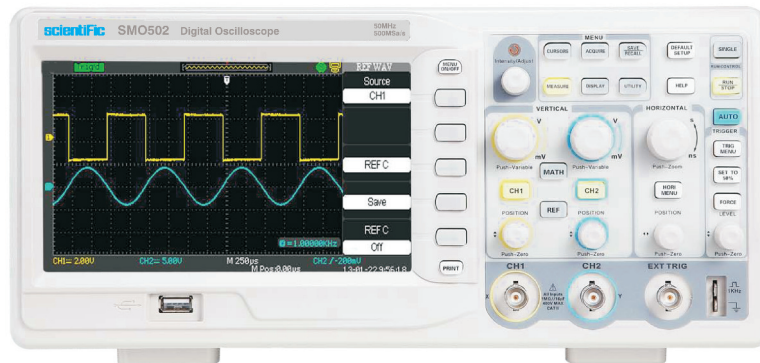


# Digital Oscilloscope SMO502



## Advance Features

- Signal bandwidth: 50MHz  
Real-time sampling rate: Max. 500 MSa/s  
Equivalent sampling rate: Max. 50 GSa/s
- 7.0" TFT LCD Color display
- 32kpts memory depth
- Independent vertical scale & position control knobs for each channel.
- Edge, Pulse Width, Video, Slope, Alternate trigger mode
- Math functions including Add, Subtract, Multiply, Divide & 1024 point FFT
- 32 parameters of automatic measurements
- Unique Digital Filter & Waveform recorder function
- Advanced cursor modes: Manual, Auto & Track
- Waveform Intensity & Grid Brightness can be adjusted
- PASS / FAIL detection, PASS/FAIL output
- Built-in 50MHz hardware frequency counter
- Save/recall types: Setups, Waveforms, CSV file, Picture
- Standard Interface  
USB Host: Support USB flash driver save/recall function & update firmware, USB Device: Support Pic tBridge compatible printer & support PC remote control, RS232, LAN, Pass/Fail Output

Technical Specifications	SMO502
<b>Sampling System</b>	
Real Time Sampling	500Ms/s
Equivalent Sampling	50GS/s
Memory Depth	32kpts
Vertical Resolution	8Bits
Sampling Mode	Sample, Peak detect, Averaging, Roll Mode
Auto Scale	Automatically set vertical scale (V/div), time base (s/div), & trigger mode
<b>Vertical System</b>	
Channels	2 analog input channels
Bandwidth	50MHz
Coupling	DC, AC & GND
Bandwidth Limit (-3 dB)	20MHz
Rise Time	< 7.0 ns
Vertical Scale	2mV/div to 10V/div 1-2-5 steps
Vertical Gain Accuracy	2mV/div Variable Gain Ranges : <± 4%
	5mV/div to 10V/div in Fixed Gain Ranges: <±3%
Vertical Offset Range	2mV-200mV: ± 1.6V, 206V - 10V: ±40V

<b>Technical Specifications</b>		<b>SMO502</b>	
Overshoot	<10% with probe or BNC input into 50Ω		
Probe Attenuation Factors Set	x 1, x 5, x 10, x 50, x 100, x 500, x 1000		
Input Impedance	1MΩ ± 2%    16pF ± 3pF		
Max. Input Voltage	400V (DC + AC pk 1MΩ input impedance, X10), CAT I		
<b>Horizontal System</b>			
Time Base Range	5ns – 50s/div		
Scan	100ms– 50 s/div (1–2.5–5 sequence)		
Horizontal Mode	Main, Window, Window Zoom, Roll, X-Y		
Time Base Accuracy	±100ppm measured over 1ms interval		
<b>XY Mode</b>			
Input	X: Channel 1, Y: Channel 2		
Bandwidth	50MHz		
<b>Trigger System</b>			
Trigger Source	Ch1, CH2, EXT, EXT/5, AC Line		
Trigger Mode	Auto, Normal, Single		
Trigger Coupling	DC, AC, LF-reject, HF- reject		
Trigger Type	Edge, Pulse Width, Video, Slope, Alternative		
Trigger Level Range	Internal : + 6 div from screen center; EXT : + 1.2 V; EXT/5 : + 6 V		
Trigger Sensitivity	DC–10MHz: 1 Div, 10MHz – 50MHz: 1.5Div ; EXT: DC–10 MHz: 200 mVpp, 10 MHz – 50 MHz: 300mVpp ; EXT/5: DC–10 MHz: 1 Vpp, 10 MHz – 50 MHz: 1.5Vpp		
<b>Signal Measurement</b>			
Parameters	Vpp, Vmax, Vmin, Vamp, Vtop, Vbase, Vavg, Mean, Crms, Vrms, ROVShoot, FOVShoot, Shoot, FPREShoot, Rise time, Fall time, Freq, Period, + Wid, -Wid, +Dut, -Dut, BWid, Phase, FRR, FRF, FFR, FFF, LRR, LRF, LFR, LFF		
Math Functions	Add, subtract, multiply, divide & 1024 point FFT		
Window	Hanning, Hamming, Blackman, Rectangular		
Cursor Measurement	Manual, Auto, Track		
Hardware Frequency Counter	DC Coupled, 10Hz to 50MHz, resolution: 1Hz; Accuracy: ±0.01%		
<b>Storage &amp; Interface</b>			
Storage	Internal: 2 reference waveform, 20 setup files & 20 captured waveform files USB: Setups, Waveforms, CSV file, BMP		
Interface	USB HOST, USB DEVICE, RS232C, LAN & PASS/FAIL OUT		
<b>Display System</b>			
Display Screen	TFT LCD display, 7.0”		
Resolution	480 (horizontal ) x 234 (vertical) pixels		
Color	24 bit		
<b>Waveform Display</b>			
Scale	8 x 18 div		
Type	Dots , Vector		
Interpolation	(Sinx)/x, Linear		
Persistence	Off, 1 sec, 2 sec, 5 sec, Infinite		
<b>General Information</b>			
Operating Condition	10°C to 40°C, < 85% RH		
Power	100–240V AC, CAT II, 45Hz to 440Hz		
Power Consumption	< 50 VA		
Dimension	W : 323, D : 136, H: 157 (mm)		
Weight	2.5kg (approx.)		
Accessories	Probes (2 Nos), Power cord, USB cable, Software CD		

Subject to change

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