

# DSO5000B Series Digital Storage Oscilloscope



**Hantek®**

Bandwidth:60-200MHz,1GSa/s Real Time sample rate Large (7.0-inch) color display,WVGA(800x480) Record length up to 1M

## Features:

- 200/100/60MHz bandwidths
- 1GSa/s Real Time sample rate
- Large (7.0-inch) color display,WVGA(800x480)
- Record length up to 1M
- Trigger mode: edge/pulse width/line selectable video/slop/overtime etc.
- USB host and device connectivity, standard
- Multiple automatic measurements
- Four math functions, including FFTs standard
- Provides software for PC real-time analysis

## Hardware Specification

Model	DSO5202B	DSO5102B	DSO5062B
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 (4K,16K,40K optional)		
SEC/DIV Range	4nS/div-40S/div (in a 2, 4, 8 sequence)		

Delay Time Accuracy	500ps		
Vertical			
A/D Converter	8-bit resolution, each channel sampled simultaneously		
VOLTS/DIV Range	2mV/div~5V/div at input BNC		
Position Range	±50V(5V/div),±40V(2V/div~500mV/div),2V(200mV/div~50mV/div)±400mV(20mV/div~2mV/div)		
Rise Time at BNC	≤1.7ns	≤3.5ns	≤5.8ns
DC Gain Accuracy	±4% for Sample or Average acquisition mode, 5mV/div to 2mV/div ±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 EXT (Typical) 200mV from DC to 40MHz EXT/5 (Typical) 1V from DC to 40MHz 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 EXT: ±1.2V EXT/5: ±6V		
Trigger Level Accuracy, typical (Accuracy is for signals having rise and fall times ≥20ns)	CH1,CH2: ±(0.3div×V/div) (within ±4 divisions from center of screen) EXT: ±(6% of setting + 40mV) EXT/5: ±(6% of setting + 200mV)		
Holdoff Range	100ns-10s		
Trigger Type			
Edge	Trigger on the rising or falling edge		
Pulse Width	Trigger (when >,<=,≠) 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 >,<=,≠) 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 $\Delta V$ ; the difference between time cursors $\Delta T$ ; $1/\Delta T$ 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
Display	
Type	Right angle 7"TFT 16-digit color LCD
Resolution	800*480 dots
Contrast	16 gears, with the progress bar to show adjustment
Interface	USB host and USB slave
Power Supply	
Voltage	100-120VACRMS( $\pm 10\%$ ), 45Hz to 440Hz, CAT II 120-240VACRMS( $\pm 10\%$ ), 45Hz to 66Hz, CAT II
Power	<30W
Fuse	2A, T rating, 250V
Mechanical	
Size	Length: 313mm Width: 108mm Height: 142mm
Weight	2.08KG (exclusive of packing and accessories)

#### 6. Software:

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