

## FEATURES

- Go/NoGo Function
- Digital Voltage Meter Function
- Data Log Function
- Zero key function
- Compact and innovative design

# RS PRO IDS1102B Oscilloscope, Digital Storage, 2 Channels, 100MHz

RS Stock No.: 123-3542



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

## Product Description

RS PRO IDS-1000B Series Digital Storage Oscilloscopes (DSO) are general purpose instruments which include exceptional features for a great-value price. They are equipped with Visual Persistence Oscilloscope (VPO) technology. This uses a high-density IC for hardware acceleration to transfer all the acquired data into the displayed waveform image. The 256 colour gradient display function shows waveform details in gradients while measuring fast-changing analogue signals.

Options available:

1233540 - 50 MHz, 4 Channels

1233541 - 70 MHz, 2 Channels

1233542 - 100 MHz, 2 Channels

1233543 - 100 MHz, 4 Channels

1233544 - 70 MHz, 4 Channels

## General Specifications

<b>Series</b>	IDS-1000B
<b>Model Number</b>	IDS1102B
<b>Oscilloscope Type</b>	Digital Storage
<b>Bandwidth</b>	100MHz
<b>Sampling Type</b>	Real time sampling
<b>Sampling Mode</b>	Normal, Average, Peak Detect, Single
<b>Average Time</b>	2 to 256 selectable
<b>Standard Interfaces</b>	USB, RS232, SPI
<b>Additional Interfaces</b>	LAN
<b>Calibration Available</b>	Yes
<b>Applications</b>	Laboratories, Educational establishments, Product testing and Quality Assurance, Service operation and post-sales support, Product development and debugging

### Input System

<b>Input Coupling</b>	AC, DC, GND
<b>Input impedance</b>	1M $\Omega$ 16pf
<b>Maximum Input Voltage</b>	300Vrms
<b>Input Sensitivity</b>	1mV/div to 10V/div
<b>Input Channel Connectors Type</b>	BNC

### Vertical System

<b>Maximum Vertical Sensitivity</b>	1mV/div
<b>Minimum Vertical Sensitivity</b>	10V/div
<b>Vertical Resolution</b>	8 bit
<b>DC Gain Accuracy</b>	$\leq \pm 3\%$
<b>Rise Time</b>	3.5ns
<b>Channel Voltage Offset Range</b>	1mV/div : $\pm 1.25V$ ; 2mV/div ~ 100mV/div : $\pm 2.5V$ ; 200mV/div ~ 10V/div : $\pm 125V$
<b>Math Operation</b>	+, -, *, /, FFT
<b>FFT</b>	Window Mode: Hanning, Hamming, Blackman, Rectangular Sampling: 1024 points

### Horizontal System

<b>Real Time Sampling Rate</b>	1GSa/s
<b>Memory Depth</b>	10Mpts Max.
<b>Measure Display Mode</b>	MAIN, WINDOW, WINDOW ZOOM, ROLL, X-Y
<b>Time Base Range</b>	5ns/div to 100s/div
<b>Horizontal ROLL Rate</b>	100ms/div to 100s/div
<b>Realtime Waveform Acquisition Rate</b>	50000 waveforms/s

### X-Y Mode

<b>X-Pole Input / Y-Pole Input</b>	(CH1) / (CH2)
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### Measurement System

<b>Auto Measure</b>	Pk-Pk, Vpp, Vmax, Vmin, Vamp, Vtop, Vbase, Vavg, Amplitude, Mean, Crms, Vrms, ROVShoot, FOVShoot, RPRESshoot, FPRESshoot, Rise time, Fall time, Freq, Period, + Wid, -Wid, +Dut, -Dut, BWid, Phase, FRR, FRF, FFR, FFF, LRR, LRF, LFR, LFF, Phase
<b>Cursor Measure</b>	Manual, Track and Auto

### Trigger Specifications

<b>Trigger Type</b>	Edge, Pulse Width, Video, Pulse Runt, Rise & Fall, Timeout, Alternate, Event-Delay, Time-Delay, Bus
<b>Trigger Source</b>	CH1, CH2, Line
<b>Trigger Modes</b>	Auto, Normal, single
<b>Trigger Coupling</b>	AC, DC, LF Reject, HF Reject
<b>Trigger Displacement</b>	Pre Trigger: 10 div maximum Delay Trigger: 2,000,000 div
<b>Trigger Sensitivity</b>	1 div
<b>Hold-off Range</b>	4ns – 10s

### Control Panel Function

<b>Auto Set</b>	Single-button, automatic setup of all channels for vertical, horizontal and trigger systems, with undo Autoset
<b>Save/Recall</b>	20set

### Display System

<b>Display Mode</b>	7" TFT WVGA color display
<b>Resolution</b>	800 horizontal x 480 vertical pixels
<b>Display Colour</b>	256 Colour
<b>Waveform Display Range</b>	8 x 10 div
<b>Waveform Display Mode</b>	Dots, vectors
<b>Persistence</b>	Off, 1 sec, 2 sec, 4sec, Infinite
<b>Waveform Interpolation</b>	Sin(x), x
<b>Colour model</b>	Normal , Invert

## Electrical Specifications

<b>Operating Supply Voltage</b>	AC 100V ~ 240V , 50Hz ~ 60Hz , Auto selection
<b>Plug Type</b>	Europe, UK
<b>Safety Category Level and Voltage</b>	CAT I 300 V, CAT II 300 V

## Mechanical Specifications

<b>Dimensions</b>	127.3mm x 208mm x 380mm
<b>Length</b>	127.3mm
<b>Width</b>	208mm
<b>Height</b>	380mm
<b>Weight</b>	2.8kg

## Operation Environment Specifications

<b>Relative Humidity</b>	< 80%
<b>Operating Temperature Range</b>	0°C to 50°C

## Approvals

<b>Compliance/Certifications</b>	EN61340, CE
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ORDERING INFORMATION	
<b>IDS-1104B</b>	100MHz, 4 channels, Digital Storage Oscilloscope
<b>IDS-1102B</b>	100MHz, 2 channels, Digital Storage Oscilloscope
<b>IDS-1074B</b>	70MHz, 4 channels, Digital Storage Oscilloscope
<b>IDS-1072B</b>	70MHz, 2 channels, Digital Storage Oscilloscope
<b>IDS-1054B</b>	50MHz, 4 channels, Digital Storage Oscilloscope
ACCESSORIES	
User manual x1, Power cord x1	
GTP-101A-2 100MHz Passive Probe, 10:1, Suitable for IDS-1000B full series.	

OPTIONAL ASSESSORIES	
<b>GDB-03</b>	Demo Board
<b>GTL-110</b>	Test lead, BNC to BNC heads
<b>GTL-246</b>	USB cable, USB 2.0 A-B type cable 4P, 1200mm
FREE DOWNLOAD	
<b>Software</b>	OpenWave Software
<b>Driver</b>	USB Driver ; LabView Driver