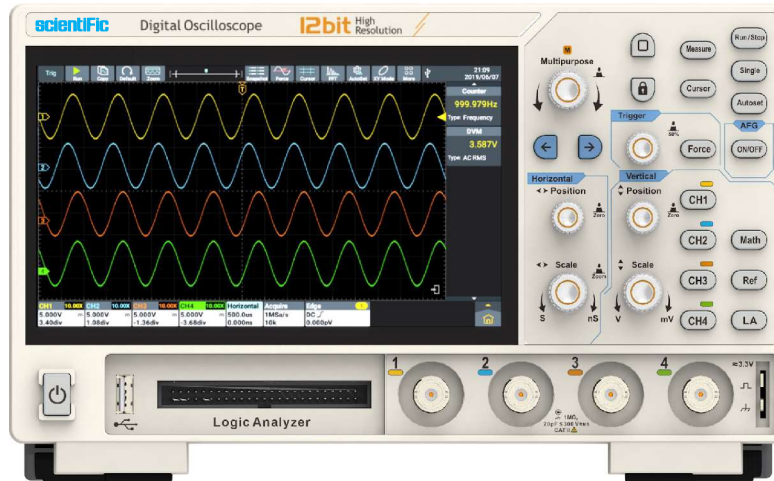


# Digital Storage Oscilloscope SMO900X Series



## Advance Features

- 125MHz~250MHz bandwidth, 2GSa/s real time sampling rate.
- 100M storage depth, up to 700,000 wfms/s waveform refresh rate.
- Vertical Accuracy is 200 $\mu$ V/div ~ 10V/div.
- 7inch touch screen with multi-touch support for an enhanced interactive experience
- 1M-point FFT analysis ensure accurate frequency component display.
- 256 level grayscale and color persistence enhance waveform visualization.
- Equipped with HDMI, USB Device, USB Host, Trig Out (P/F), LAN supporting Web Control and SCPI command tools.
- Integrated with oscilloscope, 30MHz AFG (Optional), logic analyzer (optional), frequency counter, voltmeter and FFT spectrum analyzer.
- Rich triggering : edge, video, pulse width, slope, under-amplitude, over-amplitude, timeout, Nth edge, logic, and RS232/UART, I2C, SPI, CAN, LIN : 2 channel hardware decoding : UART, I2C, SPI, CAN, LIN.
- Bode plot functions (AFG models)
- Full memory hardware measurement function, math operations, built in enhanced FFT and peak search.
- Screen video recording for easy documentation and sharing.
- Enhanced FFT and ZOOM features provide clearer waveform display and cursor information.
- Convenient measurement statistics with measurement indicators, cursor gating and more measurement prompts .

Technical Specifications	SMO912X	SMO922X	SMO914X	SMO924X
Bandwidth (-3 dB)	125MHz	250MHz	125MHz	250MHz
Channel	2		4	
Max. Sample Rate	2GSa/s (Single Channel), 1GSa/s (Dual Channel) 500MSa/s (Full Channel)			
Acquire Mode	Sample, Peak, High Res. Average, Segmentation			
DC Gain Accuracy	3% ( $\leq 1$ mV), 2% ( $\geq 2$ mV)			
Max Memory depth	100M			
Vertical Resolution	12bits			
Real Time Accuracy	$\pm 25$ ppm (typical)			
Max. Waveform Capture Rate	Max. 700,000wfms/s			
Vertical Sensitivity Range	200 $\mu$ V/div ~ 10 V/div			
Sampling Rate Range	1ns/div ~ 1000s/div, step by 1-2-5			
Input Impedance	1M $\Omega$ $\pm$ 2%, Parallel with 20pF + 5 pF			
Probe Attenuation Coefficient	1.00 $\mu$ X ~ 1M.00MX, step by 1-2-5 support custom			

Technical Specifications	SMO912X	SMO922X	SMO914X	SMO924X
Trigger Type	Edge, Video, Pulse, Slope, Runt, Windows, Timeout, Nth, Logic, RS232/UART, I2C, SPI, CAN, LIN			
Bus decoding	RS232/UART, I2C, SPI, CAN, LIN			
Auto Measurement	Period, Frequency, +Width, -Width, Rise Time, Fall Time, Scr Duty, +Duty, -Duty, Vavg, Vpp, VRMS, Overshoot, Vmax, Vmin, Vtop, CycRms, Vbase, Vamp, Preshoot, Std Dev, +Pulse Cnt, -Pulse Cnt, Rise Cnt, Fall Cnt, Area, Cyc Area, Delay (A↑~B↑), Delay (A↑~B↓), Delay (A↓~B↑), Delay (A↓~B↓), Phase (A↑~B↑), Phase (A↑~B↓), Phase (A↓~B↑), Phase (A↓~B↓), FRR (A↑~B↑), FRF (A↑~B↓), FFR (A↓~B↑), FFF(A↓~B↓), LRR (A↑~B↑), LRF (A↑~B↓), LFR (A↓~B↑), LFF (A↓~B↓)			
Waveform Math	+, -, *, /, &&   , ^, !, Intg, Diff, Sqrt, Function operation (Lg/Ln/Exp/Abs/Sine/Cosine/Tan), FFT, FFT rms, User Defined, digital Filter (low pass, high pass, band pass, band reject)			
Frequency Counter	6-digit frequency counter. 7-Maximum frequency : Maximum analog bandwidth of oscilloscope			
Voltmeter	Support DC, AC + DCrms, ACrms, Resolution : 4 digits (ACV/DCV)			
<b>Arb. Waveform Generator (Optional) Specification</b>				
Max. Frequency Output	30MHz Single			
Sample Rate	160MSa/s			
Standard Waveform	Sine, Square, Ramp, Pulse, Noise			
Arbitrary Waveform	28 built in waveforms			
Vertical Resolution	14 bits			
Arb. Waveform	1μHz ~ 10MHz			
Arb. Waveform Length	2~8k points			
Amplitude	2mVpp ~ 10Vpp, 1mVpp ~ 5Vpp (50Ω)			
Impedance	50Ω (Type)			
Modulation	AM, FM, PM, FSK			
<b>Logic Analyzer (Optional) Specification</b>				
Number of Channels	16 input channels (D0 ~ D15) (D0 ~ D7, D8 ~ D15)			
Threshold Range	± 20.0V, 10mV step			
Minimum Voltage Swing	500mVpp			
Max. Input Dynamic Range	± 30V + threshold			
Max. Input Voltage	± 40V peak CAT I, Transient over voltage 800Vpk			
Input Impedance	100kΩ, 8pF			
Max. Input Dynamic Range	± 30V + threshold			
Vertical Resolution	1 bit			
<b>General Specifications</b>				
Communication Interface	HDMI, USB device, USB Host, Trig Out (P/F), LAN			
Display	7inch (1024 x 600), capacitive multi touch screen			
Power Supply Interface	Type-C			
Dimensions (W X H X D)	260 X 160 X 78mm			
Weight	1.5kg			
Accessories	Standard : Power Cord, USB Cable, Probe, Adapter Optional : BNC Line			

Subject to change

**scientific**

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

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

☎ 0731-2422330/31/32/33

✉ sales@scientificindia.com

🌐 www.scientificindia.com



Bengaluru 080-23452635  
Chennai 044-42054180  
Gujarat +917567463752  
Hyderabad +917095228811  
Kanpur +919981329105

✉ bangalore@scientificindia.com  
✉ chennai@scientificindia.com  
✉ gujarat@scientificindia.com  
✉ hyderabad@scientificindia.com  
✉ up@scientificindia.com

Kolkata +919630945856  
Mumbai +919850901735  
New Delhi +918770013379  
Pune +919603828884

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