

DSO1000B Series Handheld Oscilloscope/Multimeter



Hantek®

60MHz-200MHz Bandwidth Oscilloscope, 1GSa/s sample rate, 1M Memory Depth, and 6000 Counts DMM with analog bargraph. 5.6 inch TFT Color LCD Display, High Resolution(640*480)

Characteristic(Handheld Oscilloscope/Multimeter)

- High Bandwidth 60MHz-200MHz Oscilloscope, 1GS/s sample rate, and 6000 Counts DMM with analog bargraph.
- 1M Memory Depth.
- High Refresh Rate (2500 frames)
- Large 5.6 inch TFT Color LCD Display, High Resolution(640*480), Dual-Window Design --More clear, More Detailed
- One-touch automatic setup optimizes the position, range, timebase, and triggering to assure a stable display of virtually any waveform
- Easy-to-use pop-up menu with built-in multi-language help system
- 23 Automatic Measurements
- Waveform Math: Add, Subtract, Multiply, and Divide
- Store and recall over
- Automatic cursor tracking measurements
- XY Mode
- Built-in FFT function converts a time-domain signal into its frequency components to measure harmonic content and distortion in systems
- Waveform Recorder to capture/replay input waveforms from CH1 and CH2 with a maximum record length of 1000 frames
- Pass-Fail function compares a stored waveform to an unknown input
- Average Mode for smoothing waveforms
- Square Wave Output (2V, 1kHz) for probe adjustment
- USB Host/Device 2.0 full-speed interface, support removable disk, LAN Optional, Easy to control by PC or long-distance.
- Dimensions (mm): 240(L)x165(W)x50(H), be carried easily.

Hardware Specification

Model	DSO1202B	DSO1102B	DSO1062B
<i>Oscilloscope mode</i>			
Bandwidth	200MHz	100MHz	60MHz
Real-time Sample Rate	1GSa/s		
Equivalent Sample Rate	25GSa/s		
Record Length(Sample Points)	Single-channel: Maximum 1M; Dual-channel:Maximum 512k		
SEC/DIV Range	2nS/div-2000S/div (in a 2, 4, 8 sequence)		
Delay Time Accuracy	500ps		
Vertical			
A/D Converter	8-bit resolution		
VOLTS/DIV Range	2mV/div~5V/div at input BNC		
Position Range	$\pm 50V(5V/div), \pm 40V(2V/div \sim 500mV/div), 2V(200mV/div \sim 50mV/div) \pm 400mV(20mV/div \sim 2mV/div)$		
Rise Time at BNC	$\leq 1.7ns$	$\leq 3.5ns$	$\leq 5.8ns$
DC Gain Accuracy	$\pm 4\%$ for Sample or Average acquisition mode, 5mV/div to 2mV/div $\pm 3\%$ for Sample or Average acquisition mode, 5V/div to 10mV/div		
Trigger			
Trigger Sensitivity (Edge Trigger Type)	DC: CH1/CH2(Typical) 1div from DC to 10MHz;1.5div from 10MHz to Full AC: Attenuates signals below 10Hz HF Reject: Attenuates signals above 80kHz LF Reject: Attenuates signals below 150kHz Noise Reject: Reduces trigger sensitivity		
Trigger Level Range	CH1,CH2: ± 8 divisions from center of screen		
Trigger Level Accuracy, typical (Accuracy is for signals	CH1,CH2: $\pm(0.3div \times V/div)$ (within ± 4 divisions from center of screen)		

having rise and fall times $\geq 20\text{ns}$)	
Holdoff Range	100ns-10s
Trigger Type	
Edge	Trigger on the rising or falling edge
Pulse Width	Trigger (when $>$, $<$, $=$, \neq) on positive or negative pulses Pulse Width Range: 20ns-10s
Video	Trigger on an NTSC, PAL, or SECAM standard video signal Line Range: 1-525 (NTSC), 1-625 (PAL/SECAM)
Slope	Trigger (when $>$, $<$, $=$, \neq) on a positive or negative slope Set Time: 20ns–10s
Overtime	from the rising or falling edge Set Time: 20-10s
Alternate	Internal trigger on edge, pulse width, video or slope
Measurement	
Cursors	Manual: The difference between voltage cursors ΔV ; the difference between time cursors ΔT ; $1/\Delta T$ calculated by Hz. Tracing: The voltage and time at a waveform point
Automatic(32)	Frequency, Period, Mean, Pk-Pk, Cycli RMS, Minimum, Maximum, Rise time, Fall Time, +Pulse Width, -Pulse Width, Delay1-2Rise, Delay1-2Fall, +Duty, -Duty, Vbase, Vtop, Vmid, Vamp, Overshoot, Preshoot, Preiod Mean, Preiod RMS, FOVShoot, RPRESshoot, BWIDTH、FRF、FFR、LRR、LRF、LFR、LFF
<i>Meter Mode</i>	
Max.Resolution	6,000 Counts
DMM Testing Modes	Voltage, Current, Resistance, Capacitance, Diode & Continuity
Max. Input Voltage	AC: 600V, DC: 800V
Max. Input Current	AC: 10A, DC: 10A
Input Impedance	10 M Ω
Display	
Type	Right angle 5.6 16-digit color LCD
Resolution	640*480 dots
Contrast	16 gears, with the progress bar to show adjustment
Interface	USB host and USB slave, Lan Optional

Power Supply	
Voltage	DC Input:12--17VDC, 1500mA
Mechanical	
Size	245 x 163 x 52 (mm)
Weight	1.3KG (exclusive of packing and accessories)

Software:

Operating system: Windows 7, Windows NT, Windows 2000, Windows XP, VISTA