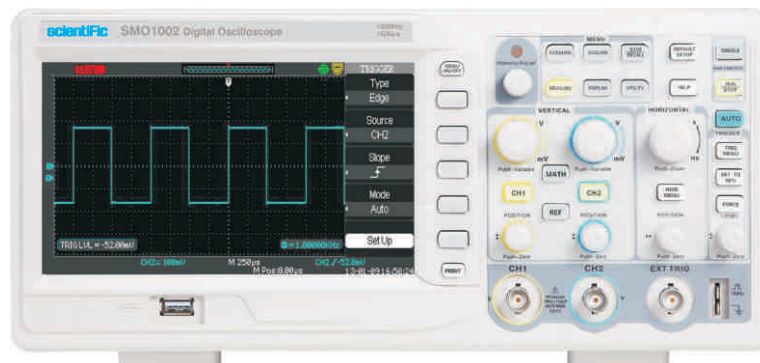


# Digital Oscilloscopes

## SMO702, SMO1002



### Advance Features

- Signal bandwidth: 70 MHz, 100 MHz
- Real-time sampling rate: Max. 1 GSa/s
- Equivalent sampling rate: Max. 50 GS/s
- 7.0" TFT LCD Color display
- 2 Mpts 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 70 MHz, 100 MHz 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 Pict Bridge compatible printer & support PC remote control, RS232, LAN, Pass/Fail Output

Technical Specifications	SMO702	SMO1002
<b>Sampling System</b>		
Real Time Sampling	1Gsa/s	
Equivalent Sampling	50GSa/s	
Memory Depth	2M points	
Vertical Resolution	8Bits	
Sampling Mode	Sample, Peak detect, Averaging, Roll Mode	
Auto Scale	Automatically set vertical scale (V/div), time base (s/div), and trigger mode	
Vertical System	Channels 2 analog input channels	
Bandwidth	70MHz	100MHz
Coupling	DC, AC and GND	
Bandwidth Limit (-3dB)	20MHz	
Calculated Rise Time	< 5.0ns	< 3.5ns
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	
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%    16 pF ± 3 pF	
Max. Input Voltage	400V (DC + AC pk pk 1 MΩ input impedance, X10), CAT I	

Technical Specifications	SMO702	SMO1002
<b>Horizontal System</b>		
Time Base Range	5ns – 50s/div	2.5ns – 50s/div
Scan	100ms – 50s/div (1–2.5–5 sequence)	
Horizontal Mode	Main, Window, Window Zoom, Roll, X-Y	
Time Base Accuracy	± 100 ppm measured over 1ms interval	
<b>XY Mode</b>		
Input	X: Channel 1, Y: Channel 2	
Phase Difference	± 3°	
Bandwidth	70MHz	100MHz
<b>Trigger System</b>		
Trigger Source	CH 1, CH 2, 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 - Max. BW: 1.5 Div; EXT: DC-10 MHz: 200 mVpp, 300 mVpp 10 MHz - Max. BW; EXT/5: DC-10 MHz: 1 Vpp, 10 MHz - Max. BW: 1.5Vpp	
<b>Signal Measurement</b>		
Parameters	Vpp, Vmax, Vmin, Vamp, Vtop, Vbase, Vavg, Mean, Crms, Vrms, ROVShoot, FOVShoot, PREShoot, , FPRESshoot, 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 Max. BW, resolution: 1Hz; Accuracy: ± 0.01%	
<b>Storage &amp; Interface</b>		
Storage	Internal: 2 reference waveform, 20 setup files & 10 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	
<b>Waveform Display</b>		
Scale	8 x 18 div	
Type	Dots , Vector	
Interpolation	(Sinx) / x, Linear	
<b>General Information</b>		
Operating Condition	10°C to 40°C, < 85% RH	
Power	100–240V AC, CAT II, 45Hz to 440Hz	
Power Consumption	< 50VA	
Dimension / Weight	W : 323, D : 136, H: 157 (mm) / 2.5kg (approx.)	
Accessories	Probes (2 Nos), Power cord, USB cable, Software CD	

Subject to Change

**scientific**

**Scientific Mes-Technik Pvt. Ltd.**

B-14, Pologround, Industrial Estate, Indore 452 015, India

☎ 0731-2422330 /31 /32 /33 ☎ 0731-2422334, 2561641 ✉ info@scientificindia.com 🏠 www.scientificindia.com



Bengaluru 080-23452635 ✉ bangalore@scientificindia.com  
Chennai 044-42054180 ✉ chennai@scientificindia.com  
Gujarat +919979308887 ✉ gujarat@scientificindia.com  
Hyderabad 040-27534995, 27534996 ✉ hyderabad@scientificindia.com

Kolkata 033-22282223-6 ✉ kolkata@scientificindia.com  
Mumbai +919820307693 ✉ mumbai@scientificindia.com  
New Delhi +919977994909 ✉ ndelhi@scientificindia.com  
Pune 020-25282882 ✉ pune@scientificindia.com

✉ kolkata@scientificindia.com  
✉ mumbai@scientificindia.com  
✉ ndelhi@scientificindia.com  
✉ pune@scientificindia.com