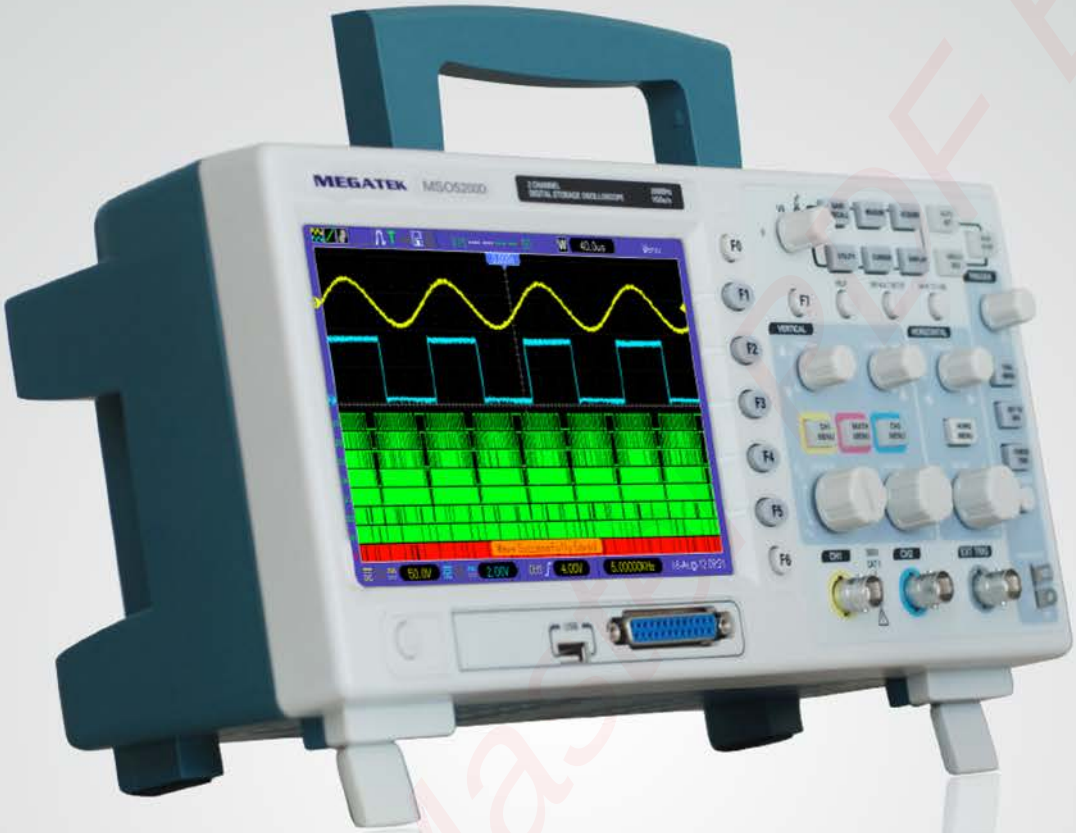
Mixed Signal Oscilloscope

16 CH logic analyzer, 2 CH oscilloscope,External trigger.

DSO5000 Series



Feature

- 16 channels logic analyzer + 2 channels oscilloscope + external trigger.
- Big and clear display (7.0-inch color LCD, high revolution 800 x 480), clear lifelike waveform display.
- Ultrathin design, handy volume, easily portable.

*** Oscilloscope Function**

- Bandwidth 60-200MHz ; Real time sampling rate up to 1GSa/s; 1M record length.
- Powerful trigger function.
- More than 20 kinds of automatic measurement function.

*** Logic Analyzer Function**

- 16 channels divided into 2 groups which is able to setup threshold level individually.
- Real time sampling rate up to 500MSa/s.
- Powerful trigger function: edge, pulse width, code-type, duration, queen, repeat.

Specification

	Model	DSO5200D	DSO5100D	DSO5060D
Horizontal	Bandwidth	200MHz	100MHz	60MHz
	Sampling Rate Range	Max. 1GS/s		
	Waveform Interpolation	(sin x) /x		
	Memory Depth (Sample Points)	Single-channel: maximum 1M; Dual-channel: maximum 512K (4K, 16K, 40K optional)		
	SEC/DIV Range	8ns/div-40s/div (stepping in a sequence: 2,4,8)		
	Sampling Rate and Delay Time Accuracy	±50ppm in any ≥1ms time intervals		
	Delta Time Measurement Accuracy (full bandwidth)	Single, "sampling" mode, ± (1 sampling interval + 100ppm × readings + 0.6 ns) > 16 times above average, ± (1 sampling interval + 100ppm × readings + 0.4 ns) Sampling interval = SEC/DIV÷200		
	A/D Converter	8-bit resolution, each channel sampled simultaneously		
Vertical	VOLTS/DIV Range	2mV/div ~ 5V/div at input BNC		
	Position Range	±400mV (2mV/div ~20mV/div); ±2V (50mV/div ~200mV/div) ±40V (500mV/div ~2V/div); ±50V (5V/div)		
	Optional Analog Bandwidth Limit (typical)	20MHz		
	Low Frequency Response (-3db)	≤10Hz at output BNC		
	Rising Time at output BNC (typical)	≤1.8ns	≤3.5ns	≤5.8ns
	Vertical Gain Accuracy	±3% for sample or average acquisition mode, 5V/div to 10mV/div; ±4% for sample or average acquisition mode, 5mV/div to 2mV/div		
	Voltage Measurement Repeatability	In the same settings and environmental conditions, acquisition ≥ the voltage increment		
	Average Acquisition Mode	between any two groups average of 16 above waveforms : ± (3% × readings + 0.05 div)		
Trigger	Trigger Sensitivity (Edge Trigger Type)	DC; CH1/CH2:1.5div from 10MHz to 100MHz,2div from 100MHz to full	DC; CH1/CH2:1div from DC to 10MHz, 1.5div from 10MHz to full	
		EXT: 200mV from DC to 100MHz, 350mV from 100MHz to full	EXT: 200mV from DC to full	
		EXT/5: 1V from DC to 100MHz, 1.75V from 100MHz to full	EXT/5: 1V from DC to full	
		AC: Attenuates signals below 10Hz; HF Reject: Attenuates signals when above 80kHz; LF Reject: The same as DC coupling limit when frequency above 150kHz; Attenuates signals when below 150kHz.		
	Trigger Level Range	CH1, CH2: ±8 divisions from center of screen; EXT: ±1.2V; EXT/5: ±6V		
	Typical accuracy for signals having rise and fall time ≥ 20ns)	CH1, CH2: ±(0.2div × V/div) (within ±4 divisions from center of screen); EXT: ±(6% of setting+40mV); EXT/5: ±(6% of setting+200mV)		
	Holdoff Range	100ns-10s		
Trigger Type	Set Trigger Level to 50% (typical)	For the input signals ≥ 50Hz		
	Video Trigger	CH1, CH2: The amplitude of 2 points peak-peak; EXT: 400mV; EXT/5: 2V; Trigger on an NTSC, PAL, or SECAM standard video signal; line Range:1-525(NTSC), 1-625(PAL/SECAM)		
	Edge Trigger	Trigger on the rising or the falling edge		
	Pluse Width Trigger	Trigger(when >,<,≠,=) on positive or negative pulses, Pluse Width Range: 20ns-10s		
	Slope Trigger	Trigger(when >,<,≠,=) on positive or negative slope, set time: 20ns-10s		
	Pvertime Trigger	From the rising or falling edge, set time: 20ns-10s		
	Alternate Trigger	Internal trigger on edge, pluse width, video or slope		
	Code-type	D0-D15 select code-type (H, L, X)		
	Duration	D0-D15 select persist time and trigger when (data terminate, data start, and data delay)		
	Queue	D0-D15 select specific data index (0-3) and code-type (H, L, X)		
	Repeat	D0-D15 select code-type (H, L, X) and repeat times		
Acquisition	Sample, peak value detect	All communications start to single acquisition simultaneously		
	Average	All communications start to N times acquisition simultaneously, and N could be 4, 8, 16, 32, 64 or 128		
Input	Input Coupling	DC, AC or GND		
	Input Impedance, DC Coupling	1MΩ±2% for 20pF±3 pF		
	Support Probe Attenuation Coefficients	1X, 10X, 100X, 1000X		
	Max. Input Voltage	CAT I and CAT II: Installation type: 300VRMS(10×); CAT III: 150VRMS(1×)		
Measurement	Cursors	The difference between voltage cursors △V; the difference between time cursors △T; 1/△T calculated by Hz.		
	Automatic	Frequency, Period, Mean, Pk-Pk, Cyc RMS, Min, Max, Rise Time, Fall Time, Positive Width, Negative Width.		
Display	Type	7" TFT, 64K true color LCD,		
	Resolution	800x480 dots		
	Contrast	16 gears with the progress bar to show adjustment		
Power Supply	Voltage	100-120VACRMS(±10%),45Hz to 440Hz, CAT Ⅱ ;120-240VACRMS(±10%),45Hz to 66Hz, CAT Ⅱ		
	Power	< 30W		
	Fuse	2A, T rating, 250V		
Mechanical	Size	313mm(L)x108mm(W)x142mm(H)		
	Weight	2.08KG(Not including the package and accessories)		
Logic Analyzer Specification	Sampled Channels	16 (divided into 2 groups)		
	Max. Input Impedance	200K (C=10p)		
	Input Voltage Range	-60V~60V		
	Logic Threshold Range	-8V~8V		
	Max. Sample Rate	500MHz		
	Compatible Input	TTL, CMOS, ECL		
	Sample Depth	512KSample		
	Measurement	Period and Frequency		