

MSO5000HD Series NEW

Digital Oscilloscopes



MSO5000HD series high-resolution oscilloscope has the maximum bandwidth of 1 GHz, the maximum Sample rate of 5 GSa/s, and is equipped with 4 analog channels and 16 digital channels, with the memory depth of up to 500 Mpt. MSO5000HD series adopts exclusive Ultra Phosphor 3.0 technology, achieving the waveform capture rate of up to 2,000,000 wfms/s, with 256 levels of gray temperature colors, and features an innovative digital trigger system with high trigger sensitivity and low jitter.

- Analog channel bandwidth:1GHz/500 MHz/350 MHz
- Real-time sample rate 5 GSa/s
- 12-bit vertical resolution
- 4 analog channels, 16 digital channels
- Memory depth of up to 500 Mpts
- Waveform capture rate is up to 800,000 wfms/s (sequence mode: 2,000,000 wfms/s)
- 9 instrument functions: digital oscilloscope, logic analyzer, function/ arbitrary waveform generator, spectrum analyzer, digital voltmeter, frequency meter, protocol analyzer, bode plot analyzer and power analyzer.
- Uninterrupted hardware real-time waveform recording and analysis of up to 400,000 frames
- Enhanced FFT of up to 4M points
- 54 kinds of parameter measurements. adds histogram and line graph display
- Multi-Windows display
- Multi-channel 7-digit hardware frequency meter
- DVM multi-channel RMS measurement:DC, AC RMS and DC+ACRMS
- Protocol triggering and decoding function:RS232/UART, I2C, SPI, I3C, 1-wire, CAN, CAN-FD, LIN, FlexRay, Audio, MIL-STD-1553B, Manchester, SENT, ARINC429
- Zone trigger for capturing sporadic signals and observing complicated signals.
- 10.1-inch 1280x800 HD capacitive multi-touch screen
- Built-in WebServer

Key Specifications	MSO5034HD	MSO5054HD	MSO5104HD
Bandwidth	350 MHz	500 MHz	1 GHz
Channels	4	4	4
Sample rate (analog)	5GSa/s(single channel), 2.5 GSa/s (dual-channel),2.5 GSa/s (four channel)		
Sample rate (digital)	1.25GSa/s		
Memory depth	500Mpts		
Max. Waveform capture rate	≥800,000 wfms/s; ≥2,000,000 wfms/s (sequence mode)		
Vertical resolution	12-bit (ERES is enabled with a maximum of 16-bit)		
Time base scale	500 ps/div to 1 ks/div		
Input impedance	(1 MΩ±2%) (18 pF±3 pF) 50 Ω±1.5%		
Input impedance (digital)	(101 kΩ±1%) (9 pF ± 1 pF)		
Vertical scale	500 μV/div - 10 V/div(1 MΩ) 500 μV/div -1 V/div(50 Ω)		
DC gain accuracy	<5 mV: ±2% full scale, ≥5 mV: ±1.5% full scale		
Waveform record	400,000 frames		

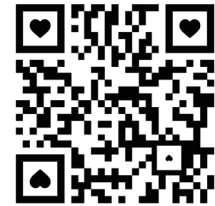
Key Specifications	MSO5034HD	MSO5054HD	MSO5104HD
Serial protocol analysis	RS232/UART, I2C, SPI, I3C, 1-wire, CAN, CAN-FD, LIN, FlexRay, Audio, MIL-STD-1553B, Manchester, SENT, ARINC429		
Auto measurements	54 kinds of parameter, simultaneously display 27 kinds of parameter measurement		
Measurement statistics	Mean, Maximum, Minimum, Std Dev, Count, Tendency chart, Histogram		
Arbitrary waveform generator (optional)	2 CH, 50 MHz, 250 MSa/s		
Frequency counter	7-bit hardware frequency counter		
Digital voltmeter	4digits,DC/AC RMS/DC+AC RMS		
Advanced analysis function	Power Analysis (Optional), BODE Plot (Optional), Limit Mask Testing		
Standard interfaces	USB Host, USB Device, LAN, EXT Trig, AUX Out (Trig Out, Pass/Fail, DVM), Gen Out, HDMI, WIFI, 10MHz reference clock IN/OUT		

General Characteristics	
Power	100 V-240 VAC(fluctuate: ±10%), 50 Hz/60 Hz 100 V-120 VAC(fluctuate: ±10%), 400 Hz
Display	10.1 - inch multi-touch capacitive screen, 1280*800(H*V)
Product net weight	3.83 kg
Product size (W×H×D)	364 mm×209 mm×106 mm
Standard quantity per carton	1pcs

Ordering Information		
MSO5000HD Series	MSO5104HD(1 GHz,5 GSa/s, 12bit, 4 analog channels, MSO)	
	MSO5054HD(500 MHz,5 GSa/s, 12bit, 4 analog channels, MSO)	
	MSO5034HD(350 MHz,5 GSa/s, 12bit, 4 analog channels, MSO)	
Standard Accessories	National standard cable x 1	
	USB3.0 cable x 1	
	BNC-BNC direct-through line x 1	
	BNC-red and black alligator connecting wire x 1	
	Passive probe x 4	
Options	MSO5000HD-BW5MT1G	500MHz Upgrade to 1GHz Bandwidth
	MSO5000HD-BW3M5T5M	350MHz Upgrade to 500MHz Bandwidth
	MSO5000HD-BW3M5T1G	350MHz Upgrade to 1GHz Bandwidth
	MSO5000HD-BND	All Serial Bus Trigger and Decode Options (including AUTO, Audio, MIL-STD, ARINC, Manchester)
	MSO5000HD-AUTO	Automotive Serial Bus Trigger and Decode Option (CAN, CAN-FD, LIN, FlexRay, SENT)
	MSO5000HD-CAN	Automotive Serial Bus Trigger and Analysis Option (CAN)
	MSO5000HD-CANFD	Automotive Serial Bus Trigger and Analysis Option (CAN-FD)
	MSO5000HD-LIN	Automotive Serial Bus Trigger and Analysis Option (LIN)
	MSO5000HD-FLEX	Automotive Serial Bus Trigger and Analysis Option (FlexRay)
	MSO5000HD-SENT	Automotive Sensor Bus Trigger and Analysis Option (SENT)

Ordering Information

Options	MSO5000HD-I3C	I3C Serial Bus Trigger and Analysis Option (I3C)
	MSO5000HD-1-wire	1-wire Bus Trigger and Analysis Option
	MSO5000HD-AUDIO	Audio Serial Bus Trigger and Analysis Option (I2S, LJ, RJ, TDM)
	MSO5000HD-MIL1553	Aerospace Serial Bus Trigger and Analysis Option (MIL-STD-1553)
	MSO5000HD-ARINC429	Aerospace Serial Bus Trigger and Analysis Option(ARINC429)
	MSO5000HD-MANCH	Serial Bus Trigger and Analysis Option (Manchester)
	MSO5000HD-AWG	Dual-Channel 50 MHz Arbitrary Waveform Generator Option
	MSO5000HD-PWR	Power Analysis Option
Optional accessories	Active single-ended probe (2GHz; 10X): UT-PA2000	
	High Voltage Probe:UT-V23/UT-P21/UT-P20	
	High Voltage Differential Probe:UT-P30/UT-P31/UT-P32/UT-P33/UT-P35/UT-P36	
	Current Probe:UT-P40/UT-P41/UT-P42/UT-P43/UT-P44:UT-P4030D/UT-P4150/UT-P4500/UT-4100A /UT-4100B	
	16-channel logic analyzer probe:UT-M15	
	Isolation transformer: UT-ISOT	



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