



# **Product Catalog**

**Test & Measurement Instruments** 

## Innovating the Future:

## An Overview of UNI-T

UNI-T was founded in 1988 and officially registered as Uni-Trend (China) Technology Co., Ltd. in 2003. We design and manufacture advanced test and measurement solutions. For years, we have been dedicated to pioneering technology and providing professional solutions, with a vision for a sustainable and shared future. UNI-T has consistently driven innovation in the electronic testing and measurement industry. As a well-established and trusted brand, we cater to a diverse range of sectors, including Education and Scientific Research, Industrial Automation, Automotive, Transportation, Energy, Semiconductors, Network and Communications, Medical, Environmental Protection, and beyond. The company went public in SSE STAR (SicTech Innovation Board) stock market in Feb. 2021 (code: 688628)



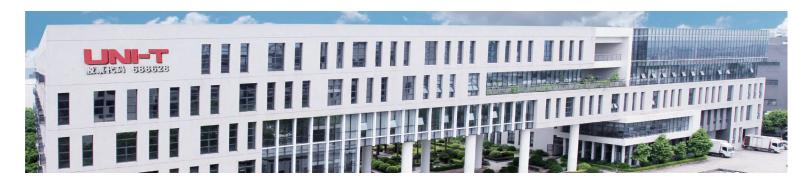




## Driving Innovation Through R&D Excellence

With three dedicated R&D centers in Dongguan, Chengdu, and Changzhou, and a team of over 200 experienced engineers, Uni-Trend Group is deeply committed to research and development. This focus ensures we maintain a competitive edge by delivering reliable, innovative, and cost-effective products.

Our proprietary manufacturing facility covers over 100,000 square meters and has an annual production capacity exceeding 10 million units. This extensive infrastructure underpins our specialization in testing solutions, allowing us to support and enhance the capabilities of our global partners and customers. Through our R&D-driven approach, we are dedicated to advancing technology and providing superior solutions tailored to diverse industry needs worldwide.

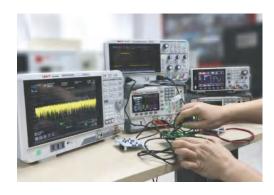


## Comprehensive Solutions for Diverse Industries

As a growing company with solutions that span multiple sectors, there's a lot to talk about Uni-Trend Group. We have four major product lines: Test & Measurement Instruments, Field Measurement Instruments, Thermal Imagers and Environmental Testers. Our products serve a wide range of industries and applications, making UNI-T a reliable partner for everything from R&D projects to facility and equipment maintenance. Our Test & Measurement Instruments portfolios includes Signal Analyzers, Oscilloscopes, Power Supplies, Signal Generators, and Bench Meters.















### Customer-Centric Sales: Global Reach, Local Support

UNI-T's network of worldwide partners, spanning over 80 countries, ensures that our customers receive timely services whenever and wherever needed. We work closely with our partners, not only on product and technical matters but also on business development and channel strategies, to guarantee customer satisfaction. Together, we are committed to maintaining the highest quality products and services for scientists, engineers, and technicians globally, driving success and innovation for the future.

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## **Digital Oscilloscopes**

## **High Definition Oscilloscopes**

#### Selection Guide

	Memo			mory Sample	Vertical	Bandwidth														
Series	Model	Channels	depth	rate resolution	2 GHz	1 GHz			300 MHz	200 MHz		100 MHz	70 MHz	60 MHz	50 MHz	25 MHz				
	MSO5104HD		500 Mpts	5 GSa/s	12 bit		•													
	MSO5054HD	4+16Digit						•												
	MSO5034HD								•											
	MSO3054HD							•												
MSO3000HD	MSO3034HD	4+16Digit	500 Mpts	s 2.5 GSa/s	12 bit	12 bit	12 bit	12 bit				•								
	MSO3024HD										•									

## MSO5000HD Series NEW

#### **Digital Oscilloscopes**



MSO5000HD series high-resolution oscilloscope has a maximum bandwidth of 1 GHz, a maximum sample rate of 5 GSa/s, is equipped with 4 analog channels and 16 digital channels, and offers a memory depth of up to 500 Mpts. MSO5000HD series adopts exclusive Ultra Phosphor 3.0 technology, achieving waveform capture rates of up to 2,000,000 wfms/s, displaying 256 levels of gray temperature colors, and featuring an innovative digital trigger system with high trigger sensitivity and low jitter.

- Analog channel bandwidth: 350 MHz/500 MHz/1 GHz
- Real-time sample rate 5 GSa/s
- 12 bit vertical resolution
- ERES (enhanced resolution) of up to 16 bit vertical resolution
- 4 analog channels, 16 digital channels
- Memory depth of up to 500 Mpts
- Waveform capture rate is up to 800,000 wfms/s (Sequence mode: 2,000,000 wfms/s)
- 9 instrument functions: digital oscilloscope, logic analyzer, function/arbitrary waveform generator, spectrum analyzer, digital voltmeter, frequency meter, protocol analyzer, bode plot analyzer, and power analyzer.
- Enhanced FFT of up to 4M points
- Multi-Windows display

- Uninterrupted hardware real-time waveform recording and analysis of up
- 54 kinds of parameter measurements. Adds histogram and line graph
- Multi-channel 7 bit hardware frequency meter
- DVM multi-channel RMS measurement: DC, AC RMS, and DC+ACRMS
- Protocol triggering and decoding options: RS232/UART, I2C, SPI, I3C, 1-wire, CAN, CAN-FD, LIN, FlexRay, Audio, MIL-STD-1553B, Manchester, SENT,
- Zone trigger for capturing sporadic signals and observing complicated
- 10.1 inch 1280x800 HD capacitive multi-touch screen
- Built-in WebServer

Key Specifications	MSO5034HD MSO5054HD MSO5104HI						
Bandwidth	350 MHz	350 MHz 500 MHz 1 GHz					
Channels	4 4 4						
Sample rate (analog)	5 GSa/s (single channel), 2.5 GSa/s (dual-channel), 2.5 GSa/s (four channel)						
Sample rate (digital)		1.25 GSa/s					
Memory depth	500 Mpts						
Max. Waveform capture rate	≥800,000 wfms/s; ≥2,000,000 wfms/s (Sequence mode)						
Vertical resolution	12 bit (ERES is enabled with a maximum of 16 bit)						
Time base scale	500 ps/div to 1 ks/div						
Input impedance	(1 MΩ±2%)  (18 pF±3 pF) 50 Ω± 1.5%						
Input impedance (digital)	(101 k Ω±1%)    (9 pF ± 1 pF)						
Vertical scale	500 μV/div - 10 V/div (1 MΩ) 500 μV/div -1 V/div (50 Ω)						
DC gain accuracy	<5 mV: ±2% full scale, ≥5 mV: ±1.5% full scale						
Waveform record	400,000 frames						

Key Specifications	MSO5034HD	MSO5054HD	MSO5104HD				
Serial protocol analysis	RS232/UART, I2C, SPI, I3C, 1-wire, CAN, CAN-FD, LIN, FlexRay, Audio, MIL-STD-1553B, Manchester, SENT, ARINC429						
Auto measurements	54 kinds of parameters, simultaneously display of 27 kinds of parameter measurements						
Measurement statistics	Mean, Maximum, Minimum, Std Dev, Count, Tendency chart, Histogram						
Arbitrary waveform generator (optional)	2 CH, 50 MHz , 250 MSa/s						
Frequency counter	7 bit hardware frequency counter						
Digital voltmeter	4digits, DC/AC RMS/DC+AC RMS						
Advanced analysis function	Power Analysis (Optional), BODE Plot (Optional), Limit Mask Testing						
Standard interfaces	USB Host, USB Device, LAN, EXT Trig, AUX Out (Trig Out, Pass/Fail, DVM), Gen Out, HDMI, WIFI, 10 MHz reference clock IN/OUT						

General Characterisitics	
Power	100 V-240 VAC (fluctuate: ±10%), 50 Hz/60 Hz 100 V-120 VAC (fluctuate: ±10%), 400 Hz
Display	10.1 inch 1280x800 HD capacitive multi-touch screen
Product net weight	3.83 kg
Product size (W×H×D)	364 mm × 209 mm × 106 mm
Standard quantity per carton	1pcs

ering Information						
	MSO5104HD (1 GHz, 5 GSa/s, 12 bit, 4 analog channels, MSO)					
MSO5000HD Series	MSO5054HD	(500 MHz, 5 GSa/s, 12 bit, 4 analog channels, MSO)				
	MSO5034HD	(350 MHz, 5 GSa/s, 12 bit, 4 analog channels, MSO)				
		National standard cable x 1				
		USB 3.0 cable x 1				
Standard Accessories		BNC-BNC direct-through line x 1				
	BNC-red and black alligator connecting wire x 1					
	Passive probe x 4					
	MSO5000HD-BW5MT1G	500 MHz Upgrade to 1 GHz Bandwidth				
	MSO5000HD-BW3M5T5M	350 MHz Upgrade to 500 MHz Bandwidth				
	MSO5000HD-BW3M5T1G	350 MHz Upgrade to 1 GHz Bandwidth				
	MSO5000HD-BND	All Serial Bus Trigger and Decode Option (including AUTO, Audio, MIL-STD, ARINC, Manchester)				
	MSO5000HD-AUTO	Automotive Serial Bus Trigger and Decode Option (CAN, CAN-FD, LIN, FlexRay, SENT)				
Options	MSO5000HD-CAN	Automotive Serial Bus Trigger and Analysis Option (CAN)				
	MSO5000HD-CANFD	Automotive Serial Bus Trigger and Analysis Option (CAN-FD)				
	MSO5000HD-LIN Automotive Serial Bus Trigger and Analysis Op					
	MSO5000HD-FLEX	Automotive Serial Bus Trigger and Analysis Option (FlexRay)				
	MSO5000HD-SENT	Automotive Sensor Bus Trigger and Analysis Option (SENT)				

Ordering Information					
	MSO5000HD-I3C	I3C Serial Bus Trigger and Analysis Option (I3C)			
	MSO5000HD-1-WIRE	1-wire Bus Trigger and Analysis Option			
	MSO5000HD-AUDIO	Audio Serial Bus Trigger and Analysis Option (I2S, LJ, RJ, TDM)			
Ontina	MSO5000HD-MIL1553	Aerospace Serial Bus Trigger and Analysis Option (MIL-STD-1553)			
Options	MSO5000HD-ARINC429	Aerospace Serial Bus Trigger and Analysis Option(ARINC429)			
	MSO5000HD-MANCH	Serial Bus Trigger and Analysis Option (Manchester)			
	MSO5000HD-AWG	Dual 50 MHz Arbitrary Waveform Generator Option (Includes Bode Plot)			
	MSO5000HD-PWR	Power Analysis Option			
	Active single-ended probe (2 GHz; 10X): UT-PA2000				
	High Voltage Probe: UT-V23/UT-P21/UT-P20				
Optional accessories	High Voltage Differential Probe: UT-P30/UT-P31/UT-P32/UT-P33/UT-P35/UT-P36				
Optional accessories	Current Probe: UT-P40/UT-P41/UT-P42/UT-P43/UT-P44, UT-4100A /UT-4100B				
	16-channel logic analyzer probe: UT-M15				
	Isolation transformer: UT-ISOT				







MSO5000HD Series

## MSO3000HD Series NEW



#### **Digital Oscilloscopes**



MSO3000HD series high-resolution oscilloscope has a maximum bandwidth of 500 MHz, a maximum Sample rate of 2.5 GSa/s, is equipped with 4 analog channels and 16 digital channels, and with a memory depth of up to 500 Mpts. MSO3000HD series adopts exclusive Ultra Phosphor 3.0 technology, achieving the waveform capture rate of up to 1,500,000 wfms/s, with 256 levels of gray temperature colors, and features an innovative digital trigger system with high trigger sensitivity and low jitter.

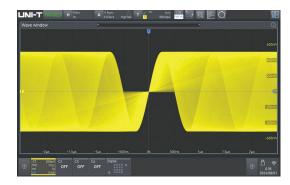
- Analog channel bandwidth: 200 MHz/350 MHz/500 MHz
- Real-time sample rate 2.5 GSa/s
- 12 bit vertical resolution
- ERES (enhanced resolution) of up to 16 bit vertical resolution
- 4 analog channels, 16 digital channels
- Memory depth of up to 500 Mpts
- Waveform capture rate is up to 500,000 wfms/s (Sequence mode: 1,500,000 wfms/s)
- 9 instrument functions: digital oscilloscope, logic analyzer, function/arbitrary waveform generator, spectrum analyzer, digital voltmeter, frequency meter, protocol analyzer, bode plot analyzer, and power analyzer.
- Uninterrupted hardware real-time waveform recording and analysis of up to 125,000 frames

9-in-1 Comprehensive Test Instrument Platform



MSO3000HD series provides 54 kinds of measurement parameters. The parameter snapshot displays 27 kinds of test items for a single channel measurement

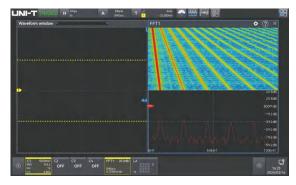
- Enhanced FFT of up to 4M points
- 54 kinds of parameter measurements. adds histogram and line graph display
- Multi-Windows display
- Multi-channel 7-digit hardware frequency meter
- DVM multi-channel RMS measurement:DC, AC RMS and DC+ACRMS
- Protocol triggering and decoding function:RS232/UART, I2C, SPI, CAN, CAN-FD, LIN, FlexRay, Audio, MIL-STD-1553B, Manchester, SENT, ARINC429
- Zone trigger for capturing sporadic signals and observing complicated sianals.
- 10.1 inch 1280x800 HD capacitive multi-touch screen
- Built-in WebServer



Utilizing Ultra Phosphor 3.0 technology, waveform capture rates are up to 500,000 wfms/s and 1,500,000 wfms/s in Sequence mode.



12 kinds of trigger protocol and decoding, which including the field of computer, embedded serial bus, automobile, aerospace and audio



Standard enhanced FFT, up to 4 Mpts, 4 channels signal analysis



Multiple power analysis functions:

- Power quality
- Harmonic analysis
- Switching loss
- Ripple wave analysis
- Loop analysis
- Safety operation area

Key Specifications	MSO3024HD	MSO3034HD	MSO3054HD			
Bandwidth	200 MHz	350 MHz	500 MHz			
Channels	4	4	4			
Sample rate (analog)	2.5 GSa/s (in	terweave mode), 1.25 GSa/s (non-inte	erweave mode)			
Sample rate (digital)		1.25 GSa/s				
Memory depth		500 Mpts				
Max. Waveform capture rate		≥500,000 wfms/s; ≥1,500,000 wfms/s (Sequence mode	2)			
Vertical resolution	12 b	it (ERES is enabled with a maximum of	16 bit)			
Time base scale	200 MHz (2 ns/div to 1 ks/div)	350 MHz (1 ns/div to 1 ks/div)	500 MHz (500 ps/div to 1 ks/div)			
Input impedance	(1 MΩ±2%)∥(18 pF±3 pF) 50 Ω± 1.5%					
Input impedance (digital)	(101 k Ω±1%)    (9 pF ± 1 pF)					
Vertical scale	500 μV/div - 10 V/div (1 ΜΩ) 500 μV/div -1 V/div (50 Ω)					
DC gain accuracy	<5 mV: ±2% full scale, ≥5 mV: ±1.5% full scale					
Waveform record	125,000 frames					
Serial protocol analysis	RS232/UART, I2C, SPI, CAN, CAN-FD, LIN, FlexRay, AUDIO, MIL-STD-1553B, Manchester, SENT, ARINC429					
Auto measurements	54 kinds of paramete	r, simultaneously display 27 kinds of p	arameter measurement			
Measurement statistics	Mean, Maximum, Minimum, Std Dev, Count, Tendency chart, Histogram					
Arbitrary waveform generator (optional)	2 CH, 50 MHz , 250 MSa/s					
Frequency counter	7-bit hardware frequency counter					
Digital voltmeter	4digits,DC/AC RMS/DC+AC RMS					
Advanced analysis function	Power Analysis (Optional), BODE Plot (Incl with AWG Option), Limit Mask Testing					
Standard interfaces	USB Host, USB Device, LAN, EXT Trig, AUX Out (Trig Out, Pass/Fail, DVM), Gen Out, HDMI,WIFI, 10 MHz reference clock IN/OUT					

General Characterisitics					
Power	100 V-240 VAC (fluctuate:±10%), 50 Hz/60 Hz,100 V-120 VAC (fluctuate:±10%), 400 Hz				
Display	10.1 inch 1280x800 HD capacitive multi-touch screen				
Product net weight	3.83 kg				
Product size (W×H×D)	364 mm × 209 mm × 106 mm				
Standard quantity per carton	1pcs				

ering Information							
	MSO:	3024HD(200 MHz,2.5 GSa/s, 4 analog channels)					
MSO3000HD Series	MSO3034HD(350 MHz,2.5 GSa/s, 4 analog channels)						
	MSO:	3054HD(500 MHz, 2.5 GSa/s, 4 analog channels)					
		National standard cable x 1					
		USB 3.0 cable x 1					
Standard Accessories		BNC-BNC direct-through line x 1					
	BN	NC-red and black alligator connecting wire x 1					
	Pæ	assive probe (200 MHz/350 MHz/500 MHz) x 4					
	MSO3000HD-BW2MT3M5	200 MHz Upgrade to 350 MHz Bandwidth					
	MSO3000HD-BW2MT5M	200 MHz Upgrade to 500 MHz Bandwidth					
	MSO3000HD-BW3M5T5M	350 MHz Upgrade to 500 MHz Bandwidth					
	MSO3000HD-BND	All Serial Bus Trigger and Decode Option (including AUTO, Audio, MIL-STD, ARINC, Manchester)					
	MSO3000HD-AUTO	Automotive Serial Bus Trigger and Decode Option (CAN, CAN-FD, LIN, FlexRay, SENT)					
	MSO3000HD-CAN	Automotive Serial Bus Trigger and Analysis Option (CAN)					
	MSO3000HD-CANFD	Automotive Serial Bus Trigger and Analysis Option (CAN-FE					
Options	MSO3000HD-LIN	Automotive Serial Bus Trigger and Analysis Option (LIN)					
Options	MSO3000HD-FLEX	Automotive Serial Bus Trigger and Analysis Option (FlexRay)					
	MSO3000HD-SENT	Automotive Sensor Bus Trigger and Analysis Option (SENT)					
	MSO3000HD-AUDIO	Audio Serial Bus Trigger and Analysis Option (I2S, LJ, RJ, TDM)					
	MSO3000HD-MIL1553	Aerospace Serial Bus Trigger and Analysis Option (MIL-STD-1553)					
	MSO3000HD-ARINC429	Aerospace Serial Bus Trigger and Analysis Option (ARINC429)					
	MSO3000HD-MANCH	Serial Bus Trigger and Analysis Option (Manchester)					
	MSO3000HD-AWG	Dual 50 MHz Arbitrary Waveform Generator Option (Includes Bode Plo					
	MSO3000HD-PWR	Power Analysis Option					

Ordering Information	
	Active single-ended probe (2 GHz; 10X): UT-PA2000
	High Voltage Probe: UT-V23/UT-P21/UT-P20
Optional accessories —	High Voltage Differential Probe: UT-P30/UT-P31/UT-P32/UT-P33/UT-P35/UT-P36
Optional accessories —	Current Probe: UT-P40/UT-P41/UT-P42/UT-P43/UT-P44, UT-4100A /UT-4100B
	16-channel logic analyzer probe: UT-M15
	Isolation transformer: UT-ISOT







MSO3000HD Series

## Digital Oscilloscopes

### Selection Guide

			Memory	Sample							width					
Series	Model	Channels	depth	Sample rate	2 GHz	1 GHz	500 MHz	350 MHz	300 MHz	200 MHz	150 MHz	100 MHz	70 MHz	60 MHz	50 MHz	25 MHz
	MSO7204X				•											
MSO7000X	MS07104X	4+16Digit	1 Gpts	10 GSa/s		•										
	UP07204L	_			•											
UPO7000L	UPO7104L	4	1 Gpts	10 GSa/s		•										
	MSO3054X						•									
MSO3000X	MSO3034X	4+16Digit	500 Mpts	5 GSa/s				•								
	MSO/UPO3504E	4+16Digit/4					•									
	MSO/UPO3502E						•									
MSO/UPO3000E	MSO/UPO3352E	2+16Digit/2						•								
. 130, 61 030002	MSO/UPO3354E	4+16Digit/4	250 Mpts	2.5 GSa/s				•								
	MSO3504E-S						•									
	MSO3354E-S	4+16Digit						•								
	MSO2304X								•							
MSO2000X	MSO2204X	4+16Digit	100 Mpts	5 GSa/s						•						
	MSO2104X											•				
	MSO/UPO2204	4+16Digit/4								•						
	MSO/UPO2202	2+16Digit/2								•						
	MSO2204-S	4+16Digit								•						
	MSO2202-S	2+16Digit								•						
MSO/UPO2000	MSO/UPO2104	4+16Digit/4	56 Mpts	2 GSa/s								•				
	MSO/UPO2102	2+16Digit/2										•				
	MSO2104-S	4+16Digit										•				
	MSO2102-S	2+16Digit										•				
	UPO1204									•						
UPO1000	UPO1104	4	56 Mpts	2 GSa/s								•				
	UPO1054														•	
LID0100055	UPO1202CS	_	56.11	1.65. /						•						
UPO1000CS	UPO1102CS	2	56 Mpts	1 GSa/s								•				

			Memory	Sample	Bandwidth																	
Series	Model	Channels	depth	rate	2 GHz	1 GHz	500 MHz		300 MHz	200 MHz	150 MHz	100 MHz	70 MHz	60 MHz	50 MHz	25 MHz						
	UTD2202CEX+									•												
UTD2000CEX+	UTD2102CEX+	2	64 Kpts	1 GSa/s	1 GSa/s								•									
	UTD2052CEX+														•							
	UTD2152CL										•											
UTD2000CL+/CL	UTD2102CL+	2	64 Kpts	500 MSa/s	500 MSa/s	500 MSa/s	500 MSa/s	500 MSa/s	500 MSa/s	500 MSa/s								•				
UTD2000CL+/CL	UTD2052CL+	2	04 Kpts								500 M5a/5	200 M24/2	300 M3a/3									
	UTD2072CL												•									

## MSO7000X Series NEW

### **Digital Oscilloscopes**

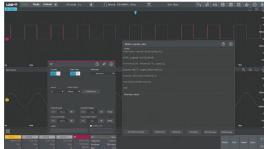


MSO7000X series mixed-signal oscilloscope offers bandwidths up to 2 GHz and a sample rate reaching 10 GSa/s. It features our exclusive UltraAcq® technology, boosting waveform capture rates to 800,000 wfms/s. The oscilloscope supports a range of advanced measurement and analysis tools, including up to 48 automatic parameter measurements, making it ideal for engineers. Running on the stable and scalable Win10 64-bit operating system, it includes a 15.6 inch HD capacitive touch screen with multi-window split-screen display and gesture controls. Suitable for industries like communications, aerospace, education, and more.

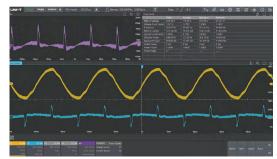
- Analog channel bandwidth: 1 GHz/2 GHz
- Maximum sample rate: 10 GSa/s
- Maximum memory depth: 1 Gpts
- Waveform capture rate: 800,000 wfms/s (UltraAcq®), 2,000,000 wfms/s (Sequence mode)
- 4 analog channels, 16 digital channels
- One machine with multiple functions: Digital oscilloscope, Logic analyzer, Spectrum analyzer, Function/arbitrary waveform generator, Digital voltmeter, Frequency counter, and Protocol analyzer
- Up to 48 kinds of parameter measurement, support histogram, tracking, and trend graph
- 11 kinds of serial protocol analysis
- Advanced measurement and analysis functions: Power analysis (optional), Jitter analysis & Eye diagram (optional), Mask and limit testing, Histogram, etc.
- Equipped with Win10 64-bit operating system
- 15.6 inch high-definition touch screen
- Embedded WebServer, providing cross-platform access
- Support SCPI standard instrument programming commands
- Supports MATLAB embedded programming and data presentation



Jitter Analysis & Eye Diagram. Efficient measurement of clock and serial bus



Support MATLAB embedded programming. Operational results are rendered directly to the oscilloscope window



Power Measurement & Analysis. Provides a full range of analytical tools and assessment results



Up to 11 serial protocols analysis

Key Specifications	MS07104X	MSO7204X						
Bandwidth	1 GHz	2 GHz						
Channels	4							
Sample rate (analog)	10 GSa/s(single channel), 5 GSa/s (dual cha	annel), 2.5 GSa/s (full channel)						
Sample rate (digital)	1.25 GSa/s							
Memory depth	1 Gpts(single channel), 500 Mpts(dual cha	annel), 250 Mpts(full channel)						
Max. Waveform capture rate	≥800,000 wfms/s (Ult ≥2,000,000 wfms/s (Sequ	traAcq®); uence mode)						
Time base scale	100ps/div-1000s	s/div						
Input impedance	1 mΩ ± 1% (15±3 pF), 5	50 Ω ± 2%						
Input impedance (digital)	100k Ω±2%							
Vertical scale	1 mV/div-10 V/div (1 MΩ);1 mV/div-1 V/div (50 Ω)							
DC gain accuracy	50 Ω: ±1.5%(≤5 mV/div: ±2.0%)±1% of F 1 mΩ: ±1.2%(≤5 mV/div: ±1.5%)±1% of F							
Serial protocol analysis	Standard configuration: RS232/422/485/UART, SPI, I2C, CAN, LIN Optional: CAN-FD, SENT, FlexRay, AudioBus (I2S/LJ/RJ/TDM), MIL STD 1553, ARINC429							
Waveform math	Simultaneous support for 8 math waveforms; Enhanced FFT, basic operations, filter, advanced function editor, MATLAB embedded programming operations ar render, enhanced resolution; Histograms, Area histograms, Trend chart, Trace							
Auto measurements	>48 , support for parameter snapshots; support for statistica chart analysis	l analysis, histograms, trend charts, and tracking						
Number of measurements	Display 10 measurements a	t the same time						
Measurement statistics	Current value, Average value, Maximum value, Minimum value, S Trend chart, Tra							
Arbitrary waveform generator (optional)	2CH, 60 MHz , 625 MSa/s							
Frequency counter	8 bit hardware frequency counter							
Digital voltmeter	4 digit,DC/AC RMS/DC+AC RMS							
Advanced analysis function	Power Analysis (Optional), Jitter and Eye Diagram Analysis (Optional), Limit Mask Testing, Sequence Mode							
Standard interfaces	USB 3.0 Host (4 ports), USB 3.0 Device (1 port, USBTMC Complia Compliant), HDMI, Aux In (Trig In, AWG external trigger input), A MHz REF In\Ot	ux Out (Trig Out, Pass/Fail, AWG trigger output), 10						

General Characterisitics					
Power 100 V-240 V ACrms (±10%), 50Hz/60Hz					
Display	15.6 inch FHD capacitive touch screen, 1920*1080(H*V)				
Product net weight	10.5kg				
Product size (W×H×D)	445 mm × 302 mm × 200 mm				
Standard quantity per carton	1pcs				

MSO7000X Series	MSO7204X: 2 GHz, 10 GSa/s, 1 Gpts, 4CH digital oscilloscope			
. 130, 000, 130, 163	MSO7104X: 1 GHz, 10 GSa/s, 1 Gpts, 4CH digital oscilloscope			
	Power cord conforming to the standard of the destination country			
	UT-D30: USB 3.0 data cable			
Standard Accessories	UT-P07: Passive probe x 4 (1x, 10x switchable, 500 MHz)			
	UT-L45: BNC-BNC straight-through cable ×2			
	Front panel protective cover ×1			
	MSO7000X-AWG: Dual-channel 60 MHz Arbitrary Wave Generator Option (includes Bode Plot)			
	MSO7000X-LA: 16-channel Logic Analyzer Option			
	MSO7000X-JITTER: Advanced Jitter and Eye Diagram Analysis Option			
	MSO7000X-PWR: Advanced Power Analysis Option			
Ontions	MSO7000X-CANFD: Automotive Serial Bus Triggering and Analysis Option (CAN FD)			
Options	MSO7000X-FLEX: Automotive Serial Bus Trigger and Analysis Option (FlexRay)			
	MSO7000X-SENT: Automotive Sensor Bus Trigger and Analysis Option (SENT)			
	MSO7000X-AUDIO: Audio Serial Bus Triggering and Analysis Option (I2S, LJ, RJ, TDM)			
	MSO7000X-AREO: Aerospace Serial Bus Triggering and Analysis Option (MIL-STD-1553, ARINC 429)			
	MSO7000X-BND: Upgrade Suite Option (JITTER, PWR, CANFD, FLEX, SENT, AUDIO, AERO)			
	Active single-ended probe (2 GHz; 10X): UT-PA2000			
	Passive high-impedance probe (1X: 8MHz; 10X: 500 MHz): UT-P07A			
	High Voltage Probe: UT-V23/UT-P21/UT-P20			
Optional accessories	High Voltage Differential Probe: UT-P30/UT-P31/UT-P32/UT-P33/UT-P35/UT-P36			
	Current Probe: UT-P40/UT-P41/UT-P42/UT-P43/UT-P44,UT-4100A /UT-4100B			
	16-channel logic analyzer probe:UT-M15			







MSO7000X Series

# UPO7000L Series NEW

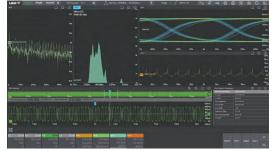
#### **Digital Oscilloscopes**



UPO7000L series digital oscilloscopes are slim and compact, 1U height is more suitable for multi-machine system integration and remote system control. Supports multi-mechanical synchronous triggering, up to 128 oscilloscopes. The single machine integrates 4 analog channels, 1 external trigger channel and 1 function/ arbitrary waveform generator channel. You can access an external touch display for a silky smooth gesture touch experience like the MSO7000X. Multi-computer integrated rack mounting kit is available. No matter what the application scenario, the UPO7000L can handle it with ease.

- Analog channel bandwidth: 1GHz/2 GHz
- Maximum sample rate: 10 GSa/s
- Maximum memory depth: 1 Gpts
- Waveform capture rate: 800,000 wfms/s (UltraAcq®), 2,000,000 wfms/s (Sequence mode)
- 4 analog channels
- One machine with multiple functions: Digital oscilloscope, Spectrum analyzer, Function/arbitrary waveform generator, Digital voltmeter, Frequency counter, and Protocol analyzer
- Up to 48 kinds of parameter measurement, support histogram, tracking, trend graph

- 11 kinds of serial protocol analysis
- Advanced measurement and analysis functions: Power analysis (optional), Jitter analysis & Eye diagram (optional), Mask and limit testing, Histogram, etc.
- Embedded WebServer, easy to achieve cross-platform access
- Support SCPI standard instrument programming commands
- Supports MATLAB embedded programming and data presentation



Jitter Analysis & Eye Diagram. Efficient measurement of clock and serial bus



Supports MATLAB embedded programming. Operational results are rendered directly to the oscilloscope window



Power Measurement & Analysis. Provides a full range of analytical tools and assessment results



Up to 11 serial protocols analysis

Key Specifications	UP07104L	UP07204L				
Bandwidth	1 GHz	2 GHz				
Channels	4	4				
Sample Rate	10 GSa/s (single channel), 5 GSa/s (dual channel), 2.5 GSa/s (full channel)					
Memory depth	1 Gpts (single channel), 500 Mpts (d	ual channel), 250 Mpts (full channel)				
Max. Waveform capture rate		s/s (UltraAcq®); 's (Sequence mode)				
Time base scale	100ps/div	7-1000s/div				
Input impedance	1 mΩ ± 1% (15±	3 pF), 50 Ω ± 2%				
Vertical scale	1 mV/div-10 V/div (1 MΩ); 1 mV/div-1 V/div (50 Ω)					
DC gain accuracy	50 Ω: ±1.5% (≤5 mV/div: ±2.0%)±1% of FS (≤5 mV/div:±1.5% of FS) 1 mΩ: ±1.2% (≤5 mV/div: ±1.5%)±1% of FS (≤5 mV/Div: ±1.2% of FS)					
Serial protocol analysis	Standard configuration: RS232/422/485/UART, SPI, I2C, CAN, LIN; Optional: CAN-FD, SENT, FlexRay, AudioBus (I2S/LJ/RJ/TDM), MIL STD 1553, ARINC429					
Waveform math	Simultaneous support for 8 math waveforms; Enhanced FFT, basic operations, filter, advanced function editor, MATLAB embedded programming operations and render, enhanced resolution; Histograms, Area histograms, Trend chart, Trace					
Auto measurements	>48 , support for parameter snapshots; support for statistical analysis, histograms, trend charts, and tracking chart analysis					
Number of measurements	Display 10 measurem	nents at the same time				
Measurement statistics		Minimum value, Standard deviation, Measure the Trend chart, Trace				
Arbitrary waveform generator (optional)	1CH, 60 MH	z , 625 MSa/s				
Frequency counter	8-bit hardware frequency counter					
Digital voltmeter	4-bit,DC/AC RMS/DC+AC RMS					
Advanced analysis function	Power Analysis (Optional), Jitter and Eye Diagram Analysis (Optional), Limit Mask Testing, Sequence Mode					
Standard interfaces		mb/s)×2, HDMI, Aux Out (Trig Out, Pass/Fail, AWG IEF In\Out,Audio interface				

General Characterisitics					
Power	100 V-240 V ACrms (±10%), 50Hz/60Hz				
Product net weight	3.5kg				
Product size (W×H×D)	214 mm × 43mm × 500 mm				
Standard quantity per carton	1pcs				

Ordering Information					
UPO7000L Series	UPO7204L: 2 GHz, 10 GSa/s, 1 Gpts, 4CH digital oscilloscope				
UPO/000L Series	UPO7104L: 1 GHz, 10 GSa/s, 1 Gpts, 4CH digital oscilloscope				
	Power cord conforming to the standard of the destination country				
Standard Accessories	USB 2.0 data cable				
Statidard Accessories	UT-P07: Passive probe x 4 (1x, 10x switchable, 500 MHz)				
	UT-L45: BNC-BNC straight-through cable ×2				

Ordering Information						
	UPO7000L-AWG: 60 MHz arbitrary wave generator					
	UPO7000L-JITTER: Advanced Jitter and Eye Diagram Analysis Option					
	UPO7000L-PWR: Advanced Power Analysis					
	UPO7000L-CANFD: Automotive Serial Bus Triggering and Analysis (CAN FD)					
Options	UPO7000L-FLEX: Automotive Serial Bus Trigger and Analysis (FlexRay)					
	UPO7000L-SENT: Automotive sensor bus trigger and annalysis (SENT)					
	UPO7000L-AUDIO: Audio serial bus triggering and analysis (I2S, LJ, RJ, TDM)					
	UPO7000L-AREO: Aerospace Serial Bus Triggering and Analysis (MIL-STD-1553, ARINC 429)					
	UPO7000L-BND: Upgrade kit (JITTER, PWR, CANFD, FLEX, SENT, AUDIO, AERO)					
	Active single-ended probe (2 GHz; 10X): UT-PA2000					
	Passive high-impedance probe (1X: 8MHz; 10X: 500 MHz): UT-P07A					
	High Voltage Probe: UT-V23/UT-P21/UT-P20					
Optional accessories —	High Voltage Differential Probe: UT-P30/UT-P31/UT-P32/UT-P33/UT-P35/UT-P36					
	Current Probe: UT-P40/UT-P41/UT-P42/UT-P43/UT-P44, UT-4100A/UT-4100B					
	Rack mount kit: UPO7000L-RM					







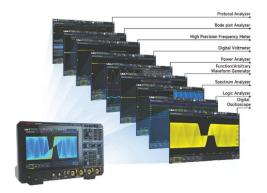
## MSO3000X Series NEW

#### **Digital Oscilloscopes**

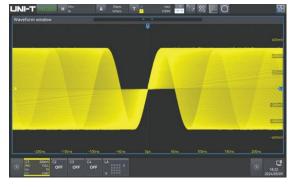


The MSO3000X series mixed-signal oscilloscope features a maximum bandwidth of 500 MHz, a sample rate up to 5 GSa/s, and is equipped with 4 analog channels and 16 digital channels, along with a memory depth of up to 500 Mpts. With its Ultra Phosphor 3.0 technology, it achieves waveform capture rates up to 2,000,000 wfms/s and uses an innovative digital trigger system offering high sensitivity and low jitter. This oscilloscope supports advanced triggers, serial bus triggering and decoding, as well as spectrum analysis, power analysis, histograms, waveform recording, enhanced resolution (ERES), and hardwareaccelerated template testing. Its 10.1 inch capacitive touch screen with multi-gesture support, combined with one-touch keys on the front panel, enhances operation efficiency and improves user experience.

- Analog channel bandwidth: 350 MHz/500 MHz
- Maximum sample rate: 5 GSa/s Maximum memory depth: 500 Mpts
- Waveform capture rate: 800,000 wfms/s, 2,000,000 wfms/s (Sequence mode)
- 4 analog channels, 16 digital channels
- 9-in-1: Digital oscilloscope, Logic analyzer, Function/arbitrary waveform generator, Spectrum analyzer, Digital voltmeter, Frequency counter, protocol analyzer, Bode plot analyzer, and Power analyzer
- Parameter measurement statistics add Histogram and Trend chart
- 4M points enhanced FFT
- 54 waveform parameter measurements
- Multi-Windows display
- Zone trigger function
- Ultra Phosphor 3.0 display technology
- 10.1 inch 1280x800 HD capacitive touch
- Supports SCPI programmable instrument standard commands
- Embedded WebServer



9-in-1 Comprehensive Test Platform



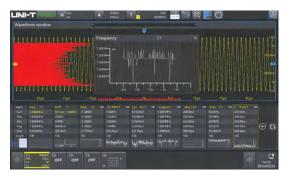
Utilizing Ultra Phosphor 3.0 technology, waveform capture rates are up to 800,000 wfms/s and 2,000,000 wfms/s in Seauence mode



MSO3000X series provides 54 kinds of measurement parameters. The parameter snapshot displays 27 kinds of test items for a single channel measurement



12 kinds of trigger protocol and decoding, which including the field of computer, embedded serial bus, automobile, aerospace, and audio



Standard enhanced FFT, up to 4 Mpts, 4 channels signal analysis



Multiple power analysis functions:

- Power quality
- Harmonic analysis
- Switching loss
- Ripple wave analysis
- Loop analysis
- Safety operation area

Key Specifications	MSO3034X	MSO3054X				
Bandwidth	350 MHz	500 MHz				
Channels	4	4				
Sample rate (analog)	5 GSa/s (interweave mode), 2.5 GSa/s (non-interweave mode)					
Sample rate (digital)	1.25	GSa/s				
Memory depth	500	Mpts				
Max. Waveform capture rate		0 wfms/s; /s (Sequence mode)				
Time base scale		s/div - 1 ks/div) os/div - 1 ks/div)				
Input impedance	(1 MΩ±2%)	(16 pF±3 pF)				
Input impedance (digital)	(101 k Ω±1%)    (9 pF ± 1 pF)					
Vertical scale	500 μV/div - 10 V/div (1 MΩ) 500 μV/div -1 V/div (50 Ω)					
DC gain accuracy	<5 mV: ±3% full scale, ≥5 mV: ±2% full scale					
Waveform record	250,000	0 frames				
Serial protocol analysis		32/UART, I2C, SPI MIL-STD-1553B, Manchester, SENT, ARINC429				
Auto measurements	54 kinds of parameter, simultaneously dis	splay 27 kinds of parameter measurement				
Measurement statistics	Mean, Maximum, Minimum, Std Dev	v, Count, Tendency chart, Histogram				
Arbitrary waveform generator (optional)	2 CH, 50 MHz , 250 MSa/s					
Frequency counter	7 bit hardware frequency counter					
Digital voltmeter	4 digit, DC/AC RMS/DC+AC RMS					
Advanced analysis function	Power Analysis (Optional), BODE Plot (Included with AWG Option), Limit Mask Testing					
Standard interfaces	USB Host, USB Device, LAN, EXT Trig, AUX Out (Trig	g Out, Pass/Fail, DVM), Gen Out, HDMI,WIFI, 10 MH: clock IN/OUT				

General Characterisitics	
Power	100 V-240 VAC (fluctuate:±10%),50 Hz/60 Hz 100 V-120 VAC (fluctuate:±10%),400 Hz
Display	10.1 inch multi-touch capacitive screen, 1280*800(H*V)
Product net weight	3.83 kg
Product size (W×H×D)	378 mm × 218 mm × 120 mm
Standard quantity per carton	1pcs

ering Information				
MSO2000VS-vive	MSO3054X: 500 MHz, 5 GSa/s, 500 Mpts, 4 CH digital oscilloscope			
MSO3000X Series	MSO3054X: 350 MHz, 5 GSa/s, 500 Mpts, 4 CH digital oscilloscope			
	Power cord conforming to the standard of the destination country			
	UT-D30: USB 3.0 data cable			
Standard Accessories	UT-P07A/UT-P08A: Passive probe x 4 (1x, 10x switchable, 500 MHz/350 MHz)			
	UT-L45: BNC-BNC straight-through cable ×1			
	UT-L02: BNC-red and black alligator connecting wire x 1			
	MSO3000X-BW3M5T5M: 350 MHz Upgrade to 500 MHz Bandwidth			
	MSO3000X-AWG: Dual-Channel 50 MHz Arbitrary Waveform Generator Option (includes Bode Plot)			
	MSO3000X-PWR: Power Analysis Option			
	MSO3000X-BND: All Serial Bus Trigger and Decode Options (Including MSO3000X-AUTO, MSO3000X-AUDI MSO3000X-MIL-STD, MSO3000X-ARINC429, MSO3000X-MANCH)			
	MSO3000X-AUDIO: Audio Serial Bus Trigger and Analysis Option			
	MSO3000X-MIL1553: Aerospace Serial Bus Trigger and Analysis Option (MIL-STD-1553)			
Options	MSO3000X-ARINC429: Aerospace Serial Bus Trigger and Analysis Option (ARINC429)			
	MSO3000X-AUTO: Automotive Serial Bus Trigger and Decode Option (CAN, CAN-FD, LIN, FlexRay, SENT)			
	MSO3000X-MANCH: Serial Bus Trigger and Analysis Option (Manchester)			
	MSO3000X-CANFD: Automotive Serial Bus Trigger and Analysis Option (CAN-FD)			
	MSO3000X-LIN: Automotive Serial Bus Trigger and Analysis Option (LIN)			
	MSO3000X-FLEX: Automotive Serial Bus Trigger and Analysis Option (FlexRay)			
	MSO3000X-SENT: Automotive Sensor Bus Trigger and Analysis Option (SENT)			
	Active single-ended probe (2 GHz; 10X): UT-PA2000			
Optional accessories	High Voltage Probe: UT-V23/UT-P21/UT-P20			
	High Voltage Differential Probe: UT-P30/UT-P31/UT-P32/UT-P33/UT-P35/UT-P36			
	Current Probe: UT-P40/UT-P41/UT-P42/UT-P43/UT-P44, UT-4100A/UT-4100B			
	16-channel logic analyzer probe: UT-M15			
	Isolation transformer: UT-ISOT			



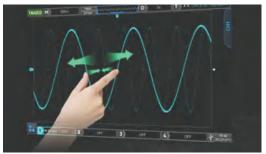


### MSO/UPO3000E Series

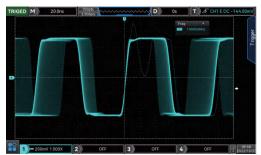
#### **Digital Oscilloscopes**



- Analog channel bandwidth: 350 MHz, 500 MHz
- Real time Sample rate of analog channel 2.5 GSa/s,Real time Sample rate of digital channel 1.25 GSa/s (only MSO)
- Input impedance: 1 m $\Omega$ ,50  $\Omega$
- Max. memory depth: 250 Mpts
- Waveform capture rate up to 1,000,000 wfms/s
- Built in 50 MHz dual channel function/arbitrary waveform generator (only MSO-S). It supports real-time loading of oscilloscope screen data to AWG arbitrary wave output.
- Support Bode Plot loop test and analysis function
- Hardware real-time waveform uninterrupted recording and analysis up to 120,000 frames
- Waveform operation functions (+, -, ×, ÷, digital filtering, logic operation and advanced operation)
- 1M points enhanced FFT, supporting frequency setting, waterfall diagram, detection setting and mark measurement, etc.
- Auto measurement of 36 waveform parameters
- Multi-Scopes 2.0 supports multi-channel independent trigger and fluorescent display
- Multi-channel independent 7 bit hardware frequency counter



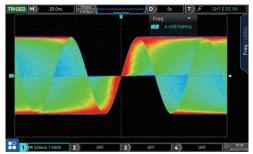
Easy-to-use interactive experience



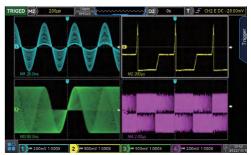
Ultra high capture rate 1,000,000 wfms/s in Fast Acquire mode

The MSO/UPO3000E series digital phosphor oscilloscope is a multifunctional and high-performance oscilloscope based on UNI-T's original Ultra Phosphor 2.0 technology. It realizes the combination of ease of use, excellent technical indicators and many functional features. It can help users complete the measurement work faster. It is an oscilloscope designed for general design / debugging / testing needs in many fields, such as communication, semiconductor, computer, instrumentation, industrial electronics, consumer electronics, automotive electronics, on-site maintenance, R & D / education, etc. Fast Acquire technology can accurately capture abnormal events such as video, jitter, noise and low wave signals.

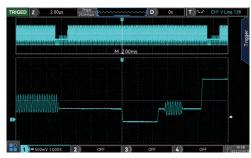
- DVM supports multi-channel independent AC / DC true RMS measurement
- Rich trigger functions: edge, pulse, video, slope, runt, over amplitude pulse, delay, timeout, duration, setup/hold, Nth edge, and pattern trigger
- Area trigger function, which can be used to capture accidental signals and observe complex signals
- Protocol trigger and decoding function (optional): RS232, I2C, SPI, CAN, CAN-FD, LIN, FlexRay
- Ultra Phosphor 2.0 super fluorescent display effect, up to 256 levels of gray
- 8 inch 800×480 capacitive touch, supporting various gesture operations: click, slide, zoom, edit, drag, etc.
- Rich interfaces: USB Host, USB Device, LAN, EXT Trig, AUX Out (Trig Out, Pass/Fail), AWG, VGA
- Support U disk data storage, U disk software upgrade, one-key copy screen and other functions
- Support plug and play USB device, can communicate with computer through USB device
- Support SCPI programmable instrument standard commands
- Support web access and control



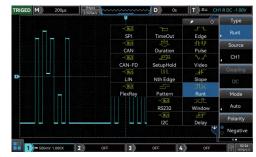
256-level grayscale display



Channel split screen function Multi-Scopes 2.0



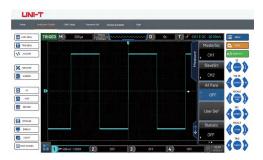
Max. memory depth 250 Mpts



Rich trigger function



AWG Function Arbitrary Waveform Generator (-S models)



Embedded with Web Server

Key Specifications	MSO3352E UPO3352E	MSO3354E UPO3354E	MSO3354E-S	MSO3502E UPO3502E	MSO3504E UPO3504E	MSO3504E-S
Bandwidth		350 MHz			500 MHz	
Channels	2+ 16digital/2	4+ 16digital/4	4+ 16digital, 2CH AWG	2+ 16digital/2	4+ 16digital/4	4+ 16digital, 2CH AWG
Sample rate (analog)		2.5 GS	a/s (Single channel)	), 1.25 GSa/s (all ch	annels)	
Sample rate (digital)			1.25 (	GSa/s		
Max. memory depth			250	Mpts		
Waveform capture rate		200,0	000 wfms/s; 1,000,0	00 wfms/s (Fast Ac	quire)	
Time base scale (s/div)		1ns/div-1000s/div (Display current Sample rate and memory depth)				
Input impedance		(± 2%@1 mΩ,±1.5%@50 Ω)∥(18 pF± 3 pF)				
Input impedance (digital)	(101 k Ω±1%)  (9 pF ± 1 pF)					
Vertical scale (V/div)	1 mV/div-10 V/div (1 MΩ); 1 mV/div-1 V/div (50 Ω)					
DC gain accuracy		<5 mV:±3%,≥5 mV:±2%				
Waveform record	120,000 frames					
Trigger types	Edge, Runt, Window, Nth Edge, Delay, Time out, Duration, Setup/Hold, Pulse Width, Slop, Video, Pattern; Optional: RS232/UART, I2C, SPI, CAN, CAN-FD, LIN, FlexRay					
Bus decode	Optional: RS232/UART, I2C, SPI, CA, CAN-FD, LIN, FlexRay					
Mathematical operations	A+B, A-B, A×B, A/B, Enhanced FFT, digital filtering, editable advanced and logical operations					

Key Specifications	MSO3352E UPO3352E	MSO3354E UPO3354E	MSO3354E-S	MSO3502E UPO3502E	MSO3504E UPO3504E	MSO3504E-S
Auto measurements	Analog channel:  Max, Min, High, Low, Ampl, Pk- Pk, Middle, Mean, Cycmean, RMS, CycRMS, AC RMS, Period, Freq, Rise, Fall, RiseDelay, FallDelay, +Width, -Width, FRFR, FRFF, FFFF, FRLF, FRLF, FFLF, FFLF, +Duty, -Duty, Area, CycArea, Oversht, Presht, Phase, Pulse, a total of 36 measurement parameters; Digital channel: Freq, period, +Width, -Width, +Duty, -Duty, RiseDelay A→B, FallDelay A→B, phase A→B, phase B→A					
Number of measurements		Display 5 measurements at the same time				
Measurement statistics		Average, Max, Min, standard deviation, number of measurements				
Frequency counter	7 bit hardware frequency meter					
Standard interfaces	USB-host, US	5B-Device, LAN, EX	T Trig, AUX Out (Trig (	out/Pass/Fail) outpu	ut, AWG (only MSO-	5 model), VGA

General Characterisitics	
Power	100 V -240 VAC (fluctuate:±10%), 50 Hz/60 Hz 100 V -120 VAC (fluctuate:±10%), 400 Hz
Display	8 inch TFT LCD, WVGA (800x480),touch screen
Product net weight	4.5kg
Product size (W×H×D)	370 mm × 185 mm × 115 mm
Standard quantity per carton	1pcs
Standard carton size	475 mm x 215 mm x 300 mm
Standard carton gross weight	5.2kg

Ordering Information	
	MSO3504E-S: 500 MHz, 2.5 GSa/s, 250 Mpts, 4+16CH MSO, 2CH 50 MHz AWG
	MSO3504E: 500 MHz, 2.5 GSa/s, 250 Mpts, 4+16CH MSO
Model	MSO3502E: 500 MHz, 2.5 GSa/s, 250 Mpts, 2+16CH MSO
MSO3000E Series	MSO3354E-S: 350 MHz, 2.5 GSa/s, 250 Mpts, 4+16CH MSO, 2CH 50 MHz AWG
	MSO3354E: 350 MHz, 2.5 GSa/s, 250 Mpts, 4+16CH MSO
	MSO3352E: 350 MHz, 2.5 GSa/s, 250 Mpts, 2+16CH MSO
	UPO3504E: 500 MHz, 2.5 GSa/s, 250 Mpts, 4CH
Model UPO3000E Series	UPO3502E: 500 MHz, 2.5 GSa/s, 250 Mpts, 2CH
	UPO3354E: 350 MHz, 2.5 GSa/s, 250 Mpts, 4CH
	UPO3352E: 350 MHz, 2.5 GSa/s, 250 Mpts, 2CH

lering Information	
	Power cord conforming to the standard of the destination country
Standard Accessories	UT-D14: USB interface cable
	UT-P07A: Passive probe x 2/4 (1x, 10x switchable, 500 MHz) (MSO/UP03502E,MSO/UP03504E
	UT-P08A: Passive probe x 2/4 (1x, 10x switchable, 350 MHz) (MSO/UPO3352E,MSO/UPO3354E
	UT-M15: 16CH logic analyzer probe (MSO3000E series)
	UT-L45: BNC-BNC straight-through cable (only MSO-S)×1
	UT-L02A: BNC-red and black alligator clip cable (only MSO-S) ×1
	MSO/UPO3000CS-BND: All Serial Bus Trigger and Decode Options
	MSO/UPO3000CS-EMBD: Serial bus trigger and decode options (includes RS232, UART, I2C, SP
	MSO/UPO3000CS-AUTO: Automotive serial bus triggering and decoding options (CAN, CAN-FD, LIN, FlexRay)
	MSO/UPO3000CS-COM: RS232/UART trigger and decode options
	MSO/UPO3000CS-I2C: I2C trigger and decode options
Options	MSO/UPO3000CS-SPI: SPI trigger and decode options
	MSO/UPO3000CS-CAN: CAN trigger/decode option
	MSO/UPO3000CS-CAN-FD: CAN-FD trigger/decode option
	MSO/UPO3000CS-LIN: LIN trigger/decode option
	MSO/UPO3000CS -FlexRay: FlexRay trigger/decode option
	MSO3000CS -S-BODE: Bode plot loop test analysis (software) (Only MSO-S)
	High Voltage Probe: UT-V23/UT-P21
	High Voltage Differential Probe: UT-P30/UT-P31/UT-P32/UT-P33/UT-P35/UT-P36
Optional accessories	Current Probe: UT-P40/UT-P41/UT-P42/UT-P43/UT-P44
	16-channel logic analyzer probe: UT-M15
	Isolation transformer: UT-ISOT



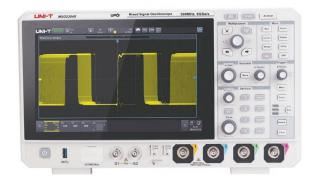




MSO/UPO3000E Series

## MSO2000X Series NEW

#### **Digital Oscilloscopes**



Analog channel bandwidth: 100 MHz/200 MHz/300MHz

Maximum sample rate: 5 GSa/s Maximum memory depth: 100 Mpts

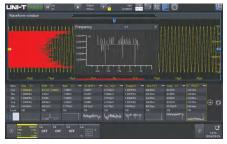
Waveform capture rate: 500,000 wfms/s, 2,000,000 wfms/s (Sequence mode)

4 analog channels, 16 digital channels

9-in-1: Digital oscilloscope, Logic analyzer, Function/arbitrary waveform generator, Spectrum analyzer, Digital voltmeter, Frequency counter, protocol analyzer, Bode plot analyzer, and Power analyzer

Parameter measurement statistics add Histogram and Trend chart

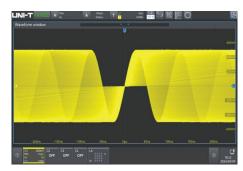
9-in-1 Comprehensive Test Platform



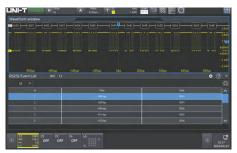
MSO2000X series provides 54 kinds of measurement parameters. The parameter snapshot displays 27 kinds of test items for a single channel measurement

The MSO2000X series mixed-signal oscilloscope offers a maximum bandwidth of 300 MHz, a sample rate up to 5 GSa/s, and comes with 4 analog channels and 16 digital channels, along with a memory depth of up to 100 Mpts. Featuring Ultra Phosphor 3.0 technology, it delivers waveform capture rates of up to 2,000,000 wfms/s and includes an innovative digital trigger system with high sensitivity and low jitter. The oscilloscope supports advanced triggers, serial bus triggering and decoding, as well as spectrum analysis, power analysis, histograms, waveform recording, enhanced resolution (ERES), and hardware-accelerated template testing. Its 10.1 inch capacitive touch screen with multi-gesture functionality, combined with one-touch keys on the front panel, boosts operational efficiency and enhances the user experience.

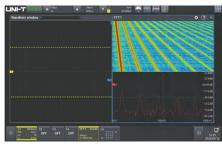
- 125,000 frames of hardware real-time waveform non-stop recording and analysis capabilities
- 4M points enhanced FFT
- 54 waveform parameter measurements
- Multi-Windows display
- Zone trigger function
- Ultra Phosphor 3.0 display technology
- 10.1 inch 1280x800 HD capacitive touch
- Supports SCPI programmable instrument standard commands
- Embedded WebServer



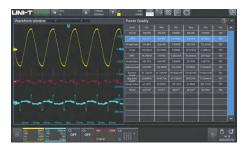
Utilizing Ultra Phosphor 3.0 technology, waveform capture rates are up to 500,000 wfms/s and 2,000,000 wfms/s in Sequence mode



9 kinds of trigger protocol and decoding, which including the field of computer, embedded serial bus, automobile, aerospace and



Standard enhanced FFT, up to 4 Mpts, 4 channels signal analysis



Multiple power analysis functions:

- Power quality
- Harmonic analysis
- Ripple wave analysis
- Loop analysis
- Safety operation area

Key Specifications	MSO2104X	MSO2204X	MSO2304X	
Bandwidth	100 MHz	200 MHz	300 MHz	
Channels	4	4	4	
Sample rate (analog)	5 GSa/s (i	nterweave mode), 2.5 GSa/s (non-interw	veave mode)	
Sample rate (digital)		1.25 GSa/s		
Memory depth		100 Mpts per channel		
Max. Waveform capture rate		≥500,000 wfms/s; ≥2,000,000 wfms/s (Sequence mode)		
Time base scale		100 MHz (5 ns/div - 1 ks/div) 200 MHz (2 ns/div - 1 ks/div) 300 MHz (1 ns/div - 1 ks/div)		
Input impedance		(1 MΩ±2%)    (16 pF±3 pF)		
Input impedance (digital)		(101 k Ω±1%)    (9 pF ± 1 pF)		
Vertical scale	500 μV/div - 10 V/div (1 ΜΩ) 500 μV/div -1 V/div (50 Ω)			
DC gain accuracy	<5 mV : ±3% full scale, ≥5 mV : ±2% full scale			
Waveform record	125,000 frames			
Serial protocol analysis	Standard: RS232/422/485/UART, I2C, SPI Option: CAN, CAN-FD, LIN, FlexRay, AUDIO, SENT			
Auto measurements	54 kinds of parameter, simultaneously display 27 kinds of parameter measurement			
Measurement statistics	Mean, Maximum, Minimum, Std Dev, Count, Tendency chart, Histogram			
Arbitrary waveform generator (optional)	2 CH, 50 MHz , 250 MSa/s			
Frequency counter	7 bit hardware frequency counter			
Digital voltmeter	4 digit, DC/AC RMS/DC+AC RMS			
Advanced analysis function	Power Analysis (Optional), BODE Plot (included with AWG Option), Limit Mask Testing			
Standard interfaces	USB Host, USB Device, LAN, EXT Trig, AUX Out (Trig Out, Pass/Fail, DVM), Gen Out, HDMI,10 MHz reference clock IN/OUT			

General Characterisitics	
Power	100 V-240 VAC (fluctuate:±10%), 50 Hz/60 Hz 100 V-120 VAC (fluctuate:±10%), 400 Hz
Display	10.1 inch multi-touch capacitive screen, 1280*800(H*V)
Product net weight	3.83 kg
Product size (W×H×D)	378 mm × 218 mm × 120 mm
Standard quantity per carton	1pcs

lering Information				
	MSO2104X: 100 MHz, 5 GSa/s, 100 Mpts, 4 CH digital oscilloscope			
MSO2000X Series	MSO2204X: 200 MHz, 5 GSa/s, 100 Mpts, 4 CH digital oscilloscope			
	MSO2304X: 300 MHz, 5 GSa/s, 100 Mpts, 4 CH digital oscilloscope			
	Power cord conforming to the standard of the destination country			
	UT-D30: USB3.0 data cable			
Standard Accessories	UT-P06/UT-P05/UT-P04: Passive probe (300 MHz/200 MHz/100 MHz) x 4			
	UT-L45: BNC-BNC straight-through cable ×1			
	UT-L02: BNC-red and black alligator connecting wire x 1			
	MSO2000X-BW1MT3M: 100 MHz Upgrade to 300 MHz Bandwidth			
	MSO2000X-BW2MT3M: 200 MHz Upgrade to 300 MHz Bandwidth			
	MSO2000X-BW1MT2M: 100 MHz Upgrade to 200 MHz Bandwidth			
	MSO2000X-AWG: Dual-Channel 50 MHz Arbitrary Waveform Generator Option			
	MSO2000X-PWR: Power Analysis Option			
	MSO2000X-BND: All Serial Bus Trigger and Decode Options (Including MSO2000X-AUTO bundle and MSO2000X-AUDIO)			
Options	MSO2000X-AUDIO: Audio Serial Bus Trigger and Analysis Option			
	MSO2000X-AUTO: Automotive Serial Bus Trigger and Decode Option (Including CAN, CAN-FD, LIN, FlexRay, SENT)			
	MSO2000X-CAN: Automotive Serial Bus Trigger and Analysis Option (CAN)			
	MSO2000X-CANFD: Automotive Serial Bus Trigger and Analysis Option (CAN-FD)			
	MSO2000X-LIN: Automotive Serial Bus Trigger and Analysis Option (LIN)			
	MSO2000X-FLEX: Automotive Serial Bus Trigger and Analysis Option (FlexRay)			
	MSO2000X-SENT: Automotive Sensor Bus Trigger and Analysis Option (SENT)			
	High Voltage Probe: UT-V23/UT-P21/UT-P20			
	High Voltage Differential Probe: UT-P30/UT-P31/UT-P32/UT-P33/UT-P35/UT-P36			
Optional accessories	Current Probe: UT-P40/UT-P41/UT-P42/UT-P43/UT-P44,UT-4100A /UT-4100B			
	16-channel logic analyzer probe: UT-M15			
	Isolation transformer: UT-ISOT			





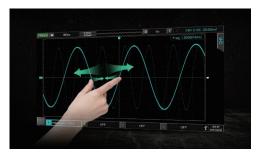
MSO2000X Series

### MSO/UPO2000 Series

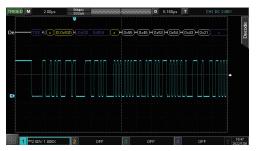
#### **Digital Oscilloscopes**



- Analog channel bandwidth: 200 MHz, 100 MHz
- Real time Sample rate of analog channel 2 GSa/s
- Memory depth of each channel: 56 Mpts
- Waveform capture rate up to 1,000,000 wfms/s
- Built in 50 MHz dual channel function / arbitrary waveform generator (only MSO-S)
- Support real-time loading of oscilloscope screen data to AWG arbitrary wave output
- Support Bode Plot loop test and analysis function (only MSO-S)
- Hardware real-time waveform uninterrupted recording and analysis up to 120,000 frames



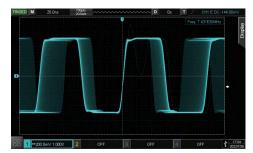
The 8 inch touch screen design supports a variety of gesture operations, such as click, slide, zoom, edit, drag, etc.



The full-memory hardware decoding under the deep storage of 56 Mpts, Decoding speed in milliseconds

The UPO/MSO2000 series digital phosphor oscilloscope is a multifunctional and high-performance oscilloscope based on UNI-T's original Ultra Phosphor technology. It realizes the combination of ease of use, excellent technical indicators and many functional features. It can help users complete the measurement work faster. It is an oscilloscope designed for general design / debugging / testing needs in many fields, such as communication, semiconductor, computer, instrumentation, industrial electronics, consumer electronics, automotive electronics, on-site maintenance, R & D / education, etc. FastAcq technology can accurately capture abnormal events such as video, jitter, noise and low wave signals.

- 4M points enhanced FFT, supporting frequency setting, waterfall diagram, detection setting and mark measurement, etc.
- Auto measurement of 36 waveform parameters
- Multi-Scopes supports multi-channel independent trigger and fluorescent display
- Hardware 7-bit frequency meter
- DVM supports multi-channel independent AC / DC true RMS measurement
- Area trigger function
- Protocol trigger and decoding function. Standard: RS232, I2C, SPI; Optional: CAN, CAN-FD, LIN, FlexRay
- 8 inch 800×480 capacitive touch



Using innovative digital signal parallel processing technology, it can reach an ultra-high capture rate of 200,000 wfms/s in normal sampling and 1,000,000 wfms/ s in FastAcq mode.



The area trigger can be used in combination with the existing basic trigger, advanced trigger and protocol trigger to complete the capture of various occasional and complex characteristic signals.



Provides a Bode plot for loop analysis



XY mode cursor measurement can quickly measure the phase difference between two signals.

Key Specifications	MSO2102-S MSO2102	MSO2104-S MSO2104	MSO2202-S MSO2202	MSO2204-S MSO2204	
key specifications	UPO2102	UPO2104	UPO2202	UPO2204	
Bandwidth	100	MHz	200	) MHz	
Channels	2+16 digital/2	4+16 digital/4	2+16 digital/2	4+ 16 digital/4	
Sample rate (analog)		2 G:	Sa/s		
Sample rate (digital)		1 GSa/s (i	only MSO)		
Max. memory depth		56 Mpts	s per CH		
Waveform capture rate		200,000 wfms/s; 1,000,0	000 wfms/s(Fast Acquire)		
Time base scale (s/div)	2ns/div-1 (Display Sample rate			-1000s/div e and memory depth )	
Input impedance		(1 mΩ±2%) l	I (16pF±3pF)		
Input impedance (digital)		(101k Ω±1%)	II (9pF±1pF)		
Vertical scale (V/div)		500uV/div-20 V/div (1 MΩ)			
DC gain accuracy		<5 mV:±3%,≥5 mV:±2%			
Waveform record	120,000 frames				
Trigger types	Edge, Runt, Window, Nth Edge, Delay, Time out, Duration, Setup/Hold, Pulse Width, Slop, Video, Pattern; Optional: RS232/UART, I2C, SPI, CAN, CAN-FD, LIN, FlexRay				
Bus decode	Optional: RS232/UART, I2C, SPI, CA, CAN-FD, LIN, FlexRay				
Mathematical operations	A+B, A-B, A×B, A/B, Enhanced FFT, digital filtering, editable advanced and logical operations				
Auto measurements	Analog channel:  Max, Min, High, Low, Ampl, Pk- Pk, Middle, Mean, Cycmean, RMS, CycRMS, AC RMS, Period, Freq, Rise, Fall, RiseDelay, FallDelay, +Width, -Width, FRFR, FRFF, FFFF, FRLF, FRLR, FFLR, FFLF, +Duty, -Duty, Area, CycArea, Oversht Presht, Phase, Pulse, a total of 36 measurement parameters;  Digital channel:  Freq, period, +Width, -Width, +Duty, -Duty, RiseDelay A→B, FallDelay A→B, phase A→B, phase B→A				
Number of measurements	Display 5 measurements at the same time				
Measurement statistics	Average, Max, Min, standard deviation, number of measurements				
Frequency counter	7-bit hardware frequency meter				
Standard interfaces	USB-host, USB-Device, LAN, EXT Trig, AUX Out (Trig Out/Pass/Fail) output, AWG (only MSO-S model), VGA				

General Characterisitics	
Power	100 V -240 VAC (fluctuate:±10%), 50 Hz/60 Hz 100 V -120 VAC (fluctuate:±10%), 400 Hz
Display	8 inch TFT LCD, WVGA (800x480),touch screen
Product net weight	4.5kg
Product size (W×H×D)	370 mm x 185 mm x 115 mm
Standard quantity per carton	1pcs
Standard carton size	470 mm x 215 mm x 300 mm
Standard carton gross weight	5.2kg

Ordering Information	
MSO2000 Series	MSO2204-S: 200 MHz, 2 GSa/s, 56 Mpts, 4+16CH MSO, 2CH 50 MHz AWG
	MSO2204: 200 MHz, 2 GSa/s, 56 Mpts, 4+16CH MSO
	MSO2202-S: 200 MHz, 2 GSa/s, 56 Mpts, 2+16CH MSO, 2CH 50 MHz AWG
	MSO2202: 200 MHz, 2 GSa/s, 56 Mpts, 2+16CH MSO
	MSO2104-S: 100 MHz, 2 GSa/s, 56 Mpts, 4+16CH MSO, 2CH 50 MHz AWG
	MSO2104: 100 MHz, 2 GSa/s, 56 Mpts, 4+16CH MSO
	MSO2102-S: 100 MHz, 2 GSa/s, 56 Mpts, 2+16CH MSO, 2CH 50 MHz AWG
	MSO2102: 100 MHz, 2 GSa/s, 56 Mpts, 2+16CH MSO
UPO2000 Series	UPO2204: 200 MHz, 2 GSa/s, 56 Mpts, 4CH
	UPO2202: 200 MHz, 2 GSa/s, 56 Mpts, 2CH
	UPO2104: 100 MHz, 2 GSa/s, 56 Mpts, 4CH
	UPO2102: 100 MHz, 2 GSa/s, 56 Mpts, 2CH
Standard Accessories	Power cord conforming to the standard of the destination country
	UT-D14: USB interface cable
	UT-P05:Passive probe x 2/4 (1x, 10x switchable, 200 MHz) (MSO/UPO2202,MSO/UPO2204,MSO2202/4-S)
	UT-P04:Passive probe x 2/4 (1x, 10x switchable, 100 MHz) (MSO/UPO2102,MSO/UPO2104,MSO2102/4-S)
	UT-M15: 16CH logic analyzer probe (MSO2000 series)
	UT-L45: BNC-BNC straight-through cable (only MSO-S)
	UT-L02A: BNC-red and black alligator clip cable (only MSO-S)

Ordering Information	
Options	MSO/UPO2000-BND: Serial Bus Trigger and Decode Option (MSO/UPO2000-EMBD& MSO/UPO2000-AUTO)
	MSO/UPO2000-EMBD: Serial Bus Trigger and Decode Option (includes RS232, UART, I2C, SPI)
	MSO/UPO2000-AUTO: Automotive Serial Bus Trigger and Decode Option (CAN, CAN-FD, LIN, FlexRay)
	MSO/UPO2000-COM: RS232/UART trigger and decode options
	MSO/UPO2000-I2C: I2C trigger and decode options
	MSO/UPO2000-SPI: SPI trigger and decode options
	MSO/UPO2000-CAN: CAN trigger/decode option
	MSO/UPO2000-CAN-FD: CAN-FD trigger/decode option
	MSO/UPO2000-LIN: LIN trigger/decode option
	MSO/UPO2000-FlexRay: FlexRay trigger/decode option
	UPO2000-LA16: 16-channel upgrade option (software), for UPO2000 models only
	MSO2000-S-BODE: Bode plot loop test analysis (software), for MSO-S models only
Optional accessories	High Voltage Probe: UT-V23/UT-P21
	High Voltage Differential Probe: UT-P30/UT-P31/UT-P32/UT-P33/UT-P35/UT-P36
	Current Probe: UT-P40/UT-P41/UT-P42/UT-P43/UT-P44
	16-channel logic analyzer probe: UT-M15
	Isolation transformer: UT-ISOT

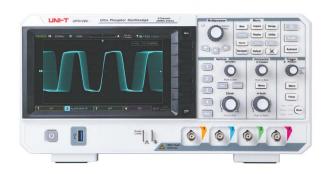






## **UPO1000** Series

### **Digital Oscilloscopes**



Analog channel bandwidth: 200 MHz, 100 MHz,50 MHz

Number of analog channels: 4

Maximum Sample rate: 2 GSa/s

Vertical scale: 500µV/div-20 V/div

Low noise floor: <100µVrms

Memory depth 56 Mpts/CH

Waveform capture rate up to 500,000 wfms/s

Hardware real-time waveform recording 120,000 frames

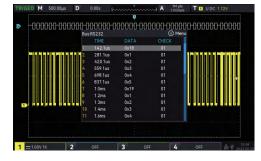
Can automatically measure 36 kinds of waveform parameters, the measurement range is optional: screen or cursor area

UPO1000 series digital oscilloscope adopts UNI-T's newly created digital 3D technology Fast Acquire Phosphor™. This series is equipped with three levels of bandwidth of 50 MHz/100 MHz/200 MHz, and the real-time Sample rate is as high as 2 GSa/s. The whole series is equipped with 4 channels as standard; supports independent DVM module; has rich trigger and bus decoding functions, and supports full-memory hardware real-time decoding. It can be widely used in communication, semiconductor, computer, integrated circuit design, instrumentation, industrial electronics, consumer electronics, automotive electronics, field maintenance, research and development/education and many other fields.

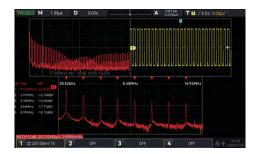
- 7-bit hardware frequency meter
- DVM supports four-channel true RMS measurement
- 1M points enhanced FFT function
- RS232, I2C, SPI full memory hardware real-time decoding
- Supports waveform navigation, markers, segments
- Support SCPI programmable instrument standard commands
- Support WEB access and control



The maximum memory depth is 56 Mpts. At the same time, the whole and details of the waveform are considered



Innovative hardware decoding enables real-time decoding



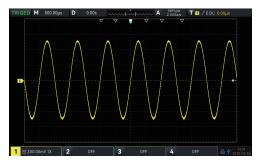
1M sampling points enhanced FFT



The cursor function can measure the time and voltage of CH1, CH2, CH3, CH4, MATH, REF at the same time.MATH, REF at the same time.



When Cursor is turned on, the parameters of the waveform in the cursor area can be measured



When Cursor is turned on, the parameters of the waveform in the cursor area can be measured

Key Specifications	UPO1054	UPO1104	UPO1204
Bandwidth	50 MHz	100 MHz	100 MHz
Channels		4	
Sample rate		2 GSa/s	
Max. memory depth		56 Mpts (Per channel)	
Waveform capture rate	150,00	0 wfms/s; 500,000 wfms/s (Fast Acqui	ire mode)
Time base scale (s/div)	2ns/div-1000s/div	2ns/div-1000s/div	1 ns/div-1000s/div
Input impedance		(1 mΩ± 2%)    (16 pF± 3pF)	
Vertical scale (V/div)	500 μV/div-20 V/div (1 mΩ)		
DC gain accuracy	<10 mV: ±4.0% full scale; ≥10 mV: ±3.0% full scale;		
Waveform record	120,000 frames		
Trigger types	Edge, Runt Set, Window Set, Nth Edge, Delay, Timeout, Pattern, Duration, Build / hold, Pulse, Slope, Video, RS232 / UART, I2C, SPI		
Bus decode	RS232/UART, I2C, SPI		
Mathematical operations	A+B, A-B, A×B, A/B, Enhanced FFT, Editable advanced operations (Log, Exp, Sin, Cos, Tan, Sqrt, Intg, Diff), Logical operations		
Auto measurements	Max, Min, High, Low, Ampl, Pk- Pk, Middle, Mean, Cycmean, RMS, CycRMS, AC RMS, Period, Freq, Rise, Fall, RiseDelay, FallDelay, +Width, -Width, FRFR, FRFF, FFFF, FRLF, FRLF, FRLF, FFLF, +Duty, -Duty, Area, CycArea, Oversht, Presht, Phase, Pulse, a total of 36 measurement parameters		
Number of measurements	5 measurements are displayed simultaneously		
FFT points	1 Mpts		
Frequency counter	7 bit hardware frequency meter		
Standard interfaces	USB Host, USB Device, LAN, EXT Trig, AUX Out (Trig Out/Pass/Fail)		

General Characterisitics		
Power	100 V -240 VAC (fluctuate:±10%), 50 Hz/60 Hz 100 V -120 VAC (fluctuate:±10%), 400 Hz	
Display	7 inch TFT LCD, WVGA (800×480)	
Product net weight	2.45 kg	
Product size (W×H×D)	306 mm × 138mm × 107mm	
Standard quantity per carton	1pcs	
Standard carton size	470 mm × 215 mm × 300 mm	
Standard carton gross weight	4 kg	

Ordering Information		
	UPO1054: 50 MHz, 2 GSa/s, 56 Mpts, 4CH	
UPO1000 Series	UPO1104: 100 MHz, 2 GSa/s, 56 Mpts, 4CH	
	UPO1204: 200 MHz, 2 GSa/s, 56 Mpts, 4CH	
	Power cord conforming to the standard of the destination country	
	UT-D14: USB interface cable	
Standard Accessories	UT-P03: Passive probe x 4 (1x, 10x switchable, 60 MHz) (UPO1054)	
	UT-P04: Passive probe x 4 (1x, 10x switchable, 100 MHz) (UPO1104)	
	UT-P05: Passive probe x 4 (1x, 10x switchable, 200 MHz) (UPO1204)	
Options	MSO/UPO1000X-1MT2M: Bandwidth upgrade option for MSO/UPO1104 to 200 MHz bandwidth	
Optional accessories	High Voltage Probe: UT-V23/UT-P21	
	High Voltage Differential Probe: UT-P30/UT-P31/UT-P32/UT-P33/UT-P35/UT-P36	
	Current Probe: UT-P40/UT-P41/UT-P42/UT-P43/UT-P44	







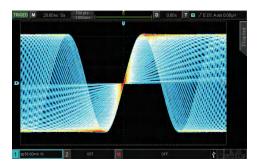
UPO1000 Series

# **UPO1000CS** Series

### **Digital Oscilloscopes**



- 1 GSa/s real-time Sample rate per channel, 2 analog channels
- Bandwidth: 100 MHz, 200 MHz
- Memory depth 56 Mpts (per channel)
- Up to 150,000 wfms/s waveform capture rate
- 256-level intensity grading display
- Alternative trigger



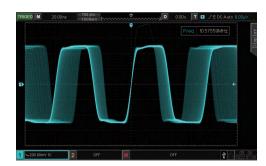
Using the original Ultra Phosphor display technology, it is easy to display the details of the waveform information



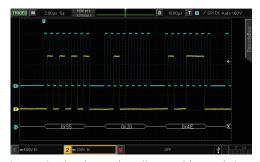
Standard 56 Mpts per channel. Take into account the overall and details of the waveform

The UPO1000CS Series offers unprecedented value in customer applications with its innovative technology, industry leading specifications, powerful trigger functions and analysis capabilities. The Series is available in 100 and 200 MHz bandwidths and 2 analog channels.It adopts UNI-T UPO visualization technology, has a maximum sample rate of 1 GSa/s and a standard memory depth of 56 Mpts. It comes with an innovative digital trigger system with high sensitivity and low jitter, and a waveform capture rate of 150,000 wfms/s.

- Low noise floor, minimum vertical gear 1 mV / div
- A variety of trigger modes, and a variety of serial bus trigger and real-time decoding
- 100,000 frames waveform record
- 7 inch TFT LCD, WVGA (800x480)
- Interfaces: USB Host, USB device, LAN, EXT Trig, AUX



Innovative digital signal parallel processing technology, normal sampling waveform capture up to 150,000 wfms/s, FastAcq mode up to 500,000 wfms/s



Innovative hardware decoding enables real-time decoding. The decoding time under the deep storage 56 Mpts can reach the millisecond level



Multi-Scopes technology, which can be used for testing signals with different clock sources and different frequencies



1Mpts enhanced FFT for easy frequency domain analysis of signals

Key Specifications	UP01102CS	UP01202CS	
Bandwidth	100 MHz	200 MHz	
Channels	2		
Sample rate	1 GSa/s (Pe	er channel)	
Max. memory depth	56 Mpts (Pe	er channel)	
Waveform capture rate	150,000 wfms/s; 500,000 w	rfms/s (Fast Acquire mode)	
Time base scale (s/div)	2ns/div-1000s/div	1ns/div-1000s/div	
Input impedance	(1 mΩ± 2%)  (	(16 pF± 3pF)	
Vertical scale (V/div)	1 mV/div-20 V/div (1 mΩ)		
DC gain accuracy	<10 mV: ±4.0% full scale; ≥10 mV: ±3.0% full scale;		
Waveform record	100,000 frames		
Trigger types	Edge, Runt Set, Window Set, Nth Edge, Delay, Timeout, Pattern, Duration, Build/hold, Pulse, Slope, Video RS232/UART, I2C, SPI. Optional: CAN, LIN		
Bus decode	RS232/UART, I2C, SPI. Optional: CAN, LIN		
Mathematical operations	A+B, A-B, A×B, A/B, Enhanced FFT, Editable advanced operations (Log, Exp, Sin, Cos, Tan, Sqrt, Intg, Diff), Logical operations		
Auto measurements	Max, Min, High, Low, Ampl, Pk- Pk, Middle, Mean, Cycmean, RMS, CycRMS, AC RMS, Period, Freq, Rise, Fall, RiseDelay, FallDelay, +Width, -Width, FRFR, FRFF, FFFR, FFFF, FRLF, FFLR, FFLF, +Duty, -Duty, Area, CycArea, Oversht, Presht, Phase, Pulse, a total of 36 measurement parameters		
Number of measurements	5 measurements are displayed simultaneously		
Measurement statistic	Mean, maximum, minimum, standard deviation, and number of measurements		
Frequency counter	7 bit hardware frequency meter		
Standard interfaces	USB Host, USB Device, LAN, EXT Trig, AUX Out (Trig Out/Pass/Fail)		

General Characterisitics	
Power	100 V-240 V AC, 50Hz/60Hz
Display	7 inch TFT LCD, WVGA (800×480)
Product net weight	3.0 kg
Product size (W×H×D)	306 mm × 138mm × 107mm
Standard quantity per carton	1pcs
Standard carton size	410 mm × 225 mm × 270 mm
Standard carton gross weight	4 kg

Ordering Information		
LIDO1000CC Carina	UPO1102CS: 100 MHz, 1 GSa/s, 56 Mpts, 2CH	
UPO1000CS Series	UPO1202CS: 200 MHz, 1 GSa/s, 56 Mpts, 2CH	
	Power cord conforming to the standard of the destination country	
Standard Accessories	UT-D14: USB interface cable	
Stalldald Accessories	UT-P04: Passive probe x 2 (1x, 10x switchable, 100 MHz) (UPO1102CS)	
	UT-P05: Passive probe x 2 (1x, 10x switchable, 200 MHz) (UPO1202CS)	
Options	UPO1000CS-AUTO: Automotive Serial Bus Trigger and Decode option (CAN, LIN)	
Optional accessories	High Voltage Probe: UT-V23/UT-P21	
	High Voltage Differential Probe: UT-P30/UT-P31/UT-P32/UT-P33/UT-P35/UT-P36	
	Current Probe: UT-P40/UT-P41/UT-P42/UT-P43/UT-P44	



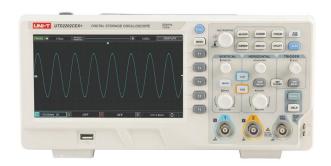




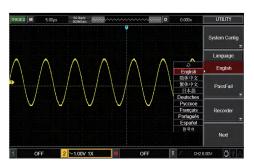
UPO1000CS Series

# UTD2000CEX+ Series

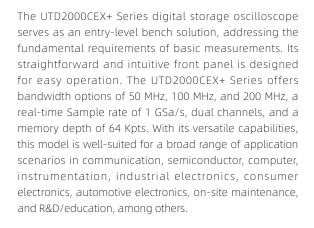
## **Digital Oscilloscopes**



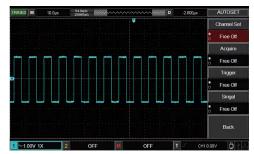
- 50/100/200 MHz bandwidth
- 2 channels, low noise floor, wide vertical range:1 mV/div-20 V/div
- Memory depth: 64 Kpts
- System software upgrade via USB drive



Multilingualism to meet the needs of users in more countries



- 7 inch TFT LCD
- Supports plug-and-play USB storage device
- Communication with and remote control of computer through the USB device



8div×16div Wider display range



Automatic Measurement of waveform parameter



Waveform recording functions

Key Specifications	UTD2052CEX	UTD2102CEX+	UTD2202CEX+	
Bandwidth	50 MHz	100 MHz	200 MHz	
Channels		2		
Sample rate		1 GSa/s		
Memory depth		64 Kpts		
Waveform capture rate		5,000 wfms/s		
Rise time	<7ns	<3.5ns	<1.8ns	
Vertical scale (V/div)		1 mV/div-20 V/div		
Vertical resolution		8 bit		
Time base scale (s/div)		2 ns/div-50 s/div		
Deviation from scope		±8 div (away from screen center)		
Input impedance		1 mΩ±2%, 18±3pF		
Input coupling	DC, AC, GND			
Timing accuracy	≤± (50+2 × service life ) ppm			
Time base mode	Y-T, X-Y, Roll			
Storage methods	Setup, wave, bitmap			
Trigger types	Edge, pulse, alternate, slope, video			
Mathematical operations	+, -, ×, ÷, FFT			
Auto measurements	Max, Min, High, Low, Ampl, Pk-Pk, Middle, Mean, CycMean, RMS, CycRMS, Period, Freq, Rise, Fall, RiseDelay, FallDelay, +Width, -Width, FRR, FRF, FFR, FFF, LRF, LRF, LFR, LFF, +Duty, -Duty, Area, CycArea, OverSht, PreSht, Phase, 34 parameters in total			
Displayed measurements	Display 5 measurements at the same time			
Frequency counter	6 bit			
Interface	USB Host, USB Device, Pass/Fail			

General Characterisitics	
Power	100-240 VAC, 45-440Hz
Display	7 inch TFT LCD, 800×480
Product color	White and grey
Product net weight	2.5kg
Product size (W×H×D)	306 mm × 138mm × 124 mm
Standard quantity per carton	2pcs
Standard carton size	450 mm x 420 mm x 280 mm
Standard carton gross weight	7.5kg

Ordering Information		
UTD2000CEX+	UTD2202CEX+: 200 MHz, 1 GSa/s, 64 Kpts, 2CH	
	UTD2102CEX+: 100 MHz, 1 GSa/s, 64 Kpts, 2CH	
	UTD2052CEX+: 50 MHz, 1 GSa/s, 64 Kpts, 2CH	
Standard Accessories	Power cord conforming to the standard of the destination country	
	UT-D14: USB interface cable	
	UT-P03: Passive Probe x 2 (1x , 10x switchable, 60 MHz)	
	UT-P04: Passive Probe x 2 (1x , 10x switchable, 100 MHz)	
	UT-P05: Passive Probe x 2 (1x , 10x switchable, 200 MHz)	



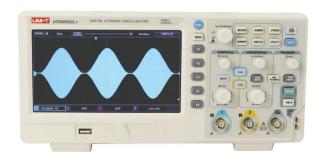




UTD2000CEX+ Series

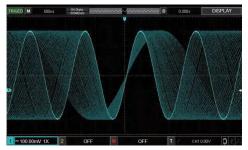
# UTD2000CL/CL+ Series

## **Digital Oscilloscopes**

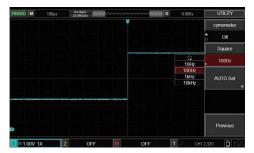


The UTD2000CL/CL+ Series stands out as a popular choice for entry-level digital oscilloscopes, designed to fulfill mainstream testing needs. With a classic front panel design and a clear user interface, this model is well-suited for your daily testing tasks.

- 50 MHz/70 MHz/100 MHz/150 MHz bandwidth
- 2 channels
- Low noise floor
- wide vertical range:1 mV/div-20 V/div
- Memory depth: 64 Kpts



Wider display range 8div×16div

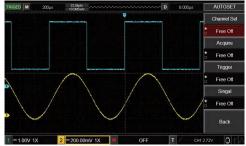


Multiple frequency output standard square wave optional

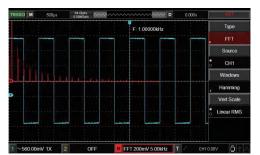


Automatic measurement of waveform parameters

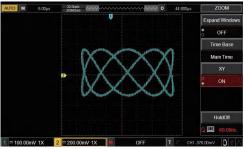
- System software upgrade via USB drive
- 7 inch TFT LCD
- Supports plug-and-play USB storage device, communication with and remote control of computer through the USB device



New autoset function, easy to handle complex test scenarios



Abundant math functions: math operation, FFT, digital filtering



Lissajous figure phase measurement

Key Specifications	UTD2052CL+	UTD2102CL+	UTD2072CL	UTD2152CL
Channels	2			
Bandwidth	50 MHz	100 MHz	70 MHz	150 MHz
Sample rate		500 MSa/:	5	
Memory depth		64 Kpts		
Waveform capture rate		5,000 wfms	5/s	
Rise time	<7ns	<3.5ns	<5ns	<2.4ns
Vertical scale (V/div)	1 mV/div-20 V/div			
Time base scale (s/div)	2ns/div-50s/div 2ns/div-50s/div		s/div	
Timing accuracy	≤± (50+2 × service life) ppm			
Time base modes		Y-T, X-Y, Roll		
Storage methods		Setup, wave, bitmap		
Trigger types		Edge, pulse, alternate, slope, video		
Mathematical operations	A+B, A-B, A×B, A/B, FFT			
Auto measurements	Max, Min, High, Low, Ampl, Pk-Pk, Middle, Mean, CycMean, RMS, CycRMS, Period, Freq, Rise, Fall, RiseDelay, FallDelay, +Width, -Width, +Duty, -Duty, FRR, FRF, FFF, LRF, LRR, LFF, LRF, LFF, Area, CycArea, OverSht, PreSht, Phase, 34 paramet ers in total			
Number of measurements	Display 5 measurements at the same time			
Frequency counter	6 bits			
Standard interfaces	USB Host, USB Device, Pass/Fail			

General Characterisitics	
Power	100-240 V AC, 45-440Hz
Display	7 inches TFT LCD, 800×480
Product color	White and grey
Product net weight	2.5kg
Product size (W×H×D)	336 mm × 164 mm × 108mm
Standard quantity per carton	2pcs
Standard carton size	450 mm x 420 mm x 280 mm
Standard carton gross weight	6.7kg

Ordering Information	
	UTD2152CL: 150 MHz, 500 mS/s, 64 Kpts, 2CH
UTD2000CL Series	UTD2072CL: 70 MHz, 500 mS/s, 64 Kpts, 2CH
UTD2000CL Series	UTD2102CL+: 100 MHz, 500 mS/s, 64 Kpts, 2CH
	UTD2052CL+: 50 MHz, 500 mS/s, 64 Kpts, 2CH
	Power cord conforming to the standard of the destination country
	UT-D14: USB interface cable
Standard Accessories	UT-P05: Passive probe x 2 (1x, 10x switchable, 200 MHz) UTD2152CL
Standard Accessones	UT-P04: Passive probe x 2 (1x, 10x switchable, 100 MHz) UTD2072CL,UTD2102CL+
	UT-P03: Passive probe x 2 (1x, 10x switchable, 60 MHz) UTD2052CL+
	User Manual and Software Download Guide







UTD2000CL/CL+ Series

### Accessories

Model	Picture	Information	Certification	Series	
UT-P01		Probe factor: (10:1) Bandwidth: 25 MHz Voltage: 600 Vpp		UTD2000CL/CL+	
UT-P03		Probe factor: (10:1) Bandwidth: 60 MHz Voltage: 600 Vpp		UTD2000CEX+; UTD2000CL/CL+	
UT-P04		Probe factor: (10:1) Bandwidth: 100 MHz Voltage: 600 Vpp		MSO2000X; MSO/UPO2000; UPO2000E; UPO1000CS; UPO1000; UTD2000CEX+; UTD2000CL/CL+	
UT-P05		Probe factor: (10:1) Bandwidth: 200 MHz Voltage: 600 Vpp	CE&UKCA	MSO3000HD; MSO/UPO3000E; MSO3000X; MSO2000X; MSO/UPO2000; UPO2000E; UP01000CS; UPO1000; UTD2000CEX+; UTD2000CL/CL+;	
UT-P06		Probe factor: (10:1) Bandwidth: 300 MHz Voltage: 600 Vpp		MSO3000HD; MSO7000X; MSO/UPO3000E; MSO3000X; MSO2000X;	
UT-P07A		Probe factor: (10:1) Bandwidth: 500 MHz Voltage: 600 Vpp		MSO3000HD; MSO7000X; MSO/UPO3000E; MSO3000X;	
UT-P08A		Probe factor: (10:1) Bandwidth: 350 MHz Voltage: 600 Vpp		MSO3000HD; MSO7000X; MSO/UPO3000E; MSO3000X; MSO2000X;	
UT-PA2000		Active single ended probe (2 GHz; 10X)	ROW	MSO3000HD; MSO7000X; MSO3000X;	
UT-P20		Passive probe: (100:1) Bandwidth: 250 MHz. Voltage: 1500 V			
UT-P21		Passive high voltage probe: (1000:1) Bandwidth: 40 MHz voltage: DC 10kV/AC 7kVrms	CE&UKCA		
UT-P30		Differential probe: (10:1/100:1) Bandwidth: 100 MHz differential voltage: 800 Vpp			
UT-P31		High voltage differential probe: (100:1/1000:1)  Bandwidth: 100 MHz differential voltage: 1500 Vpp	1	MSO3000HD; MSO7000X;	
UT-P32		Differential probe: (1000:1/100:1) Bandwidth: 50 MHz, Input differential voltage: 3000 Vpp	1	MSO/UPO3000E; MSO3000X; MSO2000X; MSO/UPO2000;	
UT-P33		Differential probe: (1000:1/100:1) Bandwidth: 70/50 MHz, differential voltage: 14kVpp	1	UPO2000E; UPO1000CS; UPO1000; UTD2000CEX+; UTD2000CL/CL+;	
UT-P35	0	High voltage Differential probe: 1:50, 130 V (DC+peakAC); 1:500, 1300 V (DC+peakAC), Bandwidth: 50 MHz, Precision: 2%	2011	0182000027021,	
UT-P36		High voltage Differential probe: 1:200, 560V (DC+peakAC) 1:2000, 5600 V (DC+peakAC), Bandwidth: 100 MHz, Precision: 2%	ROW		
UT-V23		High voltage probe: (100:1) Bandwidth: 100 MHz, Voltage: 2000 Vpp			
UT-P40		Conversion ratio: 50 mV/A, 5 mV/A, Current range: 0.4 A-60 A, Frequency: DC-100 kHz, Voltage: 600 Vrms  Conversion ratio: 100 mV/A, 10 mV/A, Current range: 50 mA-100 A, Frequency: DC-100 kHz, Voltage: 600 Vrms		1	
UT-P41				CE&UKCA	
UT-P42		Conversion ratio: 50 mV/A, 5 mV/A, Current range: 0.4 A-200 A, Frequency: DC-150 kHz, Voltage: 600 Vrms		MSO3000HD; MSO7000X; MSO/UPO3000E; MSO3000X; MSO2000X; MSO/UPO2000; UPO2000E; UP01000CS; UPO1000;	

Model	Picture	Information	Certification	Series
UT-P43	U LINI-T was 1170 www.	Current range: 20 A AC/DC, Frequency: DC-25 MHz, Conversion ratio: 100 mV/A		MSO7000X; MSO5000HD; MSO3000HD; MSO/UPO3000E; MSO3000X;
UT-P44		Current range: 40 A AC/DC, Frequency: DC-50 MHz, Conversion ratio: 50 mV/A		MSO3000X, MSO2000X; MSO/UPO2000; UPO2000E; UP01000CS; UPO1000; UTD2000CEX+; UTD2000CL/CL+
UT-M15		Logic analyzer probe: 16CH		MSO7000X; MSO5000HD; MSO3000HD; MSO/UPO3000E; MSO3000X; MSO2000X;
UT-ISOT		Isolation transfomer for Bode Plot application (Hardware)	ROW	MSO/UPO2000
UT-P4100 A		100 A/600 kHz Low frequency current probe Range: 100 A/10 A, Freq range: DC-600 kHz, Rise time: ≤583ns		
UT-P4100B		100 A/2 MHz Low frequency current probe Range: 100 A/10 A, Freq range: DC-2 mHz, Rise time: ≤175ns		MSO7000X; MSO3000HD; MSO3000X; MSO2000X; MSO/UPO3000E; MSO/UPO2000; UPO1000CS; UPO1000; UPO1002
UT-M13X	LINET	Oscilloscope Signal Protocol Demonstration Board		

## **Generators**

### Waveform Generators

### Selection Guide

			Sample	MAX Frequency											
Series	Model	Channels	rate	600 MHz	500 MHz	350 MHz	200 MHz	160 MHz	120 MHz	80 MHz	60 MHz	40 MHz	30 MHz	25 MHz	20 MHz
	UTG9604T			•											
UTG9000T	UTG9504T	4	2.5 GSa/s		•										
	UTG9354T					•									
	UTG4202A						•								
UTG4000A	UTG4162A	2	500 MSa/s					•							
01G4000A	UTG4122A	2	500 MSa/S						•						
	UTG4082A									•					
	UTG2122X		1.25 GSa/s						•						
UTG2000X	UTG2082X	2								•					
	UTG2062X										•				
	UTG2122B								•						
UTG2000A/B	UTG2082B	2	1.28 GSa/s							•					
UTG2000A/B	UTG2062B	2									•				
	UTG2025A		125 MSa/s											•	
	UTG1042X											•			
UTG1000X	UTG1022X	2	200 MSa/s												•
	UTG1022X-PA														•
UTG900E	UTG962E	2	200 MSa/s								•				
0.1GAOOE	UTG932E		200 M24/2										•		

### Accessories

Model	Picture	Information	Certification	Series
UT-L45		BNC-BNC line: 1 M, Suitable for all signal generators	ROHS	UTG9000T UTG4000A UTG2000X UTG2000A/B UTG1000X UTG900E

# **UTG9000T Series**

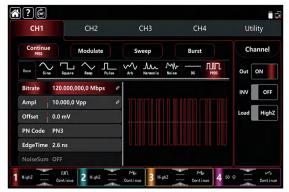
### **Waveform and Function Generators**



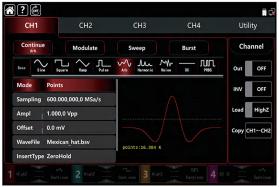
The UTG9000T Series pulse/function/arbitrary waveform generators utilize Direct Digital Synthesizer (DDS) technology to produce precise and stable waveforms with a bandwidth of up to 600 MHz. They offer a maximum sample rate of 2.5 GSa/s and an ultra-fine resolution of 1 μHz. These instruments deliver accurate, stable, pure, and low-distortion signals. Designed for ease of use, they combine technical excellence with the ability to generate high-frequency square waves featuring fast rise and fall times, making them versatile tools for a wide range of applications.

- 4 channels output
- Output: 350 MHz/500MHz/600 MHz sine wave, full-band resolution: 1 µHz
- 200 MHz maximum pulse waveform with adjustable rise and fall time
- Sample rate: 2.5 GSa/s, Vertical resolution: 16 bit
- Arbitrary wave memory depth of 64 Mpts, supports point-to-point output.
- Supports one-click SNR output.

- Frequency sweep modes: linear, logarithmic, list, stepping
- Modulation types: AM, PM, FM, DSBAM, ASK, PSK, BPSK, QPSK, FSK, 3FSK, 4FSK, QAM, OSK, PWM, SUM
- 10.1 inch capacitive touchscreen with 1280\*800 resolution
- Digital protocol output: SPI, I2C, UART
- Standard interfaces: USB Host, USB Device, LAN



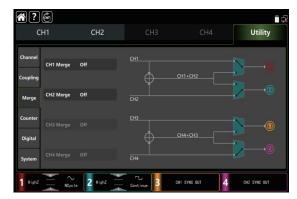
Support for multiple signal outputs: sine, square, ramp, pulse, harmonic, noise, PRBS, DC, arbitrary waveform



Arbitrary wave memory depth of 64 Mpts, supports pointto-point output.



Digital protocol output: SPI, I2C, UART



Addition of Waveforms And Channels Merge



10.1 inch capacitive touchscreen 4 Channel, Sample rate: 2.5 GSa/s, vertical resolution: 16 bit



Rich sweep features: Line, Log, Step, List

Key Specifications	UTG9354T	UTG9504T	UTG9604T	UTG9354T	UTG9504T	UTG9604T	
Channel		CH1 & CH2		CH3 & CH4			
Max. frequency	350 MHz	500 MHz	600 MHz	160 MHz	200 MHz	200 MHz	
Sample rate		2.5 GSa/s			625 MSa/s		
Vertical resolution	14 bit	14 bit	16 bit	16 bit	16 bit	16 bit	
Arbitrary wave length		8 pts-64 Mpts			8 kpts		
Working mode	Continue,	modulation, freque	ency sweep, burst, fr	requency counter (c	ymometer), digital p	protocol	
Continue		Sine, square, ram	o, pulse, harmonic, r	noise, PRBS, DC, arb	itrary waveform		
Modulation types	AN	1, PM, FM, DSBAM, A	SK, PSK, BPSK, QPSK	, FSK, 3FSK, 4FSK, Q	DAM, OSK, PWM, SUM	1	
Frequency sweep types			Linear, logarithmi	c, list, stepping			
Burst types			N cycle, gatii	ng, infinite			
Digittypes	SPI, I2C, UART						
Hardware frequency counter			100 mHz-800 MHz,	DC/AC coupling			
Frequency Characteristics							
Sine wave	1 μHz-350 MHz	1 μHz-500 MHz	1 μHz-600 MHz	1 μHz-160 MHz	1 μHz-200 MHz	1 μHz-200 MHz	
Square wave	1 μHz-120 MHz	1 μHz-160 MHz	1 μHz-200 MHz	1 μHz-50 MHz	1 μHz-60 MHz	1 μHz-60 MHz	
Pulse wave	1 μHz-120 MHz	1 μHz-160 MHz	1 μHz-200 MHz	1 μHz-50 MHz	1 μHz-60 MHz	1 μHz-60 MHz	
Ramp wave	1 μHz-20 MHz	1 μHz-30 MHz	1 μHz-30 MHz	1 μHz-8MHz	1 μHz-10 MHz	1 μHz-10 MHz	
Noise	1 mHz-350 MHz	1 mHz-500 MHz	1 mHz-600 MHz	1 mHz-160 MHz	1 mHz-200 MHz	1 mHz-200 MHz	
Arbitrary wave (DDS)	1 μHz-80 MHz	1 μHz-100 MHz	1 μHz-100 MHz	1 μHz-50 MHz	1 μHz-60 MHz	1 μHz-60 MHz	
PRBS	1 μbps-80 Mbps	1 μbps-120 Mbps	1 μbps-120 Mbps	1 μbps-40 Mbps	1 μbps-60 Mbps	1 μbps-60 Mbps	
Harmonic wave	1 μHz-175 MHz	1 μHz-250 MHz	1 μHz-300 MHz	1 μHz-80 MHz	1 μHz-100 MHz	1 μHz-100 MHz	
Frequency resolution	1 μHz						
			1 MHz, 1 Vpp	, 50 Ω load			
Rise/fall time	<2ns	<2ns	<1.5ns	<6ns	<5ns	<5ns	

Key Specifications	UTG9354T	UTG9504T	UTG9604T	UTG9354T	UTG9504T	UTG9604T	
Output Characteristics		•	•	•			
	≤40 MHz		20 Vpp	≤20 MHz		20 Vpp	
Output amplitude(High Z)	≤120	) MHz	10 Vpp	≤80	MHz	10 Vpp	
Output amplitude(nigh z)	≤160	) MHz	5 Vpp	≤120	) MHz	5 Vpp	
	≤300	) MHz	4 Vpp	≤200	) MHz	3 Vpp	
	≤400 MHz		2.5 Vpp	-		-	
Output amplitude(High Z)	≤500 MHz		1.5 Vpp	-		-	
	≤600 MHz		1 Vpp	-		-	
Amplitude accuracy	(1kHz sine wave with 0 V offset, >10 mVpp)						
Amplitude accuracy	± (1% of set amplitude+1 mVpp)						
DC offset range	50 Ω: ± (5 VDC - Peak AC) HighZ: ± (10 VDC - peak AC)						
DC offset accuracy	±1% of offset set value ± 0.5% of amplitude set value ±2 mV						
Standard configuration	USB Host, USB Device, LAN						
Output resistance	50 Ω						

General Characterisitics	
Power	100 V to 240 VAC (fluctuate: ±10%), 50 Hz/60 Hz 100 V to 120 VAC (fluctuate: ±10%), 400 Hz
Display	10.1 inches TFT capacitive touchscreen with 1280*800 resolution
Product net weight	4.04kg
Product size (W×H×D)	370 mm*115 mm*185 mm
Standard quantity per carton	1рс
Standard carton size	500 mm*305 mm*315 mm
Standard carton gross weight	6.06kg

Ordering Information					
	UTG9604T: 600 MHz, 2.5 GSa/s, 64 Mpts, 4CH				
UTG9000T Series	UTG9504T: 500 MHz, 2.5 GSa/s, 64 Mpts, 4CH				
	UTG9354T: 350 MHz, 2.5 GSa/s, 64 Mpts, 4CH				
	Power cord conforming to the standard of the destination country				
Standard Accessories	UT-D14: USB interface cable				
	BNC cables (1 m): 4pcs				







UTG9000T Series

## UTG4000A Series

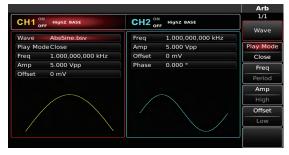
### **Waveform and Function Generators**



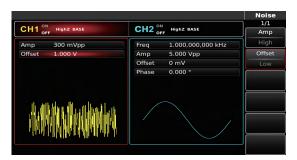
- 80 MHz/120 MHz/160 MHz/200 MHz sine waveform output, 1 µHz fullhand resolution
- 30 MHz/40 MHz/50 MHz pulse/square waveform, adjustable rise/fall
- 500 MSa/s Sample rate, 16 bit vertical resolution
- Standard dual channels, supporting stand-alone or channel-coupling
- 32 Mpts arbitrary waveform depth, 7GB non-volatile arbitrary waveforms

The UTG4000A Series waveform generators boast a multi-function design, making them well-suited for diverse application scenarios. With features such as Function Generation, Arbitrary Waveform Generation, Pulse Generation, Harmonic Generation, Analog/ Digital Modulation source, and a frequency counter, the UTG4000A Series is capable of handling a wide range of signal emulation applications-from near DC up to 80 MHz or even 200 MHz, depending on the model and function. Utilizing Direct Digital Synthesizer (DDS) technology, the UTG4000 A Series ensures the delivery of stable, precise, and low-distortion signals. The sleek, upright design is complemented by a high-resolution 8 inch display screen. Additionally, the user-friendly interface design and panel layout contribute to improved efficiency.

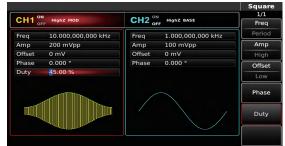
- Versatile modulation options: AM, FM, PM, ASK, FSK, PSK, BPSK, QPSK, OSK, PWM, SUM, OAM
- Frequency counter cymometer range: 100 MHz-800 MHz
- 8 inch TFT LCD, WVGA (800×480)
- Standard Ports: USB Host, USB Device, LAN, 10 MHz Input, 10 MHz Output, Frequency Counter, FSK Trig, Modulation In



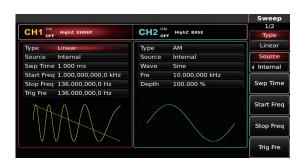
Built-in arbitrary waveform available at any time



Noise modes



Rich modulation functions



Linear and logarithmic sweep waveform



Customizable harmonic generation function



Optional digital signal output interface: SPI, IIC, UART

Key Specifications	UTG4082 A	UTG4122 A	UTG4162 A	UTG4202 A			
Max. frequency	80 MHz	120 MHz	160 MHz	200 MHz			
Channels	2						
Sample rate		5001	MSa/s				
Waveforms	Sin	e, square, ramp, harmonic, p	ulse, noise, DC voltage, arbitr	ary			
Working modes		Continuous, modul	lation, sweep, burst				
Modulation types	А	M, FM, PM, ASK, FSK, PSK, BPS	SK, QPSK, OSK, PWM, SUM, QA	М			
Hardware frequency counter		100 mHz-800	) MHz, 7 digits				
Sine	1 μHz-80 MHz	1 μHz-120 MHz	1 μHz-160 MHz	1 μHz-200 MHz			
Square/Pulse	1 μHz-30 MHz	1 μHz-40 MHz	1 μHz-50 MHz	1 μHz-60 MHz			
Ramp	1 μHz-2 MHz	1 μHz-3 MHz	1 μHz-4 MHz	1 μHz-5 MHz			
Harmonic	1 μHz-40 MHz	1 μHz-60 MHz	1 μHz-80 MHz	1 μHz-100 MHz			
Noise (-3 dB)	80 MHz	120 MHz	160 MHz	200 MHz			
Resolution		1,	uHz				
Arbitrary Waveform							
Frequency range	1 μHz-20 MHz	1 μHz-30 MHz	1 μHz-40 MHz	1 μHz-50 MHz			
Memory depth	8 pts-32 Mpts	8 pts-32 Mpts	8 pts-32 Mpts	8 pts-32 Mpts			
Vertical resolution	16 bit						
Min rise/fall time (typical: 1 Vpp)	<7ns	<6ns	<5ns	<5ns			

General Characterisitics						
Power	100 V-240 V AC, 50Hz/60Hz					
Display	8 inch TFT LCD, WVGA (800 x 480)					
Product net weight	3.5kg					
Product size(W×H×D)	336 mm x 164 mm x 108mm					
Standard quantity per carton	1pc					
Standard carton size	405 mm x 225 mm x 265 mmv					
Standard carton gross weight	4.8kg					

Ordering Information	Ordering Information					
	UTG4082A: 80 MHz, 500 MSa/s, 32 Mpts, 2CH					
UTG4000 A Series	UTG4122A: 120 MHz, 500 MSa/s, 32 Mpts, 2CH					
UTG4000 A Series	UTG4162A: 160 MHz, 500 MSa/s, 32 Mpts, 2CH					
	UTG4202A: 200 MHz, 500 MSa/s, 32 Mpts, 2CH					
	Power cord conforming to the standard of the destination country					
Standard Accessories	UT-D14: USB interface cable					
	BNC cables (1 m): 1pair					
Optional Accessories	UT-U02: digital cable					







UTG4000A Series

# UTG2000X Series NEW

### **Waveform and Function Generators**

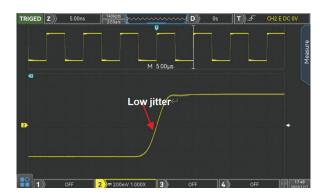


The UTG2000X series uses direct digital synthesis technology to produce accurate and stable waveform output with a resolution as low as 1 µHz. It is an economical, high-performance, multi-functional function/ arbitrary waveform generator. It can generate accurate, stable, pure and low-distortion output signals. With easy operation, superior technical indicators and user-friendly graphic display, it is a multi-purpose device that meets learning and testing needs and improves work efficiency.

- Dual channel with the maximum frequency output 120 MHz, the maximum output amplitude 20 Vpp
- 625 MSa/s sample rate and 16 bit vertical resolution
- 11 basic waveforms: Sine, Square, Pulse, Ramp, Arbitrary, Harmonic, Expression, PRBS, Noise, DC, Double Pulse.
- Multiple analog and digital modulation function: AM, PM, FM, DSB-AM, ASK, PSK, BPSK, QPSK, FSK, 3FSK, 4FSK, QAM, OSK, PWM, SUM
- Square wave with the maximum frequency 50 MHz, low jitter
- Wide dynamic and high-precision pulse wave with adjustable edge time, which can achieve fine edge time adjustment and has extremely high adjustment resolution and range
- Excellent performance with low harmonic distortion

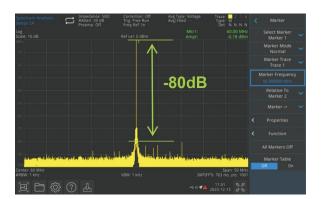


4.3 inch full-color display, touch-operable, making instrument control faster and more convenient

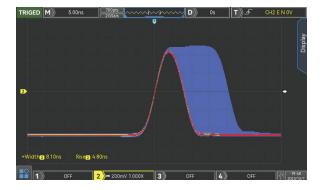


Excellent digital sampling technology makes the output waveform jitter lower

- Supports frequency sweep and burst output
- Low jitter waveform can be outputted point by point within the range of arbitrary waveform length from 8 pts to 64 Mpts
- Supports channel copying, following, and stacking settings
- Arbitrary waveform can be generated by PC software
- 7 bit hardware frequency meter
- Built-in 200 arbitrary waves
- Standard USB Host, USB Device, and LAN interface
- Support SCPI programmable instrument standard commands
- 4.3 inch high resolution touch-screen TFT LCD



Low distortion output, -80 dBc spurious-free dynamic range



The new generation of wide dynamic and high-precision pulse wave with adjustable edge time has a minimum pulse width of 8ns, finely adjustable pulse width, and a minimum step of 100ps

Key Specifications	UTG2062X	UTG2082X	UTG2122X				
Channel		2					
Max. frequency	60 MHz	80 MHz	120 MHz				
Sample rate		625 MSa/s (1.25 GSa/s, 2 x interpolation)					
Vertical resolution	16 bit	16 bit	16 bit				
Arbitrary wave length		64 Mpts					
Working mode	Contin	uous, Modulation, Frequency sweep, Bur	rst, Counter				
Continue	Sine, Square,	, Ramp, Pulse, Noise, DC, Arb, Harmonic,	PRBS, Expression				
Modulation types	AM, FM, PM, DSB-A	M, ASK, FSK, PSK, 3FSK, 4FSK, BPSK, QPSk	K, OSK, SUM, QAM, PWM				
Frequency sweep types		Lin, Log, Step					
Burst		N-cycle, Gated, Infinite					
Hardware frequency counter		100 mHz-200 MHz, 7 digits					
Frequency Characteristics							
Sine wave	1 μHz-60 MHz	1 μHz-80 MHz	1 μHz-120 MHz				
Square wave	1 μHz-30 MHz	1 μHz-40 MHz	1 μHz-50 MHz				
Pulse wave	1 μHz-30 MHz	1 μHz-40 MHz	1 μHz-50 MHz				
Ramp wave	1 µHz-3 MHz	1 μHz-4 MHz	1 μHz-5 MHz				
Arbitrary wave	1 μHz-30 MHz	1 μHz-40 MHz	1 μHz-50 MHz				
Harmonic	1 μHz-30 MHz	1 μHz-40 MHz	1 μHz-50 MHz				
Expression	1 μHz-15 MHz	1 μHz-20 MHz	1 μHz-25 MHz				
PRBS	1 μbps-30 Mbps	1 μbps-40 Mbps	1 μbps-50 Mbps				
Gauss noise	1 mHz-60 MHz	1 mHz-80 MHz	1 mHz-120 MHz				
Frequency resolution		1 μHz					
2: (6.11):		1 Vpp, 50 Ω load					
Rise/fall time	<7ns (typical, 1 kHz)	<6ns (typical, 1 kHz)	<5ns (typical, 1 kHz)				
Output Characteristics							
		≤20 MHz: 1 mVpp-10 Vpp					
Output amplitude(50 Ω)		≤60 MHz: 1 mVpp-5 Vpp					
		≤120 MHz: 1 mVpp-2 Vpp					
A constitution of a second constitution	Туріс	al value (1kHz, sine wave, 0 V, deviation >	-10 mVpp)				
Amplitude accuracy —	± (1% of set value+1 mVpp)						
DC offset range	±5 V (50 Ω); ±10 V (High Z)						
DC offset accuracy	Offset set value ±1% ± amplitude set value 0.5%±2 mV						
Interface							
Standard configuration		USB Host, USB Device, LAN					
Output Impedance		50 Ω					

General Characterisitics	
Power	100-240 VAC (Fluctuations: ±10%), 50 Hz/60Hz; 100-120 VAC (Fluctuations: ±10%), 400 Hz
Display	4.3 inch TFT LCD WVGA (480×277),capacitive touch
Product size(W×H×D)	215 mm × 103mm × 316 mm
Product net weight	2.5kg
Standard quantity per carton	1pc

Ordering Information				
	UTG2062X: 60 MHz, 1.25 GSa/s, 64 Mpts, 2CH			
UTG2000X Series	UTG2082X: 80 MHz, 1.25 GSa/s, 64 Mpts, 2CH			
	UTG2122X: 120 MHz, 1.25 GSa/s, 64 Mpts, 2CH			
Standard Accessories	Power cord conforming to the standard of the destination country			
	UT-D14: USB interface cable			
	UT-L02A: BNC-red and black alligator clip cable x1			
	UT-L45: BNC cables x1			







UTG2000X Series

## UTG2000A/B Series

### **Waveform and Function Generators**



The UTG2000B Series waveform generators offer high precision, stability, purity, and low-distortion signals. They deliver high-frequency square waves with rapid rise and fall edges. Users can enhance their working efficiency by utilizing these multifunctional instruments, thanks to the intuitive operation interface and graphical display design.

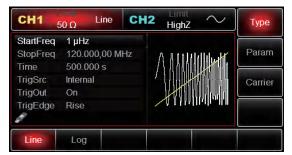
- 60 MHz/80 MHz/120 MHz sine waveform output, 1 µHz full-band resolution
- 1.28GSa/s Sample rate, 16 bit vertical resolution
- Unique expression output function
- Standard dual channels, supporting stand-alone or channelcoupling output mode



120 MHz sine waveform output, double channels multiple waveforms selection

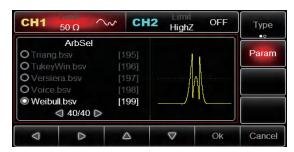


Built-in 16 types harmonic generators

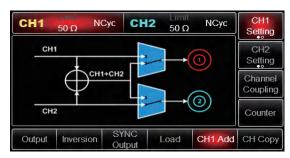


Sweep function and burst mode

- 16 Mpts arbitrary waveform depth
- Versatile modulation options: AM, FM, PM, PWM, ASK, FSK, PSK, BPSK, QPSK, OSK, DSB-AM, SUM, QAM
- 4.3 inch TFT LCD, WVGA (800×480)
- Standard Ports: USB Host, USB Device, LAN



Built-in up to 200 arbitrary waveforms



Supporting stand-alone or channel-coupling output mode Channel merging and stacking



Multiple analog and digital modulation functions

Key Specifications	UTG2025 A	UTG2062B	UTG2082B	UTG2122B	
Max. frequency	25 MHz	60 MHz 80 MHz		120 MHz	
Channels			2		
Sample rate	125 MSa/s		1.28 GSa/s (4×Interpolation)		
Waveforms	Sine, squa	are, ramp, pulse, noise, DC	, arbitrary; UTG2000B only: ha	rmonic	
Working modes		Continuous, modu	ılation, sweep, burst		
Modulation types	AM, FM, PM, ASK, FSK, PSK, PWM	AM, FM, PM, ASK, FS	K, PSK, PWM, BPSK, QPSK, OSK	, DSB-AM, SUM, QAM	
Arbitrary Waveform					
Memory depth	8 pts-8 kpts		8 pts-16 Mpts		
Vertical resolution	14 bit		16 bit (symbol included)		
Frequency Characteristics					
Sine	1 μHz-25 MHz	1 μHz-60 MHz	1 μHz-120 MHz		
Square	1 μHz-5 MHz	1 μHz-25 MHz 1 μHz-25 MHz		1 μHz-30 MHz	
Pulse	1 μHz-5 MHz	1 µHz-20 MHz 1 µHz-25 MHz 1 µH		1 μHz-30 MHz	
Ramp	1 μHz-400 kHz	1 μHz-3 MHz 1 μHz-4 MHz 1 μHz-5		1 μHz-5 MHz	
Harmonic		1 μHz-30 MHz 1 μHz-40 MHz 1 μHz-60 M		1 μHz-60 MHz	
Arbitrary	1 μHz-5 MHz	1 μHz-15 MHz	1 µHz-20 MHz	1 μHz-25 MHz	
Noise	25 MHz (-3 dB)	60 MHz (-3 dB) 80 MHz (-3 dB) 120 MHz (-3		120 MHz (-3 dB)	
Resolution	1 µHz				
		±0.5ppm 25°C			
Accuracy		First year aging rate: 1ppm			
	Temperature coefficient: ±0.5ppm/°C				
Temperature Coeifficient	<2ppm/°C				
Interfaces	USB Host, USB Device, 10 MHz clock source input/output, External analog modulation input				

General Characterisitics	
Power	100 V-240 V AC, 50Hz/60Hz
Display	4.3 inches TFT LCD, WVGA (480 x 272)
Product net weight	3.2kg
Product size	265 mm x 110 mm x 320 mm
Standard quantity per carton	2pcs
Standard carton size	380 mm x 330 mm x 320 mm
Standard carton gross weight	8.5kg

Ordering Information				
	UTG2025A: 25 MHz, 125 MSa/s, 8 Kpts, 2CH			
UTG2000 A/B Series	UTG2062B: 60 MHz, 1.28 GSa/s, 16 Mpts, 2CH			
UTG2000 A/B Series	UTG2082B: 80 MHz, 1.28 GSa/s, 16 Mpts, 2CH			
	UTG2122B: 120 MHz, 1.28 GSa/s, 16 Mpts, 2CH			
	Power cord conforming to the standard of the destination country			
Standard Accessories	UT-D14: USB interface cable			
	BNC cables: 1pcs, BNC to alligator clip line (1 m): 1pcs			







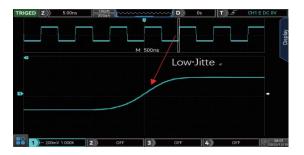
UTG2000B Series

## UTG1000X Series

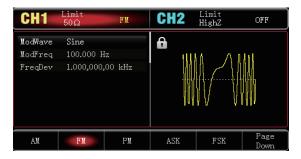
### **Waveform and Function Generators**



- Dual-channel equivalent performance Maximum output frequency 40 MHz, maximum output amplitude 20 Vpp
- 200 MSa/s Sample rate, 16 bit vertical resolution
- The maximum frequency of square wave is 10 MHz, and low jitter
- Rich analog and digital modulation function: AM, FM, PM, FSK, ASK,
- Standard USB Host, USB Device interface
- Support sweep frequency and pulse train output



Excellent digital sampling technology makes the output waveform jitter lower



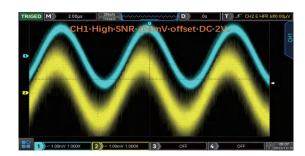
Offers AM, FM, PM, FSK, ASK, PSK, and PWM multiple analog and digital modulation methods



Standard features include linear and logarithmic frequency sweep methods

The UTG1000X utilizes direct digital synthesis technology, ensuring the generation of precise and stable waveforms with a resolution as fine as 1  $\mu$ Hz. This economical, highperformance, and multi-functional/arbitrary waveform generator produces accurate, stable, clean, and lowdistortion output signals. It is designed for convenient operation, offering superior technical indicators and a user-friendly graphic display, making it a versatile tool that meets the needs of learning and testing while enhancing work efficiency.

- Built-in power amplifier module, the maximum output power is 4 W (-PA model only)
- Arbitrary waveform can be generated by PC software
- 7-bit hardware frequency counter function has lower output noise and higher signal-to-noise ratio.
- Built-in 200 arbitrary waveforms
- 4.3 inch TFT LCD display



Set small signal to superimpose large DC, UTG1000X has lower output noise and higher signal-to-noise ratio



Supports three pulse modes: N cycle, infinite, and gated. Two modulation signal sources: Internal and External



High-precision frequency meter, which can measure the frequency range of 100 mHz-200 MHz

Key Specifications	UTG1022X UTG1022X-PA		UTG1042X	
Channel	2			
Max. frequency	20 MHz 20 MHz		40 MHz	
Sample rate	200 MSa/s			
Vertical resolution	16 bit	16 bit	16 bit	
Arbitrary wave length		4 kpts		
Working mode	Cor	ntinue, modulation, frequency sweep,B	Burst	
Continue	S	ine, Square, Ramp, Pulse, Noise, DC, Al	rb	
Modulation types		AM, PM, FM, ASK, PSK, FSK, PWM		
Frequency sweep types		Linear, logarithmic		
Hardware frequency counter		100 mHz-200 MHz		
Frequency Characteristics				
Sine wave	1 μHz - 20 MHz	1 μHz - 20 MHz	1 μHz-40 MHz	
Square wave	1 μHz - 10 MHz	1 μHz - 10 MHz	1 μHz-20 MHz	
Pulse wave	1 μHz - 10 MHz	1 μHz - 10 MHz	1 μHz-20 MHz	
Ramp wave	1 μHz - 400 kHz	1 μHz - 400 kHz	1 μHz - 1 mHz	
Noise	40 MHz bandwidth 40 MHz bandwidth (- 3 dB) (typical value) (- 3 dB) (typical value)		40 MHz bandwidth (- 3 dB) (typical value)	
Frequency resolution	1 µHz			
Dies Wellting	1 Vpp, 50 Ω load			
Rise/fall time		<16 ns		
Output Characteristics				
	≤20	MHz	1 mVpp-10 Vpp	
Output amplitude(50 Ω)	≤40	MHz	1 mVpp-5 Vpp	
	(**	kHz sine wave with 0 V offset, >10 mVp	p)	
Amplitude accuracy		± (1% of set value+2 mVpp)		
DC offset range	±5 V (50 Ω); ±10 V (High Z)			
DC offset accuracy	Offset set value ±1% ± amplitude set value 2% ±2 mV			
Interface				
Standard configuration	USB Host,USB Device,PowerOut (only-PA)			
Output resistance	50 Ω			

General Characterisitics	
Power	100-240 VAC (Fuctuations:+10%), 50 Hz/60HZ; 100-120 VAC (Fluctuations: +10%), 400 Hz
Display	4.3 inch TFT LCD WVGA (480×277)
Product size(W×H×D)	215 mm*103mm*316 mm
Product net weight	2.2kg

Ordering Information	
	UTG1022X: 20 MHz, 200 MSa/s, 4kpts, 2CH
UTG1000X Series	UTG1022X-PA: 20 MHz, 200 MSa/s, 4kpts, 2CH,Power Module
	UTG1042X: 40 MHz, 200 MSa/s, 4kpts, 2CH
	Power cord conforming to the standard of the destination country
Standard Accessories	UT-D14: USB interface cable
	BNC cables: 1pcs, BNC to alligator clip line: 1pcs







UTG1000X Series

## **UTG900E** Series

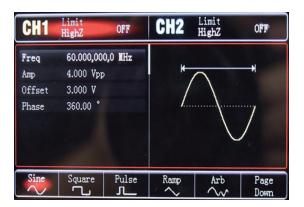
### **Waveform and Function Generators**



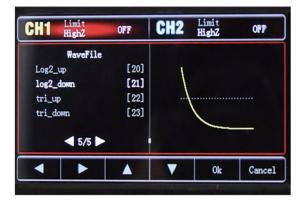
multifunctionality. Featuring a compact design, a 4.3 inch TFT LCD, and a user-friendly interface, this model is wellsuited for a range of test scenarios, making your testing tasks more straightforward. Utilizing direct digital synthesis technology, it ensures accurate and stable waveform generation. With a remarkable full-band resolution of up to 1 μHz, this generator offers precision in waveform creation.

The UTG900E Series is an entry-level handheld arbitrary waveform generator that combines high performance with

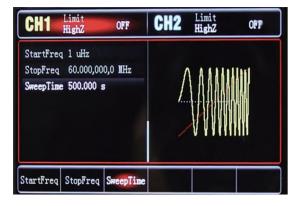
- 30 MHz/60 MHz sine waveform output, 1 µHz full-band resolution
- 200 mSa/s Sample rate, 14 bits vertical resolution, double channels
- Portable handheld mini signal generator
- High-accuracy, 7 bit frequency counter, range: 100 mHz-100 MHz
- Linear and logarithmic sweep functions
- 24 types of non-volatile waveform stores
- 4.3 inch high resolution color TFT display



Standard 2 Channels, multiple waveform signals Maximum output frequency 60 MHz, dual channel, multiple waveform signals: sine wave, square, ramp, pulse, noise, DC, arbitrary waveform

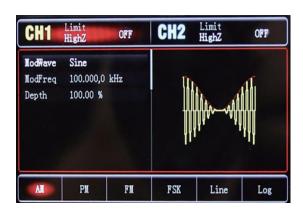


Built-in 24 arbitrary waveforms. 24 kinds of non-volatile digital arbitrary waveform covers many applications



#### Sweep function

Scan type: linear and logarithmic, test scans from low to high, and scan output from high to low



#### **Modulation function**

Easy-to-use modulation types: AM, FM, PM, FSK

Key Specifications	UTG932E	UTG962E		
Max. frequency	30 MHz	60 MHz		
Channels	2			
Sample rate	20	0 MSa/s		
Vertical resolution		14 bit		
Waveforms	Sine, square, pulse,	ramp, noise, DC, arbitrary		
Sweep modes	Logarii	thmic, linear		
Frequency Characteristics				
Sine	1 μHz-30 MHz	1 μHz-60 MHz		
Square	1 μHz-15 MHz	1 μHz-20 MHz		
Ramp	1 μHz-400 kHz 1 μHz-400 kHz			
Pulse	1 μHz-15 MHz 1 μHz-20 MHz			
Arbitrary	1 μHz-10 MHz			
Resolution		1 µHz		
	Within 90	days ± 50ppm		
Accuracy	Within 1 year ± 100ppm			
	18°C-28°C			
Output Characteristics				
Impedance	50 Ω			
Amplitude range	1 mVpp-10 Vpp (50 Ω); 2 mVpp-20 Vpp (high Z)			
DC offset range (AC+DC)	±5 V (50 Ω); ±10 V (high Z)			
Amplitude resolution	1 mV			

General Characterisitics	
Power	100-240 VAC, 50Hz/60Hz
Display	4.3 inches TFT LCD (480×272)
Product net weight	0.33kg
Product size	172 mm x 90 mm x 68mm
Standard quantity per carton	4pcs
Standard carton size	435 mm x 360 mm x 125 mm
Standard carton gross weight	3.8kg

Ordering Information				
LITCOOOF Corios	UTG932E: 30 MHz, 200 MSa/s, 2CH			
UTG900E Series	UTG962E: 60 MHz, 200 MSa/s, 2CH			
Standard Accessories	Power cord conforming to the standard of the destination country			
	UT-D14: USB interface cable			
	BNC cable: 1pcs, BNC-alligator clip cable (1 m): 1pcs			
	Power adapter			







UTG900E Series

# **Spectrum/Signal Analyzers**

### Selection Guide

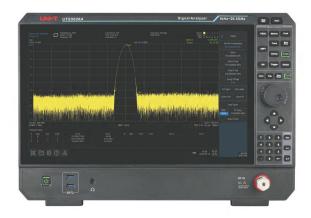
Series	Model	Frequency Range	Frequency Resolution	RBW	Phase Noise	DANL	Tracking Source
LITEFOOOA	UTS5026A	9 kHz-26.5 GHz	0.001 Hz	1 Hz-3 MHz (10% Steps), 4, 5, 6, 8 MHz	<-107 dBc/Hz (Typical value)@10 kHz	-163 dBm (Typical)	
UTS5000A	UTS5013A	9 kHz-13.6 GHz	0.001 HZ				No
	UTS3084A	9 kHz-8.4 GHz		1 Hz 1 Hz-10 MHz (1-3-10 Step)		-165 dBm (Typical)	
UTS3000A	UTS3060A	9 kHz-6 GHz	1 Hz		<-100 dBc/Hz (Typical value)@10 kHz		Yes
	UTS3036A	9 kHz-3.6 GHz					
	UTS3084T+	9 kHz-8.4 GHz				-161 dBm (Typical)	
LITERRORT	UTS3036T+	9 kHz-3.6 GHz		1 Hz-3 MHz	<-98 dBc/Hz (Typical value)@10 kHz		.,
UTS3000T+	UTS3032T+	9 kHz-3.2 GHz	1 Hz	1 Hz-1 MHz			Yes
	UTS3015T+	9 kHz-1.5 GHz					
	UTS3084T	0.141 0.4.611-	1 Hz	1 Hz-3 MHz	<-98 dBc/Hz (Typical value)@10 kHz	-161 dBm (Typical)	Yes
LITEZOGOD	UTS3084B	9 kHz-8.4 GHz					No
UTS3000B	UTS3036B	9 kHz-3.6 GHz					Oakinaal
	UTS3021B	9 kHz-2.1 GHz					Optional
	UTS1032T	0141- 2.2611-	1 Hz		<-98 dBc/Hz (Typical value)@10 kHz	-161 dBm (Typical)	Yes
	UTS1032B	9 kHz-3.2 GHz		1 Hz-1 mHz			No
UTS1000B	UTS1015T	0 ku = 1 5 Cu =					Yes
	UTS1015B	9 kHz-1.5 GHz					No

### Accessories

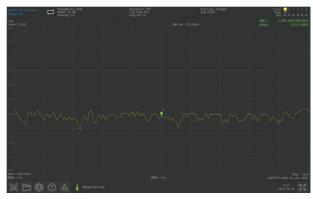
Model	Picture	Information	Certification	Series
UTS-CK01		Spectrum Utility Kit: include NSMAJ-NJ-0.7M DC-6G Cable x1, NJ-NJ-0.7M DC-6G Cable x1, SMA-N-KJ-T DC-6 GHz Adapter x2, N-BNC-JK DC-4 GHz Adapter x2, 2400 MHz-2500 MHz Antenna x2, 824-960 MHz/1710-1990 MHz x2		UTS5000A; UTS3000A; UTS3000T+ ; UTS3000B; UTS1000B
UTS-CK02		2.92J RF cable (UT-W03-40 GHz)×1, 2.92-KKG double female adaptor (UT-C04-40 GHz)×2,5MA-N-KJG adaptor (UT-C03-18 GHz)×1, Kit pouch(UT-CK02)×1		UTS5000A
UTS-EMI01		Frequency range: 30 MHz - 3 GHz; include 3 Pcs magnetic field near-field probes and 1 Pcs electric field near field probe; 1 Pcs N-SMA cable, 1 Pcs N-BNC		UTS5000A; UTS3000A; UTS3000T+; UTS3000B; UTS1000B
BAG-B3		Soft carrying bag for UTS1000B and UTS3000B/T+ Series Spectrum Analyzers		UTS3000T+; UTS3000B; UTS1000B
UT-W02-6GHz		N-SMA-JJ RF cable,DC-6 GHz VSWR≤1.25:1@6 GHz IL≤1.8 dB@6 GHz	ROHS	UTS5000A; UTS3000A; UTS3000T+; UTS3000B; UTS1000B
UT-W01-6GHz		N-N-JJ RF cable,DC-6 GHz VSWR≤1.25:1@6 GHz IL≤1.8 dB@6 GHz		UTS5000A; UTS3000A; UTS3000T+; UTS3000B; UTS1000B
UT-W03-40GHz		2.92J-2.92J RF cable,DC-40 GHz VSWR≤1.25:1@40 GHz IL≤3.5 dB@40 GHz		UTS5000A
UT-C02-4GHz		N-BNC-JK adaptor,DC-4 GHz VSWR≤1.15:1@4 GHz IL≤0.2 dB@4 GHz		UTS5000A; UTS3000A; UTS3000T+; UTS3000B; UTS1000B
UT-C01-6GHz	1	N-SMA-JK adaptor,DC-6 GHz VSWR≤1.15:1@6 GHz IL≤0.2 dB@6 GHz		UTS5000A; UTS3000A; UTS3000T+; UTS3000B; UTS1000B
UTS-T01	7	Receiving antenna, working frequency 2400 MHz-2500 MHz, Gain<2 dBi		UTS5000A; UTS3000A; UTS3000T+; UTS3000B; UTS1000B
UTS-T02	7	Receiving antenna, working frequency 824 MHz-960 MHz, Gain<2 dBi		UTS5000A; UTS3000B; UTS1000B; UTS3000A
UT-C04-40GHz	6	2.92-KKG adaptor,DC-40 GHz VSWR≤1.20:1@40 GHz IL≤0.3 dB@40 GHz		UTS5000A
UT-C03-18GHz		SMA-N-KJG adaptor,DC-18 GHz VSWR≤1.15:1@18 GHz lL≤0.3 dB@18 GHz		UTS5000A
UT-3009F	OPEN SHOW, LOAD	Female VNA Calibration Kit (9 GHz)		UTS3000A
UT-3009M	OPEN SHORT LOAD)	Male VNA Calibration Kit (9 GHz)		UTS3000A
UT-3009F/M	OPEN (SHORT (CAD) OPEN) (SHORT, LOAD)	Female-Male VNA Calibration Kit (9 GHz)		UTS3000A

# UTS5000A Series NEW

## Signal Analyzers



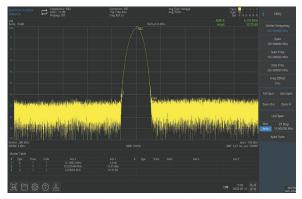
- Frequency range 9 kHz to 13.6 GHz/26.5 GHz
- DANL: -163 dBm (typical)
- Phase noise: <-107 dBc/Hz (at 10 kHz offset, typical)
- Scan points up to 100,001 points
- Minimum Resolution Bandwidth (RBW): 1 Hz
- Advanced one-key measurement of Channel Power, Occcupied Bandwidth, TOI, and more (optional)



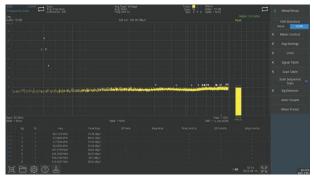
Excellent sensitivity to test weaker signals

The UTS5000A Series is a signal analyzer with a frequency range of 9 kHz to 26.5 GHz. It can be used as the main equipment required to build an automatic control system. It can also meet your needs in the test systems required for corporate R&D/factory production/education and scientific research, etc. Upgrade your bench and gain a robust instrument meticulously crafted to fulfill the demanding requirements of electrical engineers, RF professionals, and educators specializing in electrical and RF engineering.

- EMI Analysis Function (optional)
- Support Analog Demodulation Analysis (optional)
- Support Digital Demodulation Analysis (optional)
- Support I/Q Analysis (optional)
- Configuration 15.6 inches 1920x1080 high-definition TFT multi-touch LCD display



Excellent selectivity. Scan 100,001 points



EMI pre-compliance



Removable dust mesh

Key Specifications	UTS5013A	UTS5026A		
Frequency range	9 kHz-13.6 GHz	9 kHz-26.5 GHz		
Frequency resolution	0.001 Hz			
Sweep width range	0Hz, 10Hz-13.6 GHz 0Hz, 10Hz-26.5 GHz			
	Swept: ±[0.25%×span+horizontal resolution]			
Sweep accuracy	FFT: ±[0.10%×span+horizontal resolution]			
Sweep time	Span = 0 Hz, 1 μs to 6000	s; Span ≥ 10 Hz, 1 ms to 4000 s		
Marker mode	Normal,	Delta Δ, Fixed		
Marker function	Marker Noise, Band Powe	er, Band Density, N dB, Counter		
RBW (-3 dB)	1 Hz-3 MHz (109	% step), 4, 5, 6, 8 MHz		
Video bandwidth (VBW)	1 Hz-3 MHz (10 <sup>4</sup>	% step), 4, 5, 6, 8 MHz		
Selectivity (-60 dB/-3 dB)	<4.1:1 (Nominal) -60 dB:-3 dB			
Reference level	-170 dBm to +30 dBm,0.01 dB Steps			
Preamplifier	+20 dBm nominal			
Input attenuator range	0 to 50 dB,2 dB Steps			
Trace detectors	Normal, peak, sample, negative peak, log power average, RMS average, and voltage average			
Trace type	Clear/Write, Avera	ge, Max Hold, Min Hold		
Scale units	dBm, dBr	mV, dBμV, V, W		
Sweep (trace) point range	11 to 100,001			
Advanced Measurement	Power Suite Measurement, Nonlinear Measurement, Spectrum Monitoring			
Modulation Analysis	AM Measurement, FM Measurement			
Vector signal analysis	ASK (2 ASK); FSK: 2 FSK, 4 FSK, 8 FSK, 16 FSK; MSK (GMSK); PSK: BPSK, QPSK, OQPSK, 8PSK; DPSK: DBPSK, DQPSK D8PSK, π/4 -DQPSK, π/8 -D8PSK; QAM: 16,32,64,128,256			
I/Q Analyzer analysis bandwidth	Standard: 9 kHz to 25 MHz; Option B40: 9 kHz to 40 MHz			
Real-time analysis bandwidth	25 MHz			
Interface	RF input, 10 MHz reference IN, 10 MHz reference OUT, External trigger input, HDMI, USB-Host, USB-Device, LAN			

General Characterisitics	
Power	100-240 V AC (±10%), 50 Hz/60 Hz 100 to 120 VAC (Fluctuations ±10%), 400 Hz
Display	15.6 inch TFT Touch LCD (1920x1080)
Product size(W×H×D)	445 mm × 311 mm × 195 mm
Product net weight	11kg
Standard quantity per carton	1рс

ring Information		
UTC5000A Caria	UTS5013A: 13.6 GHz, 1 Hz-8 MHz, -163 dBm	
UTS5000A Series	UTS5026A: 26.5 GHz, 1 Hz-8 MHz, -163 dBm	
	Power cord conforming to the standard of the destination country ×1	
Standard Accessories	USB cable ×1	
	UTS-CK01: UT-W02-6GHz x1, UT-W01-6GHz x1, UT-C02-4GHz x2, UT-C01-6GHz x2, UTS-T01 x2, UTS-T02 x2  Kit pouch×1	
	UTS-CK02: UT-W03-40 GHz×1, UT-C04-40 GHz×2, UT-C03-18 GHz×1, Kit pouch×1	
	UTS-EMI01: Frequency range: 30 MHz - 3 GHz; include 3 Pcs magnetic field near-field probes and 1 Pcs electric field near field probe; 1 Pcs SMB-SMA cable, 1 Pcs N-SMA adaptor	
	UT-W02-6GHz: N-SMA-JJ RF cable, DC-6 GHz VSWR≤1.25:1@6 GHz IL≤1.8 dB@6 GHz	
	UT-W01-6GHz: N-N-JJ RF cable, DC-6 GHz VSWR≤1.25:1@6 GHz IL≤1.8 dB@6 GHz	
	UT-W03-40GHz: 2.92J-2.92J RF cable, DC-40 GHz VSWR≤1.25:1@40 GHz IL≤3.5 dB@40 GHz	
Optional Accessories	UT-C02-4GHz: N-BNC-JK adaptor, DC-4 GHz VSWR≤1.15:1@4 GHz IL≤0.2 dB@4 GHz	
	UT-C01-6GHz: N-SMA-JK adaptor, DC-6 GHz VSWR≤1.15:1@6 GHz IL≤0.2 dB@6 GHz	
	UTS-T01: Receiving antenna, working frequency 2400 MHz-2500 MHz,Gain<2 dBi	
	UTS-T02: Receiving antenna, working frequency 824 MHz-960 MHz,Gain<2 dBi	
	UT-C04-40GHz: 2.92-KKG adaptor, DC-40 GHz VSWR≤1.20:1@40 GHz IL≤0.3 dB@40 GHz	
	UT-C03-18GHz: SMA-N-KJG adaptor, DC-18 GHz VSWR≤1.15:1@18 GHz IL≤0.3 dB@18 GHz	
	UTS5000A-AMK: Advanced Measurement kit Option	
Options	UTS5000A-EMI: EMI Measurement Option	
	UTS5000A-AMA: Analog Demodulation Measurement Option	
	UTS5000A-P26: UTS5026 A Preamplifier, 26.5 GHz Option	
	UTS5000A-VSA: Digital Demodulation Analysis Option	
	UTS5000A-IQ: I/Q Analysis Option	







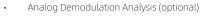
## UTS3000A Series NEW

## Signal Analyzers

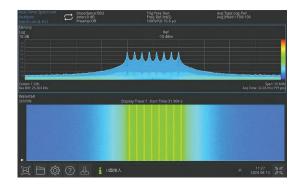


The UTS3000A Series is a signal analyzer with a frequency range of 9 kHz to 8.4 GHz. It can be used as the main equipment required to build an automatic control system. It can also meet your needs in the test systems required for corporate R&D/factory production/education and scientific research, etc.

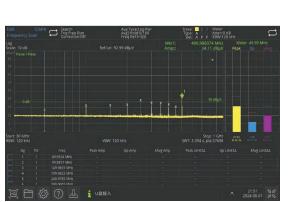
- Frequency range 9 kHz to 3.6 GHz/6.0 GHz/8.4 GHz
- DANL: -165 dBm (typical value)
- Phase noise: <-100 dBc/Hz (at 10 kHz offset, typical)
- Scan points up to 40,001 points
- Minimum Resolution Bandwidth (RBW) 1 Hz
- Vector Network Analysis
- Advanced one-key measurement of Channel Power, Occcupied Bandwidth, TOI, and more (optional)



- EMI Analysis Function (optional)
- Digital Demodulation Analysis (optional)
- Real-time Spectrum Analysis (optional)
- I/Q Analysis (optional)
- 10.1 inch high-definition capacitive touch display



Real-time spectrum mode, using density spectrograms for gapless spectrum display



EMI pre-compliance



Excellent selectivity



Provide AM/FM/PM analog signal analysis; ASK/FSK/PSKQAM/MSK/ DPSK digital signal analysis and EVM calculation

Key Specifications	UTS3036 A	UTS3060 A	UTS3084 A	
Frequency range	9 kHz-3.6 GHz	9 kHz-6.0 GHz	9 kHz- 8.4 GHz	
Frequency resolution	1 Hz	1 Hz	1 Hz	
Sweep width range	0Hz, 100Hz- 3.6 GHz	0Hz, 100Hz - 6.0 GHz	0Hz, 100Hz - 8.4 GHz	
	Swept: ±[0.25%×span+span/(sweep point -1)]			
Sweep accuracy	FFT	: ±[0.10%×span+span/(sweep point -1	)]	
Sweep time	Span = 0	Hz, 1 µs to 4000 s; Span ≠ 0 Hz, 1 ms to	4000 s	
Marker mode		Normal, Delta Δ, Fixed		
Markerfunction	Marker No	pise, Band Power, Band Density, N dB, (	Counter	
RBW (-3 dB)		1 Hz - 10 MHz (1-3-10 step)		
Video bandwidth (VBW)		1 Hz - 10 MHz (1-3-10 step)		
Selectivity (-60 dB/-3 dB)	<4.8:1 (Nominal) -60 dB: -3 dB			
Reference level	-100 dBm to +30 dBm, 1 dB Steps			
Preamplifier	+20 dBm nominal			
Input attenuator range	0 to 51 dB, 1 dB Steps			
Trace detectors	Sample, Peak, Negative, Normal, Average			
Trace type	Cle	ear/Write, Average, Max Hold, Min Hold	I	
Scale units		dBm, dBmV, dBμV, V, W		
Sweep (trace) point range		40,001		
Tracking source	100 kHz-3.6 GHz	100 kHz-6 GHz	100 kHz-8.4 GHz	
Vector network analysis		S11, S21		
Advanced Measurement	Power Suite Measurement, Nonlinear Measurement, Spectrum Monitoring			
Modulation Analysis	AM Measurement, FM Measurement, PM Measurement			
Vector signal analysis	ASK: 2 ASK, 4 ASK, 8 ASK, 16 ASK FSK: 2FSK, 4FSK, 8FSK, 16FSK MSK: type1, type2 PSK: BPSK, QPSK, OQPSK, 8PSK, BPSK, QPSK, 8BPSK; DQPSK, D8PSK, π/4 -DQPSK, π/8 -D8PSK, OQPSK QAM: 16, 32, 64, 128, 256			
Real-time analysis bandwidth	10 MHz; 40 MHz			
Interface	RF input, TG Output, 10 MHz reference IN, 10 MHz reference OUT, External trigger input, HDMI, USB-Host, USB-Device, LAN, 3.5 mm audio			

General Characterisitics	
Power	100-240 V AC(±10%), 50Hz/60Hz 100 to 120 VAC (Fluctuations±10%), 400 Hz
Display	10.1 inch multi-touch TFT LCD (1280x800)
Product size(W×H×D)	378mm × 218mm × 120 mm
Product net weight	4.96 kg
Standard quantity per carton	1pc

ering Information		
	UTS3036A: 3.6 GHz, 1 Hz-10 MHz, -165 dBm, TG	
UTS3000A Series	UTS3060A: 6.0 GHz, 1 Hz-10 MHz, -165 dBm, TG	
	UTS3084A: 8.4 GHz, 1 Hz-10 MHz, -165 dBm, TG	
Standard Accessories	Power cord conforming to the standard of the destination country ×1	
Standard Accessories	USB cable ×1	
	UTS-CK01: UT-W02-6GHz x1, UT-W01-6GHz x1, UT-C02-4GHz x2, UT-C01-6GHz x2, UTS-T01 x2, UTS-T02 x2, Kit pouchx1	
	UTS-EMI01: Frequency range: 30 MHz - 3 GHz; include 3 Pcs magnetic field near-field probes and 1 Pcs elect field near field probe; 1 Pcs SMB-SMA cable, 1 Pcs N-SMA adaptor	
	UT-3009F/M: Female-Male VNA Calibration Kit (9 GHz)	
	UT-W02-6GHz: N-SMA-JJ RF cable, DC-6 GHz VSWR≤1.25:1@6 GHz IL≤1.8 dB@6 GHz	
Optional Accessories	UT-W01-6GHz: N-N-JJ RF cable, DC-6 GHz VSWR≤1.25:1@6 GHz IL≤1.8 dB@6 GHz	
	UT-C02-4GHz: N-BNC-JK adaptor, DC-4 GHz VSWR≤1.15:1@4 GHz IL≤0.2 dB@4 GHz	
	UT-C01-6GHz: N-SMA-JK adaptor, DC-6 GHz VSWR≤1.15:1@6 GHz IL≤0.2 dB@6 GHz	
	UTS-T01: Receiving antenna, working frequency 2400 MHz-2500 MHz, Gain<2 dBi	
	UTS-T02: Receiving antenna, working frequency 824 MHz-960 MHz, Gain<2 dBi	
	UTS3000A-EMI: EMI Measurement Option	
	UTS3000A-AMK: Advanced Measurement Kit Option	
	UTS3000A-AMA: Analog Demodulation Measurement Option	
	UTS3000A-FDD-LTE: FDD-LTE Demodulation Analysis Option	
Options	UTS3000A-I/Q: I/Q Analyzer Option	
	UTS3000A-TDD-LTE: TDD-LTE Demodulation Analysis Option	
	UTS3000A-NR40: NR40 Demodulation Analysis Option	
	UTS3000A-B40: 40MHz Real Time Spectrum Analyzer Option	
	UTS3000A-VSA: Digital Demodulation Analysis Option	







UTS3000A Series

## UTS3000T+ Series NEW

## Spectrum/Signal Analyzers



- Frequency measurement range:9 kHz to 1.5 GHz, 3.2 GHz, 3.6 GHz, 8.4 GHz
- DANL: -161 dBm (typical value)
- Phase noise: <-98 dBc/Hz (Offset 10 kHz, typical value)
- Full amplitude accuracy: <0.7 dB
- Minimum resolution bandwidth (RBW): 1 Hz
- Advanced one-key measurement of Channel Power, Occcupied Bandwidth, TOI, and more (optional)

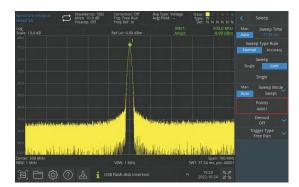
- The UTS3000T+ series are equipped with the tracking source function as standard. With proven all-digital technology and a resolution bandwidth of 1 Hz to 3 MHz, this series offers a wide range of analytical functions with 40,001 scanning points to better help you in your analysis work. The 10.1 inch touch screen of this spectrum analyzer will bring you a better using experience. Compact and beautiful structural design, multiple ports, and support for common protocols provide convenience for automation and remote control. The UTS3000T+ series can be widely used in communications, semiconductors, computers, aerospace, defense, instrumentation, industrial electronics, consumer electronics, automotive electronics, field maintenance, R&D/education, and many other fields.
  - EMI Pre-compliance analysis function (optional)
  - Support analog demodulation analysis (optional)
  - Support tracking source output function
  - 10.1 inch 1280 × 800 HD capacitive touch screen



Multitouch HD screen for quick operation



Excellent sensitivity to test weaker signal



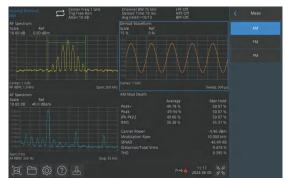
40,001 sweep points, providing higher frequency resolution



Excellent selectivity



Optional EMI pre-compliance analysis function



Provides demodulation analysis of AM, FM, PM analog signals

Key Spec	ifications	UTS3015T+	UTS3032T+	UTS3036T+	UTS3084T+
Frequer	ncy range	9 kHz - 1.5 GHz	9 kHz-3.2 GHz	9 kHz-3.6 GHz	9 kHz-8.4 GHz
Frequency	/ resolution	1 Hz	1 Hz	1 Hz	1 Hz
Sweep	o range	0Hz, 100Hz- 1.5 GHz	0Hz, 100Hz - 3.2 GHz	0Hz, 100Hz - 3.6 GHz	0Hz, 100Hz - 8.4 GHz
Sweep	accuracy	Swept ±[0.25%*Span+Span/(Points-1) ] FFT ±[0.10%*Span+Span/(Points-1) ]			
Swee	p time		1 ms to 400 1 µs to 400	0 s(span≠ 0) 0 s(span= 0)	
Sweep	o mode		Swep	t, FFT	
Marke	r mode		Normal, De	elta Δ, Fixed	
Marker	function		Marker Noise, Band Power,	Band Density, NdB, Counter	
RBW	(-3 dB)		1 Hz-1 MHz,	1-3-10 steps	
Video banc	lwidth (VBW)		1 Hz-1 MHz,	1-3-10 steps	
Selectivity (-	-60 dB/-3 dB)	<4.8:1 (nominal) (-60 dB:-3 dB)			
Bandwidth a	ccuracy (-3 dB)	<5% (nominal)			
Referer	nce level	-100 dBm - +30 dBm, Steps 1 dB			
Pre	amp	20 dB, Nominal			
Input atter	uator range		0-51 dB, 1	l dB Steps	
Maximum inp	out DC voltage		50 V DC max		
	inuous wave RF wer	≤+33 dBm 3 minute, In	put attenuation >20 dB	<pre>&lt;+33 dBm 3 minute, Input attenuation &gt;20 dB</pre>	
Display	log scale		1 dB to	200 dB	
Display li	near scale		0 -Refere	ence level	
Scale	e units	dBm, dBmV, dBuV, V, W		/, dBuV, V, W	
Sweep (trace	e) point range	10,001 40,001		001	
Number	of traces	4	4		6
Detecti	on mode	Sample, Peak, Negative, Normal, Average			
Trace	е Туре		Clear/Write, Average	, Max Hold, Min Hold	
Frequency	Preamp Off	9 kHz to 3.2 GHz: ±0.	6 dB; ±0.3 dB, Typical	9 kHz to 3.6 GHz: ±0.6 dB; ±0.3 dB, Typical 3.6 GHz to 8.4 GHz: ±0.8 dB; ±0.6 dB, Typical	
response	Preamp On	100 kHz to 3.2 GHz: ±1	.0 dB; ±0.8 dB, Typical		1.0 dB; ±0.8 dB, Typical 1.2 dB; ±1.0 dB, Typical

Key Specifications		UTS3015T+	UTS3032T+	UTS3036T+	UTS3084T+
	Frequency range	100 kHz-1.5 GHz	10 MHz-3.2 GHz	100 kHz-3.6 GHz	100 kHz-8.4 GHz
Tracking	Output level range	-40 dBm-0 dBm			
generator	Resolution	0.5 dB			
	Flatness output	±3 dB			
Inte	erface	RF input, Trace source output, 10 MHz reference input, 10 MHz reference output, Ext Trigger, HDMI, USB host, USB device, LAN, 3.5 mm Audio		t Trigger, HDMI, USB host,	

General Characterisitics	
Power	100-240 V AC, 50Hz/60Hz 100 to 120 VAC (Fluctuations±10%), 400 Hz
Display	10.1 inch multi-touch TFT LCD (1280x800)
Product size(W×H×D)	378 mm × 218 mm × 120 mm
Product net weight	4.55kg
Standard quantity per carton	1pc

Ordering Information		
	UTS3015T+: 1.5 GHz, 1 Hz-1 MHz, -161 dBm, with built-in Tracking generator	
UTS3000T+ Series	UTS3032T+: 3.2 GHz, 1 Hz-1 MHz, -161 dBm, with built-in Tracking generator	
01330001+ 3elles	UTS3036T+: 3.6 GHz, 1 Hz-3 MHz, -161 dBm, with built-in Tracking generator	
	UTS3084T+: 8.4 GHz, 1 Hz-3 MHz, -161 dBm, with built-in Tracking generator	
Standard Accessories	Power cord conforming to the standard of the destination country $\times 1$	
Standard Accessories	USB cable ×1	
	UT-CK01: accessories kit	
	UT-W02-6GHz: N-SMA-JJ RF cable, DC-6 GHz VSWR≤1.25:1@6 GHz IL≤1.8 dB@6 GHz	
	UT-W01-6GHz: N-N-JJ RF cable, DC-6 GHz VSWR≤1.25:1@6 GHz IL≤1.8 dB@6 GHz	
	UT-C02-4GHz: N-BNC-JK adaptor, DC-4 GHz VSWR≤1.15:1@4 GHz IL≤0.2 dB@4 GHz	
Optional Accessories	UT-C01-6GHz: N-SMA-JK adaptor, DC-6 GHz VSWR≤1.15:1@6 GHz IL≤0.2 dB@6 GHz	
	UTS-T01: Receiving antenna, working frequency 2400 MHz-2500 MHz, Gain<2 dBi	
	UTS-T02: Receiving antenna, working frequency 824 MHz-960 MHz, Gain<2 dBi	
	UTS-EMI01: Near-field probes kit	
	BAG-B3: Soft carrying bag for UTS1000B and UTS3000B/T+ Series Spectrum Analyzers	

Ordering Information		
	UTS3000-AMK: Advanced measurement kit (For UTS3084T+, UTS3036T+)	
	UTS3000-EMI: EMI measurement option (For UTS3084T+, UTS3036T+)	
Options	UTS3000-AMA: Analog demodulation measurement option (For UTS3084T+, UTS3036T+)	
Ομιίοπς	UTS1000-AMK: Advanced measurement kit (For UTS3032T+, UTS3015T+)	
	UTS1000-EMI: EMI measurement option (For UTS3032T+, UTS3015T+)	
	UTS1000-AMA: Analog demodulation measurement option (For UTS3032T+, UTS3015T+)	







UTS3000T+ Series

## **UTS3000B Series**

#### Spectrum/Signal Analyzers



- Frequency measurement range: 9 kHz-2.1 GHz/3.6 GHz/8.4 GHz
- DANL: -161 dBm/Hz (typical value)
- Phase noise: <-98 dBc/Hz(Offset 10 kHz, typical value)
- Full amplitude accuracy: <0.7 dB
- Up to 40,001 scanning points
- Minimum resolution bandwidth (RBW):1 Hz
- Advanced one-key measurement of Channel Power, Occcupied Bandwidth, TOI, and more (optional)

The UTS3000B series spectrum analyzer can measure frequencies up to 8.4 GHz. It is a spectrum analyzer with wide frequency band coverage and superior performance. The series adopts mature all digital IF technology. It provides a variety of analysis functions, and up to 40,001 scanning points , providing better help for your frequency domain analysis. This series of spectrum adopts a 10.1 inch large touch screen, which will bring you a better use experience. The UTS3000B series can be applied to functional/terminal/quality inspection tests in the electronics manufacturing industry, as well as wireless communication measurement, RF microwave courses, electromagnetic compatibility pre-scan, semiconductor measurement and many other application scenarios.

- EMI Pre-compliance analysis function (optional)
- Support analog demodulation analysis (optional)
- Support digital demodulation analysis (optional)
- Support tracking source output function (optional)
- 10.1 inch 1280 × 800 HD capacitive touch screen
- Provides USB/LAN interface, support SCPI protocol



Multi touch HD screen for quick operation



Excellent sensitivity to test weaker signals



Removable dust mesh



Scan 40,001 points



Excellent selectivity



EMI pre-compliance

Key Specifications	UTS3021B	UTS3036B	UTS3084B	UTS3084T
Frequency range	9 kHz-2.1 GHz	9 kHz-3.6 GHz	9 kHz-8.4 GHz	9 kHz-8.4 GHz
Frequency resolution	1 Hz			
Sweep width range	0Hz, 100Hz-2.1 GHz	0Hz, 100Hz-3.6 GHz	0Hz, 100Hz-8.4 GHz	0Hz, 100Hz-8.4 GHz
Sweep accuracy			an+Span/(Points-1)] n+Span/(Points-1)]	
Sweep time			00 s(span≠ 0) 0 s(span= 0)	
Sweep mode		Swep	ot, FFT	
Marker mode		Normal, D	elta Δ, Fixed	
Marker function	Marker Noise, Band Power, Band Density, NdB, Counter			
RBW (-3 dB)	1 Hz-3 MHz, 1-3-10 steps			
Video bandwidth (VBW)	1 Hz-3 MHz, 1-3-10 steps			
Selectivity (-60 dB/-3 dB)	<4.8:1(nominal) (-60 dB:-3 dB)			
Bandwidth accuracy (-3 dB)	<5% (nominal)			
Reference level	-100 dBm - +30 dBm, Step 1 dB			
Preamp	20 dB, Nominal, 9 kHz to 2.1 GHz (3.6 GHz, 8.4 GHz)			
Input attenuator range	0-51 dB, 1 dB Step			
Maximum input DC voltage	50 V DC max			
Maximum continuous wave RF power	<+33 dBm 3 minute, Input attenuation >20 dB			
Display log scale	1 dB to 200 dB			

Key Specifications		UTS3021B	UTS3036B	UTS3084B	UTS3084T			
Display linear scale		0 -Reference level						
Scale	e units	dBm, dBmV, dBuV, V, W						
Sweep (trace	e) point range		40,0	01				
Number	of traces		6					
Detection	on mode		Sample, Peak, Negati	ve, Normal, Average				
Trace	е Туре		Clear/Write, Average,	Max Hold, Min Hold				
Frequency	Preamp Off		9 kHz to 3.6 GHz: ±0.6 3.6 GHz to 8.4 GHz: ±0.					
response	Preamp On	100 kHz to 3.6 GHz: ±1.0 dB; ±0.8 dB, Typical 3.6 GHz to 8.4 GHz: ±1.2 dB; ±1.0 dB, Typical						
RBW switchir	ng uncertainty	Relative to 10 kHz RBW logarithmic resolution ± 0.2 dB, linear resolution ± 0.01, Nominal						
	ation switching rtainty	±0.5 dB(20 -30 °C,fc=50 MHz, Preamp Off, Relative to 20 dB attenuation, Input attenuation 1-51 dB)						
Absolute	Preamplifier off	±0.4 dB,Input signal level -20 dBm (20°C -30°C, fc=50 MHz, RBW=1 kHz, VBW=1 kHz, peak detector, attenuation input 20 dB)						
amplitude accuracy	Preamplifier on	±0.5 dB,Input signal level -40 dBm (20°C -30°C, fc=50 MHz, RBW=1 kHz, VBW=1 kHz, peak detector, attenuation input 20 dB)						
Total absolute ar	mplitude accuracy	±(0.4 dB+frequency response) (20°C -30°C,Fc>100 kHz, Input signal level -50 dBm-0 dBm, RBW=1 kHz, VBW=1 kHz, Peak detection, Input attenuation 20 dB, Preamplifier off, 95% Confidence)						
,	standing wave (VSWR)	<1.8 dB (nominal)						
	Frequency range	100 kHz-2.1 GHz (Optional)	100 kHz-3.6 GHz (Optional)	No	100 kHz-6 GHz			
	Output level range		-40 dBm	-0 dBm				
Tracking source	Resolution		0.5 dB					
	Flatness output	±3 dB						
Inte	rface	Trace source output, 10 MHz reference input, 10 MHz reference output, Ext Trigger, HDMI, USB host, USB device, LAN						

General Characterisitics					
Power	100-240 V AC, 50Hz/60Hz				
Display	10.1 inch multi-touch TFT LCD (1280x800)				
Product size(W×H×D)	378 mm × 218 mm × 120 mm				
Product net weight	4.55kg				
Standard quantity per carton	1рс				

Ordering Information	
	UTS3021B: 2.1 GHz, 1 Hz-3 MHz, -161 dBm/Hz, Tracking Generator optional
UTS3000B Series	UTS3036B: 3.6 GHz, 1 Hz-3 MHz, -161 dBm/Hz, Tracking Generator optional
UT33000B Selles	UTS3084B: 8.4 GHz, 1 Hz-3 MHz, -161 dBm/Hz
	UTS3084T: 8.4 GHz, 1 Hz-3 MHz, -161 dBm/Hz,with built-in Tracking generator
Standard Accessories	Power cord conforming to the standard of the destination country ×1
Standard Accessones	USB cable ×1
Optional Association	UT-CK01: accessories kit
Optional Accessories	UTS-EMI01: Near-field probes kit
	UTS3000-AMK: Advanced Measurement Kit Option
Outland	UTS3000-EMI: EMI Measurement Option
Optional	UTS3000-AMA: Analog Demodulation Measurement Option
	UTS3000-TG: Tracking Generator Option (UTS3021B and UTS3036B only)







UTS3000B Series

## **UTS1000B Series**

#### Spectrum/Signal Analyzers



Frequency range: 9 kHz-3.2 GHz

Resolution bandwidth: 1 Hz-1 mHz

Tracking source: 100 kHz-3.2 GHz

DANL: -161 dBm (typical)

Phase noise: <-98 dBc/Hz (1 GHz, typ.)



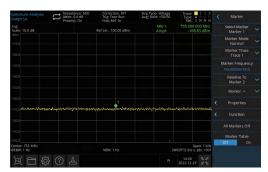
4 traces



Rich detector functions

The UTS1000B series spectrum analyzer can measure frequencies up to 3.2 GHz. It is a spectrum analyzer with wide frequency band coverage and superior performance. The series adopts mature all digital IF technology. It provides a variety of analysis functions, and up to 10,001 scanning points , providing better help for your frequency domain analysis. This series of spectrum adopts a 10.1 inch large touch screen, which will bring you a better use experience. The UTS1000B series is ideal for communication, semiconductor, computer, instrumentation, industrial electronics, consumer electronics, automotive electronics, field maintenance, R & D / education and other fields.

- Number of scanning points displayed: 10,001
- Analysis functions: EMI analysis, advanced measurement, analog demodulation analysis, digital demodulation analysis
- Display: 10.1 inch multi-touch TFT LCD (1280x800)
- Interface: HDMI, USB host, USB device, LAN, 3.5 mm audio



DANL: -161 dBm



Excellent selectivity

Key Spec	ifications	UTS1015B	UTS1015T	UTS1032B	UTS1032T				
Frequer	ncy range	9 kHz-1.5 GHz	9 kHz-1.5 GHz	9 kHz-3.2 GHz	9 kHz-3.2 GHz				
Frequency	/ resolution	1 Hz	1 Hz	1 Hz	1 Hz				
Sweep w	idth range	0Hz, 100Hz-1.5 GHz	0Hz, 100Hz-1.5 GHz	0 Hz, 100 Hz-3.2 GHz	0 Hz, 100 Hz-3.2 GHz				
Swee	p time		1 ms to 4000 s (span≠0) 1 μs to 4000 s (span=0)						
Sweep	o mode		Swept (1 kHz - 1 MH:	z), FFT (1 Hz - 30 kHz)					
Marke	r mode		Normal, De	elta Δ, Fixed					
Marker	function		Marker Noise, Band Power,	Band Density, NdB, Counter					
RBW	(-3 dB)		1 Hz-1 MHz,	1-3-10 steps					
Video band	lwidth (VBW)		1 Hz-1 MHz,	1-3-10 steps					
Selectivity (-	-60 dB/-3 dB)		<4.8:1 (nomina	l) (-60 dB:-3 dB)					
Bandwidth a	ccuracy (–3 dB)		<5% (n	ominal)					
Referer	nce level	-100 dBm - +30 dBm, Steps 1 dB							
Pre	amp	20 dB, nominal value, 9 kHz-1.5 GHz (3.2GHz)							
Input atten	nuator range	0-51 dB, 1 dB step							
Maximum inp	out DC voltage	50 V DC max							
	tinuous wave RF wer	≤±33 dBm, 3 minute, Input attenuation >20 dB							
Display	log scale	1 dB-200 dB							
Display li	near scale	0 -Reference level							
Scale	e units	dBm, dBmV, dBμV, V, W							
Sweep (trace	e) point range	10,001							
Number	of traces	4							
Detection	on mode	Sample, Peak, Negative, Normal, Average							
Trace	е Туре	Clear/Write, Average, Max Hold, Min Hold							
Frequency	Preamplifier off	±0.6 dB; ±0.3 dB, Typical (20°C -30°C, 30%-70% relative humidity, Input attenuation 20 dB, be relative to 50 MHz)							
response Preamplifier on		±1.0 dB; ±0.8 dB, Typical (20°C -30°C, 30%-70% relative humidity, Input attenuation 20 dB, be relative to 50 MHz)							
RBW switchir	ng uncertainty	Relative to 10 kHz RBW logarithmic resolution ± 0.2 dB, linear resolution ± 0.01, Nominal							
	ation switching rtainty	±0.5 dB (20°C -30°C, fc=50 MHz, Preamp Off, Relative to 20 dB attenuation, Input attenuation 1-51 dB)							
Total absolute ar	mplitude accuracy	±(0.4 dB+ Frequency response) (20-30 °C,Fc>100 kHz, Input signal level-50 dBm-0 dBm, RBW=1kHz, VBW=1 kHz, Peak detectors, Input attenuation 20 dB, Preamp Off, 95% confidence)							
	canding wave ra- /SWR)	≤1.8, (Nominal)	≤1.8, (Nominal)	≤1.8, (Nominal)	≤1.8, (Nominal)				



Key Specifications		UTS1015B	UTS1015T	UTS1032B	UTS1032T
	Frequency range	/	100 kHz-1.5 GHz	/	10 MHz-3.2 GHz
Tracking course	Output level range	/	-40 dBm-0 dBm	/	-40 dBm-0 dBm
Tracking source	Resolution	/	0.5 dB	/	0.5 dB
	Flatness output	/	±3 dB	/	±3 dB
Interface		Trace source output, 1	0 MHz reference input, 10 MH device, LAN,	z reference output, Ext Trigge 3.5 mm Audio	er, HDMI, USB host, USB

General Characterisitics	General Characterisitics					
Power	100-240 V AC, 50Hz/60Hz					
Display	10.1 inch multi-touch TFT LCD (1280x800)					
Product size(W×H×D)	368 mm × 218 mm × 120 mm					
Product net weight	4.5kg					
Standard quantity per carton	1рс					

Ordering Information	
	UTS1015B: 1.5 GHz, 1 Hz-1 MHz, -161 dBm
UTS1000B Series	UTS1015T: 1.5 GHz, 1 Hz-1 MHz, -161 dBm, with tracking generator
UTSTOODS SELIES	UTS1032B: 3.2 GHz, 1 Hz-1 MHz, -161 dBm
	UTS1032T: 3.2 GHz, 1 Hz-1 MHz, -161 dBm, with tracking generator
Standard Accessories	Power cord conforming to the standard of the destination country
Standard Accessories	USB cable ×1
	UT-CK01: accessories kit
	UT-W02-6GHz: N-SMA-JJ RF cable, DC-6 GHz VSWR≤1.25:1@6 GHz IL≤1.8 dB@6 GHz
	UT-W01-6GHz: N-N-JJ RF cable, DC-6 GHz VSWR≤1.25:1@6 GHz IL≤1.8 dB@6 GHz
	UT-C02-4GHz: N-BNC-JK adaptor, DC-4 GHz VSWR≤1.15:1@4 GHz IL≤0.2 dB@4 GHz
Optional Accessories	UT-C01-6GHz: N-SMA-JK adaptor, DC-6 GHz VSWR≤1.15:1@6 GHz IL≤0.2 dB@6 GHz
	UTS-T01: Receiving antenna, working frequency 2400 MHz-2500 MHz, Gain<2 dBi
	UTS-T02: Receiving antenna, working frequency 824 MHz-960 MHz, Gain<2 dBi
	UTS-EMI01: Near-field probes kit
	BAG-B3: Soft carrying bag for UTS1000B and UTS3000B Series Spectrum Analyzers

Ordering Information							
	UTS1000-AMK: Advanced Measurement Kit Option						
Options	UTS1000-EMI: EMI Measurement Option						
	UTS1000-AMA: Analog Demodulation Measurement Option						







UTS1000B Series

## **Power Supplies and Sources**

## **DC Power Supplies**

### Selection Guide

Series	Model	Channel	Output Voltage	Output Current	Max Power	Resolution	Name
UDP4000S	UDP4303S	4	0-32 V (CH1, CH2), 0-15 V (CH3), 0-6 V (CH4)	0-3 A (CH1, CH2, CH3) 0-10 A (CH4)	297 W	1 mV/1 μA	
UDP3000S	UDP3305S	4	0-30 V (CH1, CH2)	0-5 A (CH1, CH2)	22014	1 mV/1 mA	
UDP30005	UDP3305S-E	4	0-6 V (CH3), 5 V (CH4)	0-3 A (CH3), 2 A (CH4)	328 W	10 mV/1 mA	
	UDP3305C		0.2074(6112.6112)	0-5 A (CH1, CH2) 0-3 A (CH3), 2 A (USB)	325 W	10 mV1 mA	Programmable Linear DC Power Supply
UDP3000	UDP3303C	4	0-30 V (CH1, CH2), 1.8/2.5/3.3/5 V (CH3), 5 V (USB)	0-3 A (CH1, CH2)	205 W	10 mV/1 mA	. over supply
	UDP3303A		0 1 (002)	0-3 A (CH3), 2 A (USB)	203 W	TOTILYTTIA	1
UDP1000	UDP 1306C	2	0-32 V (CH1), 5 V (USB)	0-6 A (CH1), 2 A (USB)	202 W	10 mV/1 mA	
	UDP6953B		0-150 V 0-60 V	0-10 A	600 W 360 W	1 mV (<100 V) 10 mV (>100 V) 0.1 mA	Programmable Switching DC
	UDP6952B			0-25 A		0.1 mA	
UDP6900	UDP6942B	1		0-15 A			
	UDP6933B		0-150 V	0-5 A	- 200 W		
	UDP6932B		0-60 V	0-10 A			
	UDP6922B		0-00 V	0-5 A	100 W		Power Supply
	UDP6731		0-80 V	0-15 A	360 W	10 mV/1 mA	
UDP6700	UDP6730	1	0-40 V	0-30 A	300 W		
0000000	UDP6721		0-60 V	0-8 A	180 W		
	UDP6720		0-00 v	0-5 A	100 W		

#### Accessories

Model	Picture	Information	Certification	DC Power Supplies Series		
UT-L0615-00		Double O type terminal 60 A/1.5 m power supply/electronic load test wire, Length: 1.5 m, Wire diameter: 6.8mm, Max current: 60 A, Terminal: O type-O type, Color: red and black				
UT-L0110-BU		Fold insert-U type terminal 10 A/1 m power supply/electronic load test wire,Length: 1 m, Wire diameter: 3.6 mm,Max current: 10 A, Terminal: Fold insert-U type, Color: red and black		UDP4000S; UDP3000S; UDP6900; UDP6700; UDP1000		
UT-L0312-UU		Double U-type terminal 30 A/1.2 m power supply/electronic load test wire Length: 1.2 m,Wire diameter: 5.4 mm, Max current: 30 A,Terminal: double U-type, Color: red and black	ROW	UDP4000S; UDP3000S; UDP6900; UDP6700; UDP1000		
UT-L0320-UU		Double U-type terminal 30 A/2 m power supply/electronic load test wire Length: 2 m,Wire diameter: 5.4 mm, Max current: 30 A,Terminal: double U-type, Color: red and black		UDP4000S; UDP3000S; UDP6900; UDP6700; UDP1000		
UT-L0110-BB		Double Fold insert 10 A/1 m power supply/electronic load test wire, Length: 1 m,Wire diameter: 3.6 mm, Max current: 10 A ,Terminal: Fold insert- Fold insert,Color: red and black		UDP4000S; UDP3000S; UDP6900; UDP6700; UDP1000		
UTE-L16C	0	1 m/16 A alligator clip test wire, Wire diameter: 3.6 mm,Length:1 m, Rated voltage:220 V,Rated current: 16 A,Color: red and black		UDP4000S; UDP3000S; UDP6900; UDP6700; UDP1000		

## UDP4303S Series NEW

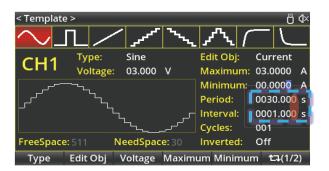
#### **Programmable Linear Power Supplies**



- 4-channel isolation
- 4.3 inch true color LCD
- One-touch series and parallel output
- Waveform measurement and display
- 8 kSa/s high speed sampling
- Fast transient response time: <50 µs
- 2-wire or 4-wire remote sense

CV CH2 CV CH4 31.999 v 9.999 v 15.999 v 6.200 v 7.355mA 0.000mA 0.000mA 0.000m 0.073 w 0.000 w 0.000 w 0.000 w 10.000 v 32.000 v 16.000 v 3.0000 A Voltage Current OVP OCP Option Display

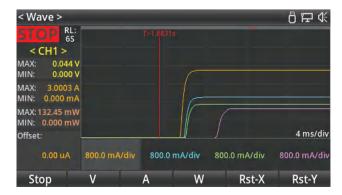
Current resolution up to 1µA, small current mode supported on all four channels



Programming time resolution up to 1 ms, more refined output for diverse arbitrary waveforms. 100 times the resolution of previous generation power supplies.

UDP4303S programmable linear DC power supply features two 32 V/3 A outputs, one 15 V/3 A output, and one 6 V/10 A output. It offers extremely low load regulation and low ripple noise output, with each channel isolated from the others. All four channels support remote sensing (4-wire) function. Channels 1 and 2 support internal series and parallel connections, making the device suitable for a wide range of applications.

- List and delayer support up to 512 outputs with minimum programming time of 1 ms
- Command processing time <10 ms
- Supports auto range test for large and small currents
- Web control and host computer control
- Multi-protection: OVP/OCP/OTP/sense protection, fast overcurrent protection time can be set (0 ms-1000 ms adjustable).



8 kSa/s current Sample rate. Four-channel current high-speed sampling. Accurately captures and displays transient changes

< List >					≣(1) 🖔 <b>(</b> ×
LIST:CH1	Running	No.	Volt(V)	Curr(A)	Time(s)
0000	210	002	3.000	1.8119	1.000
0000	.319	003	3.000	2.1101	1.000
Cycles:	Infinite	004	3.000	2.3817	1.000
,	O t Off	005	3.000	2.6147	1.000
End State:	Outp Off	006	3.000	2.7990	1.000
Groups:	181	007	3.000	2.9266	1.000
		800	3.000	2.9918	1.000
Stop					

List, Delayer, Monitor, Trigger, Recorder. Help you automate tests, monitor and protect intelligently, and record the data you care about



Independent, series and Parallel operation can be easily realized through the menu. Strong performance even when connected in series and parallel.



Four-channel full isolation. Isolation without crosstalk, comfort and safety.

Key Specifications		UDP4303S	
Output voltage		0-32 V (CH1/CH2), 0-15 V (CH3), 0-6 V (CH4)	
Output	current	0-3 A (CH1/CH2), 0-3 A (CH3), 0-10 A (CH4)	
Output	power	297 W	
Load regulation	CV	≤0.01%+2 mV	
Load regulation	СС	≤0.01%+250 µA	
Line regulation	CV	≤0.01%+2 mV	
Lille regulation	СС	≤0.01%+250 µA	
Resolution	Voltage	1 mV	
Resolution	Current	0.1 mA (1μA in small current mode)	
Programming	Voltage	CH1-CH3: ±(0.03%+8mV)/CH4: ±(0.04%+4 mV)	
accuracy	Current	CH1-CH3: ±(0.15%+5 mA)/CH4: ±(0.15%+10 mA)	
Readback accu-	Voltage	CH1-CH3: ±(0.03%+8mV)/CH4: ±(0.08%+3mV)	
racy	Current	CH1-CH3: ±(0.15%+5 mA)/CH4: ±(0.15%+10 mA)	
Ripple and noise	Voltage	<350µVrms /2 mVpp(20Hz-20 MHz)	
Current		≤2 mArms	
Programming time resolution		1 ms	
Current Sa	mple rate	8 ksa/s	
Standard i	nterfaces	USB Host, USB Device, LAN, RS232, Digital I/O	

General Characterisitics				
Power	AC 100 V/120 V/220 V/230 V 10% 50/60Hz			
Display	4.3 inch LCD			
Product net weight	10.5 kg			
Product size (W×H×D)	225 mm × 159.6 mm × 445 mm			
Standard quantity per carton	1 pcs			
Standard carton size	590 mm × 345 mm × 295 mm			

Ordering Information	
UDP4000S Series	UDP4303S: Programmable Linear DC Power Supply (4-Channel, 297 W)
Chandard Accordarias	Power cord conforming to the standard of the destination country
Standard Accessories	USB interface cable





UDP4303S Series

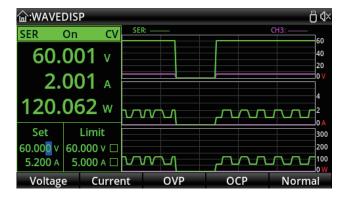
## UDP3000/S Series

#### **Programmable Linear Power Supplies**



- Maximum power up to 328 W
- Four channel independent output: 0-30 V/5 A (CH1/CH2), 0-6 V/3 A (CH3), 5 V/2 A (CH4)
- Multiple protection: OCP/OVP/OTP
- Excellent load regulation and line regulation
- Ultra low output ripple and noise
- Support one key serial and parallel output function
- The 4.3 inch TFT display can display three channels and multiple parameters at the same time
- List/delayer function to control voltage and current output as required
- External trigger function to realize industrial automation control
- CH1 On CV CH2 On CV CH3 On cv 29.999 v 30.000 v 4.999 v 0.000 A 0.000 A 0.001 A 0.000 w **0.030** w 0.000 w Set Set 30.000 v | 30.000 v 🖂 | 30.000 v | 28.000 v 🖂 5.000 v 5.000 A D 0.176 A 5.000 A D 2.682 A 1.000 A 1.000 A [ Current OVP

4.3 inch TFT LCD provides a human-computer interaction interface with rich functions and simple operation.



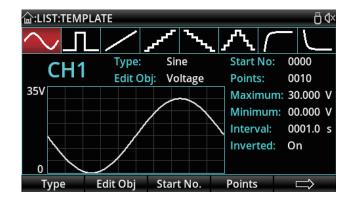
With waveform display function, it can intuitively display the change trend of voltage, current and power.

UDP3000S series is a high-performance programmable linear DC power supply. It has a clear LCD user interface, excellent performance indicators, a variety of analysis functions and communication interfaces. It can meet the diversified test needs of users. It aims to provide cost-effective DC programmable power supply equipment for teaching, scientific research, industry and other fields.

- Provides USB host, USB device, LAN, RS232, digital I/O and other interfaces
- With our waveform display function, get real-time and dynamic display of output voltage/current/power waveforms
- Intelligent speed control of fan can effectively reduce fan noise during operation
- Supports 10 groups of file storage and transfer out, and supports USB FLASH read and write
- High precision display of five-digit voltage / four-digit current, with resolutions of 10 mV / 1 mA and 1 mV / 1 mA
- Keyboard lock function to prevent misoperation
- Support SCPI remote command control



One key series parallel connection provides you with a wider working range of power supply.



Unique list and delayer functions provide convenience for automatic test

Key Specifications		UDP3303 A	UDP3303C	UDP3305C	UDP3305S-E	UDP3305S	
Output	voltage	0-30 V (CH1/CH2), 1.8 V/2.5 V/3.3 V/5 V (CH3), 5 V (USB)			0-30 V (CH1/CH2), 0-6 V (CH3), 5 V (CH4 USB)		
Output	current			0-5 A (CH1/CH2), 3 A (CH3), 2 A (USB)	0-5 A (CH1/CH2), 0-3 A (CH3), 2 A (CH4 USB		
Output	Output power		5 W	325 W	328 W		
	CV	≤0.01%+	-3mV (≤3 A);≤0.02%+5 r	mV (>3 A)	≤0.01	%+2 mV	
Load regulation	CC		≤0.2%+3mA		≤0.01%	6+250 μA	
	CV	≤0.01%+3mV	≤0.019	%+3mV	≤0.01	%+2 mV	
Line regulation	CC	≤0.2%+3mA	≤0.2%	5+3mA	≤0.01%	6+250 μA	
	Voltage		10 mV		10 mV	1 mV	
Resolution	Current		1 mA		1 mA	1 mA	
Programming	Voltage	≤0.1%+30 mV	≤0.1%+30 mV	±(0.1% of reading+30 mV)	±(0.3%+20 mV)	±(0.03%+10 mV)	
accuracy	Current	<0.5%+2 mA	≤0.5%+2 mA	±(0.3% of reading+5 mA)	±(0.2%+5 mA)	±(0.2%+5 mA)	
Voltage Readback		≤0.1%+30 mV	+30 mV ≤0.1%+30 mV		±(0.1%+20 mV)	±(0.03%+10 mV)	
accuracy	Current	≤0.5%+2 mA	≤0.5%+2 mA		±(0.15%+5 mA)	±(0.15%+5 mA)	
Discolar and action	Voltage	≤1 mVrms	≤1 mVrms		<350µVrms/2 mVpp(5Hz-1 mHz)		
Ripple and noise	Current	≤3mArms	mArms ≤3mArms			≤2 mArms	
Temperatur	e coefficient		≤300 ppm		Voltage: 0.01%+5 mV; Current: 0.01%+2 mA		
Parallel load	d regulation	≤0.01%+3mV (≤3 A); ≤0.02%+5 mV (>3 A)	≤0.01%+3mV (≤3 A); ≤0.02%+5 mV (>3 A)	≤0.01%+3mV	≤0.01%+2 mV	≤0.01%+2 mV	
Parallel line regulation		≤0.01%+3mV	≤0.01%+3mV		≤0.01%+2 mV	≤0.01%+2 mV	
Series load regulation		≤300 mV					
Series line regulation			≤0.01%+5 mV			≤0.01%+3mV	
Standard interfaces		USB Host (5 V/2 A, charging port only), Digital I/O	(5 V/2 A, charg	Host ging port only), 232, Digital I/O	USB Host (5 V/2 A, charging port only), USB Host USB Device, LAN, RS232, Digital I/O		

General Characterisitics						
Power	UDP3303 A/UDP3303C: AC110 V/120 V/220 V/230 V ±10%, 50Hz/60Hz UDP3305C/UDP3305S-E/UDP3305S: AC100 V/120 V/2202 V/230 V±10%, 50Hz/60Hz  AC 100 V/120 V/220 V/230 V±10%, 50Hz/60Hz					
Display	EBTN LO	CD	4.3inch LCD			
Product net weight	8.5kg 10kg		10.2kg			
Product size (W×H×D)	240 mm × 168mm × 355 mm					
Standard quantity per carton	1pcs					
Standard carton size	455 mm x 365 mm x 300 mm					
Standard carton gross weight	UDP3000S: 10.5kg, UDP3000: 11.4kg					

Ordering Information				
	UDP3303A: Non-Programmable Linear DC Power Supply (3CH, 30 V, 3 A)			
	UDP3303C: Programmable Linear DC Power Supply (3CH, 30 V, 3 A)			
UDP3000/S Series	UDP3305C: Programmable Linear DC Power Supply (3CH, 30 V, 5 A)			
	UDP3305S-E: Programmable Linear DC Power Supply (4CH, 30 V, 5 A)			
	UDP3305S: Programmable Linear DC Power Supply (4CH, 30 V, 5 A)			
Standard Accessories	Power cord conforming to the standard of the destination country			
Standard Accessories	USB interface cable (programmable models only)			
Optional Accessories	Alligator clip test line: 1pair			









UDP3000S Series

## **UDP1000 Series**

#### **Programmable Linear Power Supplies**



- High precision 4-digit display
- Over voltage/current/temperature protection
- Output voltage/current setting viewable
- · Shutdown memory/keyboard lock
- Intelligent cooling fan



Single output 32 V/6 A and USB charging interface 5 V/2 A



Over voltage/current/temperature protection

UDP1306C is a single-channel programmable linear DC power supply, a basic power product designed by users of a smaller size and high reliability power supply. It has low ripple noise, fast transient response, excellent power supply and load regulation and other characteristics. Powerful output function and complete protection function.

- USB charging interface
- USB device communication, RS232 program-controlled communication interface
- Remote control (output ON/OFF)
- 5 sets of setup storage: M1-M5



5 sets of setup storage: M1-M5



With RS232 and USB communication interface function

Key Specifications		UDP1306C
Output voltage		0-32 A (CH1), 5 V (USB)
Output current 0-6 A (CH1), 2 A (USB)		0-6 A (CH1), 2 A (USB)
Output	power	202 W
Display	mode mode	3-window, 4-digit voltage and current high precision display
Resolution	Voltage	10 mV
Resolution	Current	1 mA
Laadvaaulatiaa	Voltage	<0.01%+5 mV
Load regulation	Current	<0.1%+10 mA
Line regulation	Voltage	<0.01%+3 mV
Line regulation	Current	<0.1%+3 mA
Program-	Voltage	<0.5%+20 mV
ming accura- cy(25°C±5°C)	Current	<0.5%+10 mA
Ripple and noise	Voltage	≤2 mVrms
(20Hz-20 MHz)	Current	≤3 mArms
Temperature coefficient Current/Voltage: ≤300ppm/°C		Current/Voltage: ≤300ppm/°C
Voltage rising/fa	alling time delay	≤100 ms (10% rated load)
Standard i	interfaces	USB Charging (5 V/2 A), USB Device, RS232

General Characterisitics				
Power	AC 100 V/120 V/220 V/230 V±10%, 50Hz/60Hz			
Display	EBTN LCD			
Product net weight	7.5kg			
Product size (W×H×D)	136 mm x 194 mm x 327mm			
Standard quantity per carton	1pcs			
Standard carton size	505 mm x 270 mm x 335 mm			
Standard carton gross weight	9.6kg			

Ordering Information				
UDP1000 Series UDP1306C: Programmable Linear DC Power Supply (1CH, 32 V, 6 A)				
	International standard power cord			
Standard Accessories	USB interface cable			
	Alligator clip test line			
Optional Accessories	RS232 Communication line			





UDP1000 Series

# UDP6900 Series NEW

#### **Programmable Switching Power Supplies**



- 4.3 inch TFT true color LCD
- High accuracy and high resolution
- List and delaver
- Can set timing output, time 0.1-99999.9 s
- Intelligent fan control
- Remote compensation function
- Front and rear panel dual outputs
- RS232, RS485, USB, LAN multiple communication
- Support SCPI protocol and Modbus RTU dual protocol

The UDP6900 series are single-channel programmable DC power supplies. This series of power supplies can realize combined output of various voltages and currents under fixed power. A single power supply can meet the test of high-voltage low-current and highcurrent low-voltage two DUTs, which greatly saves your cost and space. UDP6900 series is equipped with standard RS232, LAN, USB and analog interfaces, supports SCPI protocol, and is convenient for remote control, industrial PLC control and building an intelligent test platform. Widely used in DC-DC power modules, battery charging and sensors and other testing fields.

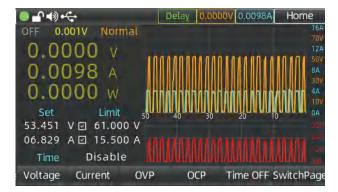
- External Analog Control vs. External Digital Control
- Built-in 4.5-digit digital voltmeter for convenient external measurement
- Multiple protections: over-temperature, over-power protection, over-voltage and over-current protection values can be set
- Support 18x8 group preset saving and recall
- High power factor, small harmonic interference to the power grid
- Waveform display output trend
- LAN interface supports web remote control



4.3 inch TFT LCD display, display more content



List function provides 512 steps of automated test steps



Waveform display can visually show the change trend of voltage, current and power



Commonly used settings can use the preset function to improve test efficiency

Key Specifications		UDP6922B	UDP632B	UDP6942B	UDP6933B	UDP6952B	UDP6953B
Output voltage		0-60 V	0-60 V	0-60 V	0-150 V	0-60 V	0-150 V
Output	current	0-5 A	0-10 A	0-15 A	0-5 A	0-25 A	0-10 A
Output	power	100 W	200 W	360 W	200 W	600 W	600 W
	CV	≤0.01%+3 mV	≤0.01%+10 mV	≤0.01%+30 mV	≤0.01%+20 mV	≤0.01%+30 mV	≤0.01%+25 mV
Load regulation	CC	≤0.05%+2 mA	≤0.05%+4 mA	≤0.05%+6 mA	≤0.01%+6 mA	≤0.1%+10 mA	≤0.05%+10 mA
Linamandation	CV	≤0.01%+3 mV	≤0.01%+10 mV	≤0.01%+30 mV	≤0.01%+20 mV	≤0.01%+30 mV	≤0.01%+25 mV
Line regulation	СС	≤0.05%+2 mA	≤0.05%+4 mA	≤0.05%+6 mA	≤0.01%+6 mA	≤0.1%+10 mA	≤0.05%+10 mA
Danalatian	Voltage	0.1 mV (<10 V) 1 mV (>10 V)	0.1 mV (<10 V) 1 mV (>10 V)	0.1 mV (<10 V) 1 mV (>10 V)	1 mV (<100 V) 10 mV (≥100 V)	0.1 mV (<10 V) 1 mV (>10 V)	1 mV (<100 V) 10 mV (>100 V)
Resolution	Current	0.1 mA	0.1 mA	0.1 mA (<10 A) 1 mA (>10 A)	0.1 mA	0.1 mA (<10 A) 1 mA (>10 A)	0.1 mA
Programming	Voltage	≤0.03%+5 mV	≤0.03%+5 mV	≤0.03%+5 mV	≤0.04%+30 mV	≤0.03%+5 mV	≤0.03%+20 mV
accuracy	Current	≤0.1%+5 mA	≤0.1%+10 mA	≤0.1%+15 mA	≤0.1%+10 mA	≤0.1%+25 mA	≤0.1%+25 mA
Readback accu-	Voltage	≤0.03%+5 mV	≤0.03%+5 mV	≤0.03%+5 mV	≤0.04%+30 mV	≤0.03%+5 mV	≤0.03%+20 mV
racy	Current	≤0.1%+5 mA	≤0.1%+10 mA	≤0.1%+15 mA	≤0.1%+10 mA	≤0.1%+25 mA	≤0.1%+25 mA
Ripple and noise	Voltage	≤5 mVp-p	≤8 mVp-p	≤15 mVp-p	≤30 mVp-p	≤20 mVp-p	≤50 mVp-p
	Current	≤5 mArms	≤6 mArms	≤8 mArms	≤6 mArms	≤15 mArms	≤15 mArms
Standard i	Standard interfaces RS232, RS485, Remote compensation, External analog, LAN, USB Device				•		

General Characterisitics			
Power	AC 100 V-240 V, 47 Hz-63 Hz	AC 100 V-240 V, 47 Hz-63 Hz	AC 100 V-240 V, 47 Hz-63 Hz
Display	4.3 inch TFT LCD	4.3 inch TFT LCD	4.3 inch TFT LCD
Product net weight	4.0kg	4.0kg	4.5kg
Product size (W×H×D)	215 mm × 88m×373.7mm	215 mm × 88m×373.7mm	215 mm × 88m×373.7mm
Standard quantity per carton	1pcs	1pcs	1pcs

Ordering Information	rdering Information				
	UDP6922B: Programmable Switching DC Power Supply (1CH, 60 V, 5 A, 100 W)				
	UDP6932B: Programmable Swiching DC Power Supply (1CH, 60 V, 10 A, 200 W)				
UDD(000 Carias	UDP6942B: Programmable Swiching DC Power Supply (1CH, 60 V, 15 A, 360 W)				
UDP6900 Series	UDP6933B: Programmable Swiching DC Power Supply (1CH, 150 V, 5 A, 200 W)				
	UDP6952B: Programmable Swiching DC Power Supply (1CH, 60 V, 25 A,600 W)				
	UDP6953B: Programmable Swiching DC Power Supply (1CH, 150 V, 10 A, 600 W)				
Standard Accessories	Power cord conforming to the standard of the destination country 1				
	USB data cable 1				





UDP6900 Series

## **UDP6700** Series

#### **Programmable Switching Power Supplies**



- Fully digital control
- Full scale high resolution: 10 mV/1 mA
- Low ripple and noise
- Software correction function
- Minimum overall dimension
- 2.8 inch LCD display
- Remote compensation
- Support RS232 communication



2.8 inch LCD provides more interactive content and displays more real-time information.



Provide OVP / OCP / OTP protection function. The protection values of current and voltage can be set.



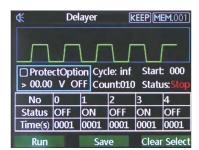
 $3 \times 200$  sets of setting values can be saved. It can better adapt to diversified and rapid automation applications.

UDP6720 /UDP6721 switching DC power supply has a wide range of voltage and current utilization, leading the same type of power supply. The power ratio reaches 3.0. One machine can replace multiple small power supplies to reduce your repeated investment. It is equipped with RS232 communication interface as standard and supports SCPI protocol to facilitate remote control. It has the functions of list and delayer. The remote compensation module can avoid the inaccurate test caused by the voltage drop on the load line. LCD display brings better experience to measurement and debugging.

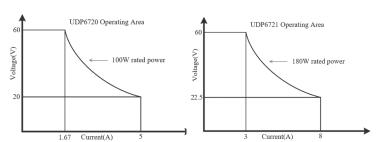
- Fan intelligent regulation
- · Constant voltage and constant current output
- High reliability: overvoltage / overcurrent / overtemperature protection function
- · List & delayer function
- The output is controlled by a switch
- High quality and high cost performance
- Multiple groups of output voltage / current can be preset: 3 × 200 groups



The list function can preset the power output curve to facilitate the automatic test.



Delayer function, set the delay output of the power supply. It can help you with on-off test or related test.



With high power ratio and wide range output, you can save the purchase of multiple small power supplies.

Key Speci	fications	UDP6720	UDP6721	UDP6730	UDP6731		
Output v	oltage	0-60 V 0-60 V		0-40 V	0-80 V		
Output	urrent	0-5 A	0-8 A	0-8 A 0-30 A 0-15 A			
Output	oower	100 W	180 W	360 W	360 W		
	CV	<0.01%+3mV	<0.01%+5 mV	<0.03%	+30 mV		
Load regulation -	CC	<0.01%+3mA	<0.01%+5 mA	<0.03%+30 mA	<0.03%+15 mA		
	CV	<0.01%+3mV	<0.01%+5 mV	<0.03%+15 mV	<0.03%+30 mV		
Line regulation -	CC	<0.1%+3mA	<0.1%+5 mA	<0.1%+15 mA	<0.1%+10 mA		
Voltage		10 mV					
Resolution -	Current	1 mA					
Programming	Voltage	<0.05%	+10 mV	<0.1%+30 mV	<0.1%+10 mV		
accuracy	Current	<0.2%+2 mA	<0.3%+5 mA	<0.3%+2 mA	<0.3%+10 mA		
Readback accu-	Voltage	<0.05%	+10 mV	<0.1%+10 mV			
racy	Current	<0.2%+2 mA	<0.3%+5 mA	<0.3%+30 mA	<0.3%+10 mA		
	Voltage	<2.0 mVrms	<5.0 mVrms	<5.0 mVrms <12 mVrms			
Ripple and noise	Current	<5.0 mArms	<8.0 mArms	<72 mArms	<27mArms		
Temperature	Voltage	≤100ppm/°C		≤300ppm/°C			
coefficient	Current	≤200ppm/°C		≤300ppm/°C			
Standard i	nterfaces		RS232, Remote	e compensation			

General Characterisitics						
Power	AC: 110(±10%)V/220(±10%)V, 50Hz/60Hz					
Display	2.8 inch LCD, 4-digit display					
Product net weight	2.5kg					
Product size (W×H×D) 87mm x 174 mm x 255 mm						
Standard quantity per carton	1pcs					

Ordering Information						
UDP6700 Series	UDP6720: Programmable Switching DC Power Supply (1CH, 60 V, 5 A)					
	UDP6721: Programmable Swiching DC Power Supply (1CH, 60 V, 8 A)					
	UDP6730: Programmable Swiching DC Power Supply (1CH, 40 V,30 A)					
	UDP6731: Programmable Swiching DC Power Supply (1CH, 80 V, 15 A)					
Standard Accessories	Standard Accessories Power cord conforming to the standard of the destination country					
Optional Accessories	Alligator clip test line: 1 pair					





## DC Electronic Loads

#### Selection Guide

Series	Model	Total Power	Voltage	Current	Highest Frequency	Current Stope	Resolution
UTL8500+	UTL8512+	300W	- 150V	30A	50kHz	0.0006Α/μS-3Α/μS	0.1mV 0.01mA
	UTL8511+	150W					

# UTL8500+ Series NEW

#### **Programmable DC Electronic Loads**



UTL8500+ series DC electronic load is a new generation of intelligent large-screen and cost-effective electronic load. Up to 500 kHz synchronous sampling, high-performance DSP processing. The fast, efficient and intuitive LIST programmable automatic test mode meets most R&D and testing needs.



15 test modes are available to arrange your tests freely



Freely edit test items in List mode to help you implement automated measurement



Various parameters of the battery mode are adjustable, and the battery discharge curve is provided. Help you complete battery testing excellently



4.3inch LCD display, clear parameter and status display

Key Specifications		UTL8	511+	UTL8512+					
Input ratings 0-40°C	Input voltage	0-15 V	0-150 V	0-15 V	0-150 V				
	Input current	0-3 A	0-30 A	0-3 A	0-30 A				
	Input power	150	W	3	300 W				
	Min. operating voltage		1.4 V ±0.1 V at 30 V						
CV mode	Range	0.1-15 V	0.1-150 V	0.1-15 V	0.1-150 V				
	Resolution	0.1 mV	1 mV	0.1 mV	1 mV				
	Accuracy	1	±(0.03%+0.05%FS)						
	Range	0-3 A	0-30 A	0-3 A	0-30 A				
CC mode	Resolution	0.01 mA	0.1 mA	0.01 mA	0.1 mA				
	Accuracy	1	±(0.0	3+0.05%FS)					
CR mode	Range		0.05 Ω-10k Ω						
	Resolution		16 bit						
	Accuracy		(0.1+0.01R)%						
	Range	150	W	3	300 W				
CP mode	Resolution		10 mW						
	Accuracy		±(0.1%+0.1%FS)						
	T1&T2		10 μS-50 S/Res: 1μS						
Dynamic mode	Accuracy		1 μS/1 mS±100ppm						
(CC mode)	Rise/fall slope		0.0006 A/μS-3 A/μS						
	Min rise time		10 μs						
	Range	0-15 V	0-150 V	0-15 V	0-150 V				
Readback volt- age	Resolution	0.01 mV	0.1 mV	0.01 mV	0.1 mV				
	Accuracy		±(0.02%+0.03%FS)						
	Range	0-3 A	0-30 A	0-3 A	0-30 A				
Readback cur- rent	Resolution	0.01 mA	0.1 mA	0.01 mA	0.1 mA				
	Accuracy		±(0.03%+0.05%FS)						
	Range	150	150 W 300 W						
Readback power	Resolution		10 mW						
	Accuracy		±(0.1%+0.1%FS)						
Over-power protection		≥152 W delaye ≥165 W immedia			≥303 W delayed protection, ≥330 W immediate protection				
Over-current protection			≥30.3 A delay protection, ≥33 A immediate protection						
Over-voltag	e protection			elay protection, nediate protection					
Over-temperat	ture protection			≥85°C					
Short circuit	Current (CC)	≤3 A	≤30 A	≤3 A	≤30 A				
	Voltage (CV)		0 V						
	Resistance (CR)	60 n	ηΩ	50 mΩ					

Key Specifications	UTL8511+	UTL8512+	
Ripple display	lay Yes Yes		
Waveform record	No No		
Test mode	15 test modes: CC, CV, CR, CP, dynamic, OVP, time, OCP, CR-LED, battery, automatic list, short circuit, load effect, combination, list		
Input terminal resistance	300Κ Ω		
Interface&protocol	RS232 interface and SCPI protocol	RS232 interface and SCPI protocol	

	General Characterisitics	
Power	110 V/220 V, 50/60Hz	
Display	4.3 inch LCD	
Product size (W×H×D)	215 mm x 88mm x 372 mm	
Product net weight	3.73kg 4.49kg	
Standard quantity per carton	1pcs	
Standard carton size	515 mmX365 mmX220 mm	

Ordering Information		
LITIOTO C	UTL8511+: Programmable DC Electronic Load (150 V, 30 A, 150 W)	
UTL8500+ Series	UTL8512+: Programmable DC Electronic Load (150 V, 30 A, 300 W)	
Standard Accessories	Power cord conforming to the standard of the destination country	
	RS232 data cable	
	2P connecting terminal	
	5P connecting terminal	
	Fuse	





UTL8500+ Series

# **Bench Meters**

# **Digital Multimeters**

## Selection Guide

Series	Model	Display Accuracy	DCV Annual Accuracy	Fastest TestRateU
	UT8806E	6 ½	0.0035%	10k rdgs/s
	UT8805E	5½	0.01%	5k rdgs/s
UT8000E	UT8804E	4%	0.025%	
	UT8803E	3%	0.3%	3 rdgs/s
	UT8802E	4 1/2	0.1%	

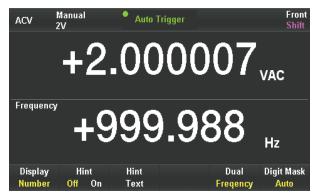


## 61/2 Digital Multimeter



- 4.3 inch TFT-LCD, display resolution 480×272
- 61/2 digit reading
- Measurement speed up to 10,000 rdgs/s
- True RMS AC voltage and current measurement
- 32GB Nand Flash, mass storage instrument setting files and data
- Built-in thermocouple cold junction compensation
- +2.000004 VDC Range **NPLC** Auto Zero Input Z Relative History

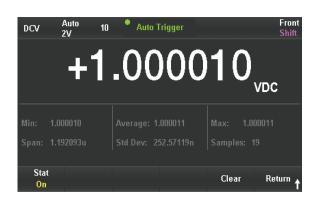
1,999,999 count, 4.3 inch TFT LCD display



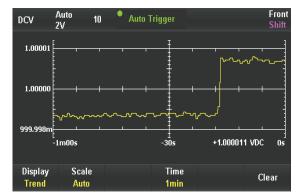
Support the display of main and auxiliary parameters on the same screen. AC true RMS

The UT8806E is a high-performance 6½ digit dual display digital multimeter, engineered to deliver exceptional accuracy and speed for precise measurements. With a display count of 1,999,999 and an impressive DC accuracy of 0.0035%, it meets the demanding needs of users seeking multifunctional, high-precision, and automated measurement capabilities. Its broad measurement ranges include DC voltage from 200 mV to 1000 V, AC voltage from 200 mV to 750 V TRMS, and resistance from 20  $\Omega$  to 1 G $\Omega$ , making it a versatile and reliable tool for various testing applications.

- Support standard SCPI remote control commands, PC software, compatible with the latest mainstream multimeter command set
- Support dual display, built-in help system, easy to obtain information
- Configuration interface: USB Host, USB Device, LAN, RS232C, GPIB
- Measurement data and settings can be imported or exported through VXI-11 or USB, so that users can modify, view, and backup conveniently



Various mathematic operations



UT8806E supports multiple display modes. Users can observe measurement data through numbers, bar graphs, trend graphs and histograms.

V	UT8806E		
Key Specifications	Range	Accuracy (1 year)	
DC voltage (V)	200 mV/2 V/20 V/200 V/1000 V	±(0.0035%+0.0006%)	
AC voltage (V)	200 mV/2 V/20 V/200 V/750 V	±(0.06%+0.03%)	
DC current (A)	2 μA/20 μA/200 μA/2 mA/20 mA/200 mA/2 A/10 A	±(0.05%+0.002%)	
AC current (A)	200 μA/2 mA/20 mA/200 mA/2 A/10 A	±(0.1%+0.04%)	
Resistance (Ω)	20 Ω/200 Ω/2k Ω/20k Ω/200k Ω/2 ΜΩ/10 ΜΩ/ 100 ΜΩ/1 GΩ	±(0.01%+0.001%)	
Capacitance (F)	2 nF/20 nF/200 nF/2 μF/20 μF/200 μF/2 mF/20 mF/100 mF	±(1%+0.1%)	
Frequency (Hz)	3 Hz-1 MHz	±0.007%	
Temperature (°C)	-270°C-1760°C	Probe accuracy +0.16%	
Display count	1,999,999		
DCV Accuracy	0.0035%	0.0035%	
Sample rate	10k rdgs/s	10k rdgs/s	
Auto range	√	$\checkmark$	
True RMS	√		
Data storage	10k data record; 32GB Nand Fla	10k data record; 32GB Nand Flash total storage	
Frequency response (Hz)	300 kHz	300 kHz	
Diode/triode test	√	√	
Continuity buzzer	√	$\checkmark$	
Data hold	√		
Mathematical operations	Pass/Fail, Relative, minimum/maximum/average, standard deviation, dBm, dB, histogram, trend chart and bar chart		
Input resistance	≥10 GΩ or 10 MΩ		
Standard interface	USB Host, USB Device, LAN, RS232C, GPIB (optional)		

General Characterisitics		
Power	AC 90 V-110 V, 45-440Hz; AC 110 V-132 V, 45-440Hz; AC 200 V-240 V, 45-66Hz; AC 216 V-264 V, 45-66Hz	
Display	4.3 inch TFT LCD	
Product net weight	4.4kg	
Product size (W×H×D)	256 mm × 113.2 mm × 378.2 mm	
Standard quantity per carton	1pcs	
Standard carton size	510 mm × 195 mm × 340 mm	
Standard carton gross weight	5.5kg	

Ordering Information		
UT8000E Series	UT8806E: Benchtop Digital Multimeter (1,999,999, Auto)	
Standard Accessories	International standard power cord	
	USB interface cable	
	RS232C interface cable	
	Basic test leads with alligator clip	







UT8806E

# UT8805E

#### 5½ Digital Multimeter



- 199,999 count resolution
- Measuring speed: 2.5/10/5k reading per second
- AC true RMS measurement.
- 2-line and 4-line resistance measurement
- Continuity and diode test
- Temperature measurement with built-in thermocouple cold junction
- Various mathematic operations: maximum, minimum, average value, standard deviation, pass/fail,dBm, dB, relative measurement, histogram, trend chart, bar chart

UT8805E is an auto-ranging, true RMS desktop digital multimeter with 199,999 counts, up to 5K rdgs/s, 300 kHz frequency response, and a 4.3 inch TFT LCD. Pass/Fail, maximum value/minimum value/ average value/relative value measurement, etc., 10K reading history data record, 1GB Nand Flash total capacity. It is a superior electrical measuring instrument. It is suitable for measurement in electronics, communications, manufacturing, petroleum, national defense, electric power, chemical and other industries. It is an indispensable experimental tool for various colleges and universities.

- USB drive store data and configuration
- Supports interface of USB, RS232C and LAN, USB-TMC, IEEE 488.2 standard, VXI11, and SCPI language
- History data record and storage
- 1GB NAND FLASH storage, mass storage system and test data
- Free PC software to program and communicate with the UT8805E



199,999 count, 4.3 inch TFT LCD display



Various mathematic operations: maximum, minimum, average value, standard deviation, pass/fail,dBm, dB, relative measurement, histogram, trend chart, bar chart



Support the display of main and auxiliary parameters on the same screen. AC true RMS



3 kinds of display formats are supported by UT8805E. User can check the measured data by number, bar chart, trend chart, and histogram.

	UT8805E		
Key Specifications	Range	Accuracy (1 year)	
DC voltage (V)	200 mV/2 V/20 V/200 V/1000 V	±(0.01%+0.003%)	
AC voltage (V)	200 mV/2 V/20 V/200 V/750 V	±(0.2%+0.05%)	
DC current (A)	200 μA/2 mA/20 mA/200 mA/2 A/10 A	±(0.055%+0.005%)	
AC current (A)	2 mA/20 mA/200 mA/2 A/10 A	±(0.5%+0.1%)	
Resistance (Ω)	200 Ω/2k Ω/20k Ω/200k Ω/2 ΜΩ/10 ΜΩ/100 ΜΩ	±(0.02%+0.003%)	
Capacitance (F)	2 nF/20 nF/200 nF/2 μF/20 μF/200 μF/2 mF	±(1%+0.5%)	
Frequency (Hz)	20 Hz-1 MHz	±(0.01%+0.003%)	
Temperature (°C)	-270°C-1760°C (thermocouple and thermal resistance sensor supported)	±0.5°C	
Display count	199,999		
DCV Accuracy	0.010%	0.010%	
Sample rate	5k rdgs/s		
Auto range	√	√	
True RMS	√		
Data storage	10k data record; 1 GB Nand Fla	10k data record; 1 GB Nand Flash total storage	
Frequency response (Hz)	100 kHz	100 kHz	
Diode/triode test	√ √		
Continuity buzzer	$\checkmark$		
Data hold	√		
Mathematical operations	Pass/Fail, relative value, minimum/maximum/average, standard deviation, dBm, dB, Hold, histogram, trend chart, and bar chart		
Input resistance	≥10GΩ or 10 MΩ		
Standard interface	USB Host, USB Device, LAN, RS232		

General Characterisitics		
Power	AC 100 V-120 V, 45Hz-440Hz; AC 200 V-240 V, 45Hz-66Hz	
Display	4.3 inch TFT LCD	
Product net weight	4.4kg	
Product size (W×H×D)	239 mm × 100 mm × 344 mm	
Standard quantity per carton	2pcs	
Standard carton size	380 mm x 330 mm x 320 mm	
Standard carton gross weight	10.5kg	

Ordering Information		
UT8000E Series	UT8805E: Benchtop Digital Multimeter (199,999, Auto)	
Standard Accessories	International standard power cord	
	USB interface cable	
	RS232C interface cable	
	Basic test leads with alligator clip	







# UT8804E

#### 4% Digital Multimeter



UT8804E is an automatic range of 59,999 counts, a true RMS desktop digital multimeter, 100 kHz frequency response, and a 4.3 inch TFT LCD. The meter can be used to measure AC/DC voltage, AC/DC current, resistance, conductance, diode, continuity, capacitance, temperature, frequency, pulse width, and more. it also has data hold, max/min/ average value measurement, comparison function measurement, relative value measurement, peak detection, tendency chart capture, and up to 20,000 data recording/readback captures.

- Reading resolution: 4%, maximum reading 59,999
- Measuring rate: 2 reading/s
- DC voltage range: 60 mV-1000 V
- DC current range: 600 µA-10 A
- AC voltage range: 60 mV-1000 V (True RMS)
- AC current range: 600 µA-10 A (True RMS)
- Resistance range:  $600 \Omega$ - $60 M\Omega$
- Capacitance range: 6 nF-60 mF
- Conductivity range: 60 ns

- Frequency measurement range: 60 Hz-60 MHz
- Duty cycle measurement range: 10%-90%
- Mathematical operation: maximum, minimum, average, peak, comparative measurement, trend chart
- Interface: USB device. It can be connected to the PC control software
- Frequency response: 100 kHz Data record: 20,000 groups
- LPF low pass filter function



UT8804E digital multimeter can display 4% digits (59,999), It can provide you high-precision and accurate result display. Its simulation bar makes the display of measurement results more intuitive. 4.3 inch full-color display, giving you a better visual experience.



The UT8804E digital multimeter has the function of maximum and minimum value statistics. At the same time, it has the function of reference value, and the calculation results relative to the reference value can be obtained.



Extreme value function. For the index range required by batch device test, UT8804E will help you automatically identify unqualified devices and give an alarm.



UT8804E digital multimeter has recording function. Historical data records can be presented in statistics and trend charts.



Additional secondary parameters can be added to make the measurement more specific, while displaying the main parameters.

	UT8804E		
Key Specifications —	Range	Accuracy (90 days)	
DC voltage (V)	60 mV-1000 V	±(0.025%+5)	
AC voltage (V)	60 mV-1000 V (45Hz-100 kHz)	±(0.3%+30)	
DC current (A)	600 μA-10 A	±(0.08%+10)	
AC current (A)	600 μA-10 A (45 Hz-10 kHz)	±(0.6%+20)	
Resistance (Ω)	600 Ω-60 ΜΩ	±(0.05%+2)	
Capacitance (F)	6 nF-60 mF	±(2%+5)	
Conductance (nS)	60 nS	±(2%+10)	
Frequency (Hz)	60 Hz-60 MHz	±(0.01%+5)	
Duty cycle (%)	10%-90% (10 Hz-2 kHz)	±(1.2%+30)	
T(05 (05)	-40 °C-1000 °C	±(1%+30)	
Temperature (°C/°F)	-40 °F-1832 °F	±(1.5%+50)	
Display count	59,999		
DCV Accuracy	0.30%		
Sampling speed	2-3 rdgs/s		
Range	Auto, Manual		
True RMS	√		
Date display	√		
requency response (Hz)	100 kHz		
Diode/transistor test	√		
Data storage	20,000		
On-off beep	$\checkmark$		
Data hold	√		
Standard interface	USB Device		

General Characterisitics		
Power	100 V/120 V/220 V/240 V ±10%, 47 Hz-63 Hz	
Display	4.3 inch TFT LCD	
Product net weight	3.7kg	
Product size (W×H×D)	239 mm x 109m x 344 mm	
Standard quantity per carton	2pcs	
Standard carton size	380 mm x 330 mm x 320 mm	
Standard carton gross weight	9.5kg	

Ordering Information		
UT8000E Series	UT8804E: Benchtop Digital Multimeter (59,999, Auto)	
Standard Accessories	International standard power cord	
	USB interface cable	
	Basic test leads with alligator clip	
	K-type temperature probe	







UT8804E

# UT8803E

#### 3% Digital Multimeter



Reading resolution: 3%, maximum reading: 5,999

Measuring rate: 2-3 reading/s DC voltage range: 600 mV-1000 V

DC current range: 600 µA-10 A

AC voltage range: 600 mV-750 V (True-RMS)

AC current range: 600 μA-10 A (True-RMS)

Resistance range:  $600 \Omega$ - $60 m\Omega$ Capacitance range: 6 nF-6 mF Inductance range: 600 µH-100 H UT8803E is a 5,999 count 3% digital, automatic range, portable desktop, AC powered digital multimeter. Large screen large character display with backlight, more clear and easy to read. With full function test, full range overload protection and unique appearance design, it has become an electrical test instrument with better performance. This instrument can be used to measure: AC / DC voltage, AC / DC current, resistance, frequency, capacitance, inductance, triode HFE, diode (LED), thyristor (SCR) and circuit on-off. Meet the measurement needs of users with multi-function, high precision and automation.

Frequency measurement range: 600 Hz-20 MHz

Duty cycle measurement range: 5%-95%

Mathematical operation: maximum, minimum, relative value, analog bar

Interface: USB device. It can be connected to the free PC control software

Frequency response: 100 kHz

It can measure triode and thyristor



Reading resolution: 3%, maximum reading: 5,999



D / Q parameters of capacitance and inductance can be measured



Multiple measurement items optional



Extreme value operation and reference value operation function, with analog bar

Var. Caracifications	UT8803E				
Key Specifications	Range	Accuracy (90 days)			
DC voltage (V)	600 mV-1000 V	±(0.3%+2)			
AC voltage (V)	600 mV-750 V	±(0.6%+5)			
DC current (A)	600 μA-10 A	±(0.8%+3)			
AC current (A)	600 μA-10 A	±(1%+5)			
Capacitance (F)	6 nF-6 mF	±(1.5%+5)			
Resistance (Ω)	60 ΜΩ	±(0.8%+5)			
Inductance (H)	100 H	±(2%+5)			
Temperature (°C/°F)	-40 °C-1000 °C	±(1%+5)			
Frequency (Hz)	600 Hz-20 MHz	±(0.1%+10)			
Duty cycle (%)	5%-95%	Only for reference			
Display count	5	5,999			
DCV Accuracy	0.30%				
Sampling speed	2-3 rdgs/s				
Frequency response (Hz)	100 kHz				
Range	Manual, Auto				
nput impedance for DCV	1	Ο ΜΩ			
True RMS	√				
Diode/triode	$\checkmark$				
SCR test	$\checkmark$				
ontinuity buzzer/data hold	$\checkmark$				
LCD backlight	$\checkmark$				
Interface	USB Device				

General Characterisitics		
Power	100 V/120 V/220 V/240 V ±10%, 47Hz-63Hz	
Display	EBTN LCD	
Product net weight	3.09kg	
Product size	265 mm x 110 mm x 320 mm	
Standard quantity per carton	2pcs	
Standard carton measurement	380 mm x 330 mm x 320 mm	
Standard carton gross weight	9kg	

Ordering Information			
UT8000E Series	UT8803E: Benchtop Digital Multimeter (Display: 5,999, 0.3%, Range: Manual)		
	International standard power cord		
Standard Accessories	USB interface cable		
	Basic test leads with alligator clip		
	K-type temperature probe		







UT8803E

# UT8802E

## 4½ Digital Multimeter



UT8802E is a manual range, benchtop digital multimeter that features 19,999 display counts, large Screen with back light, full scale over load protection and a unique design. This instrument can be used to Measure AC and DC voltage, AC and DC current, resistance, frequency, capacitance, transistor, hFE, diode (LED), SCR, continuity, etc.

- Reading resolution: 41/2, maximum reading: 19,999
- Measuring rate: 3 reading/s
- DC voltage range: 200 mV-1000 V
- DC current range: 200 µA-20 A
- AC voltage range: 2 V-750 V
- AC current range: 2 mA-20 A
- Resistance range: 200  $\Omega$ -200  $M\Omega$

Capacitance range: 20 nF-100 mF

- Frequency measurement range: 200 Hz-10 MHz
- Duty cycle measurement range: 5%-99%
- Mathematical operation: maximum, minimum, relative value
- Interface: USB device. It can be connected to the free PC control software
- Frequency response: 1KHz
- It can measure diode, triode and thyristor



Can display 41/2 digits (19,999), which can provide you with highprecision and accurate result display



With diode measurement function you can easily measure the on voltage and diode polarity



With the help of the included UT-S03 A, the measurement of triode and thyristor can be performed



Various test modes include Extreme Value and Reference Value. Extreme value mode allows you to easily see the min/max of your measurements. The Reference value mode allows you to set a measured value to compare others against

VC16:1	UT8802E				
Key Specifications	Range	Accuracy (90 days)			
DC voltage (V)	200 mV/2 V/20 V/200 V/1000 V	±(0.1%+3)			
AC voltage (V)	2 V/20 V/200 V/750 V	±(0.5%+20)			
DC current (A)	200 μA/2 mA/20 mA/200 mA/20 A	±(0.5%+20)			
AC current (A)	2 mA/20 mA/200 mA/20 A	±(0.8%+40)			
Capacitance (F)	20 nF/200 nF/2μF/20μF/200μF/2 mF/20 mF/100 mF	±(1.5%+10)			
Resistance (Ω)	200 Ω/2k Ω/20k Ω/200k Ω/200k Ω/2 ΜΩ/200 ΜΩ	±(0.5%+10)			
Frequency (Hz)	200 Hz-10 MHz	±(1%+5)			
Duty cycle (%)	5%-99%	±(1.5%+2)			
Display count	19,999				
DCV Accuracy	0.1%				
Sampling speed	2-3 rdgs/s				
Frequency response (Hz)	1 kHz				
Range	Manual				
nput impedance for DCV	10 ΜΩ				
Diode/triode	√				
SCR test	√				
ontinuity buzzer/data hold	√				
LCD backlight	√				
Interface	USB Device				

General Characterisitics		
Power	100 V/120 V/220 V/240 V ±10%, 47 Hz-63 Hz	
Display	EBTN LCD	
Product net weight	3.09kg	
Product size	265 mm x 110 mm x 320 mm	
Standard quantity per carton	2pcs	
Standard carton measurement	380 mm x 330 mm x 320 mm	
Standard carton gross weight	9kg	

Ordering Information			
UT8000E Series	UT8802E: Benchtop Digital Multimeter (Display:19,999,0.1%, Range:Manual)		
Standard Accessories	International standard power cord		
	UT-S03A: Triode/thyristor text fixture		
	USB interface cable		
	Basic test lead with alligator clip		







## **Power Meters**

## Selection Guide

Series	Model	Voltage Range	Current Range	Frequency Range	Accuracy	Measurement mode	Harmonic Analysis	Interfaces
	UTE310	75 (00)	254.20.4		.0.1 Hz-300 ±(0.1% reading+0.05%	0.5.70.15.111		RS232, LAN, USB
LITEROO	UTE310G	75 mV-600 V	25 μA-20 A	DC, 0.1 Hz-300				GPIB, LAN, USB
UTE300	UTE310H	75 1/ 80001/		kHz	range)	DC TRMS MN	Yes	RS232, LAN, USB
	UTE310HG	75 mV-1000 V	5 mA-50 A					GPIB, LAN, USB

# UTE300 Series NEW

#### **Power Meter**

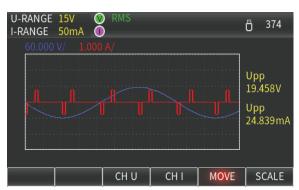


The UTE300 series are high accuracy, high performance digital power meters. The 4.3 inch full-color display, rich interfaces, and waveform display function make it a better user experience. High precision and high resolution bring you more accurate measurement results. The current and voltage measurement range of  $25\mu A$ -50 A / 75 mV-1000 V and the measurement bandwidth of 300 kHz can meet the needs of a wide range of applications such as production, testing and R&D.

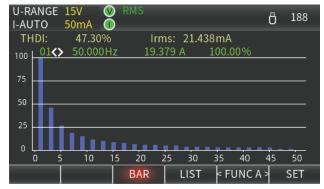
- 4.3 inch TFT-LCD display resolution 480\*272
- Measuring range of voltage and current RMS: 25uA-50 A/75 mV-1000 V
- Voltage and current highest resolution: 1 mV/0.1uA
- Basic accuracy of voltage, current and power: 0.1%
- Highest power resolution: 0.001 mW
- Abundant communication interfaces: USB, RS232 or GPIB (optional),
- Measurement bandwidth: 0.1 Hz-300 kHz
- Sample rate: 1 MHz
- Can support both Modbus and SCPI communication protocols
- Voltage and current waveform display, harmonic graph display, D/A output for measurement recording, comparator function, current sensor input, USB data storage



4.3 inch TFT color screen, multi-parameter display on one screen. 300 kHz analog bandwidth to capture higher frequency signals



1 MHz Sample rate for more accurate transient signal measurement



50th harmonic Support IEC61000-4-7 standard



Rich interfaces allow you integrate the UTE300E into your test platform

Key Specifications		UTE310	UTE310H	
Bandwidth		DC, 0.1 Hz-300 kHz	DC, 0.1 Hz-300 kHz	
Sample rate		1 MHz		
	Range	CF=3, 15 V/30 V/60 V/150 V/300 V/600 V CF=6 or 6 A, 7.5 V/15 V/30 V/75 V/150 V/300 V	CF=3, 15 V/30 V/60 V/150 V/300 V/600 V/1000 V CF=6 or 6 A, 7.5 V/15 V/30 V/75 V/150 V/300 V/500 V	
Voltage	Resolution	0.001 V/0.01 V	0.001 V/0.01 V/0.1 V	
Current	Range	CF=3, 5 mA/10 mA/20 mA/50 mA/100 mA/200 mA/500 mA/1 A/2 A/5 A/10 A/20 A CF=6 or 6 A, 2.5 mA/5 mA/10 mA/25 mA/50 mA/100 mA/250 mA/0.5 A/1 A/2.5 A/5 A/10 A	CF=3, 1 A/2 A/5 A/10 A/20 A/50 A CF=6 or 6 A, 0.5 A/1 A/2.5 A/5 A/10 A/25 A	
	Resolution	0.0001 mA/0.001 mA/ 0.01 mA/0.1 mA/1 mA	0.1 mA/1 mA	
Sensor channel	Range	CF=3, 50 mV/100 mV/200 mV/500 mV/1 V/2 V/5 V/10 V CF=6 or 6 A, 25 mV/50 mV/100 mV/250 mV/500 mV/1 V/2.5 V/5 V	CF=3, 50 mV/100 mV/200 mV/500 mV/1 V/2 V/5 V/10 V CF=6 or 6 A, 25 mV/50 mV/100 mV/250 mV/500 mV/1 V/2.5 V/5 V	
Ext1 & Ext2	Resolution	1 µV/10 µV/	100 μV/1 mV	
_	Range	75 mW-1200 W	75 mW-5000 W	
Power	Resolution	0.001 mW		
Frequency Range		Different data refresh rates, different frequency ranges 0.1 S: 20 Hz≥f≤300 kHz 0.25 S: 10 Hz≥f≤300 kHz 0.5 S: 5.0 Hz≥f≤300 kHz 1 S: 2.0 Hz≥f≤300 kHz 2 S: 1.0 Hz≥f≤300 kHz 5 S: 0.5 Hz≥f≤300 kHz 10 S: 0.2 Hz≥f≤300 kHz 20 S: 0.1 Hz≥f≤300 kHz Auto: 0.1 Hz≥f≤300 kHz		
Waveforr	n display	U and I		
Line :	filter	Yes		
Frequen	ncy filter	Yes		
Harmonic measurement		1-50 times, IEC61000-4-7		
Integral function		Average active power integration, current integration		
Math operation		Yes		
DA output and control		Yes		
Interface		RS232/GPIB (optional), LAN, USB		
Support protocol		Support SCPI, Modbus		

General Characterisitics		
Power	100 V-240 VAC, 50/60Hz	
Display	4.3 inch TFT-LCD ( 480×272)	
Product net weight	2.7kg	
Product size	254.2 mm × 113.2 mm × 403.08mm	
Standard quantity per carton	1pcs	
Standard carton size	510 mm × 195 mm × 340 mm	
Standard carton cross weight	4.3kg	

Ordering Information		
	UTE310: Digital Power Meter 600 V, 20 A, 300 kHz, RS232	
UTF300 Series	UTE310G: Digital Power Meter 600 V, 20 A, 300 kHz, GPIB	
Standard Accessories	UTE310H: Digital Power Meter 1000 V, 50 A, 300 kHz, RS232	
	UTE310HG: Digital Power Meter 1000 V, 50 A, 300 kHz, GPIB	
	Power cord conforming to the standard of the destination country	
	Double banana head test line: 1 pair	
	Fork-type pre-insulated cold-pressed terminals: 1 pair	





UTE310 Series



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