

DIGITAL OSCILLOSCOPES

- Analogue bandwidth: 100MHz~500MHz
- Memory depth: 100Mpts
- Maximum real-time sampling rate: 2.5GSa/s
- Waveform capture rate: 500,000wfms/s
- FFT spectrum analyzer
- 10.1-inch touch screen
- Optional arbitrary waveform generator
- Comprehensive triggering and protocol decoding



passive probe (included)



9531-0504

OSCILLOSCOPE SPECIFICATION

Part No.	9531-0102	9531-0202	9531-0352	9531-0502	9531-0104	9531-0204	9531-0354	9531-0504
Analogue bandwidth	100MHz	200MHz	350MHz	500MHz	100MHz	200MHz	350MHz	500MHz
Rise time	≤3.5ns	≤1.75ns	≤1ns	≤700ps	≤3.5ns	≤1.75ns	≤1ns	≤700ps
Channel	2				4			
Maximum real-time sampling rate	single channel: 2.5GSa/s, dual channel: 1.25GSa/s				single channel: 2.5GSa/s, dual channel/four channel: 1.25GSa/s			
Maximum memory depth	100Mpts							
Maximum waveform capture rate	500,000wfms/s (high refresh rate mode)							
Vertical resolution	12bits							
Vertical scale (V/div)	500μV/div~10V/div							
Time base scale (s/div)	500ps/div~1000s/div							
DC gain accuracy	3% (≤1mV); 2% (2mV); 1.5% (≥5mV)							
Frequency counter	6-digit frequency counter; range upper limit: maximum analogue bandwidth of oscilloscope							
Input impedance	1MΩ±2%, 50Ω±2%							
Maximum input voltage	1MΩ: ≤300Vrms; 50Ω: ≤5Vrms							
Sampling mode	normal, peak detect, high resolution, average, segmented acquisition							
Trigger mode	auto, normal, single							
Trigger type	edge, pulse width, slope, video, timeout, runt, overshoot, nth edge trigger, logic trigger, RS232/UART, I2C, SPI, CAN, LIN							
Trigger coupling	DC, AC, high frequency rejection							
Decoding type	RS232/UART, I2C, SPI, CAN, LIN							
Cursor measurement	time, voltage, tracking							
Parameter measurement	43 types of automatic waveform parameter measurements, up to 8 measurements displayed simultaneously							
Mathematical operation	+, −, ×, ÷, differentiation, integration, square root, function operation (Lg/Ln/Exp/Abs/Sin/Cos/Tan), user-defined function, digital filter (LPF, HPF, BPF, BSF), FFT (Vrms, dBVrms, Rad, Deg)							
Bode plot	start/end frequency: 10Hz~25MHz, amplitude: 2 mV~6V							
Interface	HDMI, USB host, USB device, LAN, trig out (P/F)							
Probe compensation output	voltage: about 3.3Vp-p, frequency: 1kHz							
Power supply	AC 100V~240V, 50/60Hz; power adapter: 12V/4A (optional)							
Dimension (L×W×H)	12.80×4.41×8.23"							
Net weight	7.05lb							

*Bode plot function requires optional arbitrary waveform generator

ARBITRARY WAVEFORM GENERATOR MODULE SPECIFICATION (OPTIONAL)

Channel		2
Maximum frequency		50MHz
Sample rate		160MSa/s
Vertical resolution		14bits
Output waveform	standard waveform	sine, square, ramp, pulse, noise
	arbitrary waveform	exponential rise/fall, sin(x)/x, step wave, and others total 28 built-in waveforms
Arbitrary waveform length		2~16K
Output mode		continuous, modulation, frequency sweep, pulse burst
Modulation type		AM, FM, PM, FSK
Frequency characteristic	sine	1μHz~50MHz
	square	1μHz~20MHz
	ramp	1μHz~1MHz
	pulse	1μHz~10MHz
	noise (-3dB)	20MHz (gaussian white noise)
	arbitrary waveform (except DC)	1μHz~10MHz
	resolution	1μHz~9bits
	stability	±25ppm, 32~104°F
	aging rate	±25ppm/year
Amplitude characteristic	output amplitude	high resistance: 2mVpp~10Vpp (≤10MHz); 2mVpp~5Vpp (≤50MHz) 50Ω: 1mVpp~5Vpp (≤10MHz); 1mVpp~2.5Vpp (≤50MHz)
	amplitude accuracy	±(1%×setting+1mVpp) (typical value: 1kHz,sine wave, 0V, deviation)
	amplitude resolution	1mVpp~5bits
	offset range (AC+DC)	high resistance: ±5V (≤10MHz); ±2.5V (≤50MHz) 50Ω: ±2.5V (≤10MHz); ±1.25V (≤50MHz)
	offset accuracy (50Ω)	±(1%× setting +1mV+amplitude Vpp×0.5%)
	offset resolution	1mVpp
	output impedance	50Ω

STANDARD DELIVERY

Main unit	1 pc
Passive probe*	2/4 pcs
USB cable	1 pc

OPTIONAL DELIVERY

Power adapter	9531-ADP
WiFi/Bluetooth module	9531-BWL (must be installed in factory)
Arbitrary waveform generator module	9531-AWG50 (must be installed in factory)

*Number of passive probes corresponding to channel count