



Data Sheet

UT3550 Serie Battery Tester



Main Features

- High-accuracy: resistance 0.5% / voltage 0.05%
- Resistance measurement range: 0.001m Ω ~ 30.00 Ω
- Voltage measurement range: 0.0001V ~ 100.00V
- Resolution: resistance: 0.001mΩ voltage: 0.1mV
- Comparison mode: SEQ, PER, ABS
- The new AC internal resistance test method can measure almost all types of batteries
- 3.5-inch LCD main display
- 0.96 inch auxiliary display screen
- UPS can be measured directly online
- USB data storage and screenshot saving function
- Lithium battery power supply (2000mAh)
- Provide type C interface to realize remote control
- Support SCPI protocol
- Protection grade IP65

Battery Tester Panel



- ① 3.5 inch LCD
- ② Function keys
- ③ Power switch
- ④ Test terminals
- ⑤ Function shortcuts
- ⑥ Numeric keypad
- ⑦ Type-C interface
- ⑧ USB interface
- ⑨ Power Socket
- ⑩ 0.96 inch sub-display
- ⑪ Replaceable clip



Product Introduction

UT3550 is a hand-held battery tester with automatic real-time detection. It has the portability of handheld instruments and the superior performance of Bench instruments. It is a measuring instrument with high accuracy and high resolution. Equipped with USB type C interface for remote control and data acquisition and analysis. Support SCPI protocol. It is mainly used in the quality inspection of various batteries. UPS can be directly measured online with high accuracy.

Wide measuring range

UT3550 battery tester resistance measurement range: 0.001mΩ~30.00Ω. Voltage measurement range: 0.0001V ~ 100.00V. The measuring range is wider than that of the common handheld internal resistance meter. More kinds of battery products can be measured.



Filtering function

UT3550 has three comparison methods: direct reading, percentage, and absolute value. It can be set according to the measurement object to help you screen out defective products. The filtering results shall be clearly and specifically marked.



Dual screen display

This handheld internal resistance tester has two screen displays. 3.5inch main screen, displaying detailed information. The auxiliary screen is located at the top, which is convenient to carry and read

quickly during measurement. Save you valuable time.



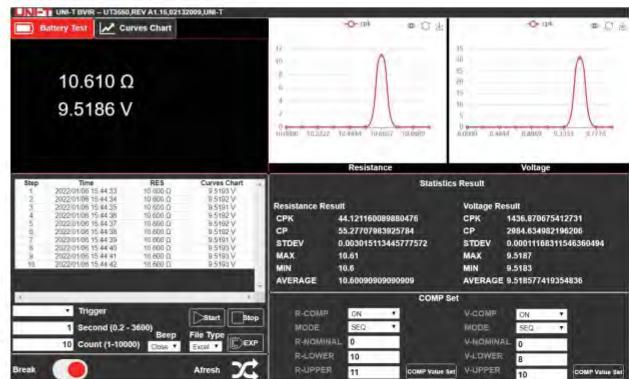
On-line measurement

UT3550 adopts AC method to measure internal resistance, which can measure a wide range of batteries. It can be measured during the working process of the battery without affecting the measurement accuracy and stability. It is also applicable to UPS measurement.



Remote control

The UT3550 uses the type C interface to connect the upper computer, so as to realize remote control. With the host computer software, the data record and filtering can be displayed at the same time. Support SCPI protocol, which can be applied to automatic construction.



Automatic recording

UT3550 can set the timer value to start the automatic recording process. Up to 500 test data can be recorded. You can export CSV files and do

data analysis on the computer.

14.22 USB Disk Ready				16.38			
UTILITY				VIEW DATA			
TRIGGER	INT	R-RANGE	<2 AUTO	021	10 90	+9 5273	2022-01-03 16:10:04
FUNC	RV	V-RANGE	<0 AUTO	022	10 90	+9 5273	2022-01-03 16:10:12
TIMER	8 s	BEEP	OFF	023	10 90	+9 5272	2022-01-03 16:10:20
				024	10 91	+9 5271	2022-01-03 16:10:28
				025	10 91	+9 5272	2022-01-03 16:10:36
				026	10 91	+9 5271	2022-01-03 16:10:44
				027	10 91	+9 5271	2022-01-03 16:11:00
				028	10 91	+9 5272	2022-01-03 16:11:08
				029	10 91	+9 5272	2022-01-03 16:11:16
				030	10 91	+9 5272	2022-01-03 16:11:16
TEST	SYSTEM	COMP SET	SET ZERO	SAVE TO USB DISK	CLEAR	JUMP TO	PAGE UP
							PAGE DOWN

Technical Specification

Function	Range name	Range	Resolution	Accuracy	Measuring current	Description			
Resistance Measurement	0			±0.5%rdg±5dgt		Measuring current frequency: 1kHz±30Hz			
	1	30mΩ	10μΩ		150mA				
	2	300mΩ	100μΩ		15mA				
	3	3Ω	1mΩ		1.5mA				
	4	30Ω	10mΩ		150μA				
Voltage Measurement	0	10V	100μV	±0.05%rdg±5dgt	/				
	1	100V	1mV						
Display	3.5 inch LCD display +0.96 inch OLED on the top								
Range Mode	Auto and Manual (resistance and voltage)								
Calibration	Short circuit full range to zeroed								
Testing Speed	1/s (manual range)								
Filter function	It has three output situations: exceed resistance and voltage upper limit/ exceed resistance and voltage low limit and conform								
Beep	OFF, OK, NG								
Comparison Mode	Absolute deviation (ABS) , Relative deviation (PER)								
	Direct-reading (SEQ)								
Other Function	Lock keypad, U disk storage, keypad tone, Chines/English language, screenshot								
Test Terminal	Four-terminal test method								
Trigger	Internal, manual and remote trigger								
Storage	Internal 500 groups, exportable CSV files								
Interface	Type-c interface (communication)/USB DEVICE(storage) /charge interface								
Upper-computer Software	SCPI								
Charging Time	<5 hour								
Operating Time	About 5 hour (20% brightness display)								
Power	The maximum 5VA								
Power Supply	7.4V, 2000mAh rechargeable lithium battery or 9VDC 2A power adapter								
Preheating Time	At least 15 minute								
Temperature/Humidity Index	Temperature: 18C~28C, Humidity: <65%RH								
Operating Temperature/Humidity	Temperature: 0C~40C, Humidity: 10~80%RH								
Storage Temperature/Humidity	Temperature: -20C~60C, Humidity: 10~90%RH								
Temperature Index	Over 28C, less 18C, each degree plus 0.1* the specified precision								
Operating Altitude	≤2000m								



*The UT3550 series have been certified by CE

Standard accessories

Power adapter	1	9V 2000mA switching power adapter wire length 1200mm round pin (RoHS)
Soft carrying case	1	Black, with "UNI-T" logo/RoHS
Shoulder strap	1	Black
USB communication cable type-C	1	USB2.0, type C data wire
With magnetic hanging belt	1	Black, long about 40cm, width about 2.5cm/RoHS
UT3550 Kelvin test clip	1	Crocodile clip red and black test line (with sheath)(RoHS)

Warranty

Three-years warranty, excluding probes and accessories.

Please visit https://instruments.uni-trend.com/list_190/65.html to learn more information.

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