

SPECIFICATIONS

Analog Channels – Vertical	WaveSurfer 24MXs-B	WaveSurfer 44MXs-B MSO 44MXs-B	WaveSurfer 42MXs-B	WaveSurfer 64MXs-B MSO 64MXs-B	WaveSurfer 62MXs-B	WaveSurfer 104MXs-B MSO 104MXs-B
Bandwidth (@ 50 Ω)	200 MHz	400 MHz	400 MHz	600 MHz	600 MHz	1 GHz
Rise Time	1.75 ns	875 ps	875 ps	500 ps	500 ps	300 ps
Input Channels	4	4	2	4	2	4
Vertical Resolution	8 bits					
Vertical Sensitivity (V/div)	2 mV/div–10 V/div (1 MΩ); 2 mV/div–1 V/div (50 Ω)					
Vertical (DC Gain)	±1.0% of full scale (typical); ±1.5% of full scale ≥ 10 mV/div (warranted)					
Accuracy						
BW Limit	20 MHz	20 MHz, 200 MHz				
Maximum Input Voltage	50 Ω: 5 V _{rms} , 1 MΩ: 400 V max. (DC + Peak AC ≤ 5 kHz)					50 Ω: 5 V _{rms} 1 MΩ: 250 V max. (DC + Peak AC ≤ 10 kHz)
Input Coupling	AC, DC, GND (DC and GND for 50 Ω)					
Input Impedance	1 MΩ 16 pF, or 50 Ω					1 MΩ 20 pF, or 50 Ω

Analog Channels – Acquisition

Sample Rate (Single-shot)	2.5 GS/s	5 GS/s	5 GS/s (10 GS/s Interleaved)
Sample Rate (Repetitive)	50 GS/s		
Record Length	12.5 Mpts/Ch (all channels), 25 Mpts (interleaved)		
Capture Time	Up to 2.5 ms at full sample rate on all four channels		
Acquisition Modes	Real Time, Roll, RIS (Random Interleaved Sampling), WaveStream (Fast Viewing Mode), Sequence (Segmented Memory up to 10,000 segments)		
Time Base Range	200 ps/div–1000 s/div (roll mode from 500 ms/div–1000 s/div)		
Time Base Accuracy	≤ 5 ppm @ 25 °C (typical) (≤ 10 ppm @ 5–40 °C)		

Digital Channels – Vertical

Input Channels	18 (D0–D17)	18 (D0–D17)	18 (D0–D17)
Input Impedance	100 kΩ 5.0 pF	100 kΩ 5.0 pF	100 kΩ 5.0 pF
Maximum Input Voltage	±30 V non-destruct	±30 V non-destruct	±30 V non-destruct
Threshold Groupings	D0–D8, D9–D17	D0–D8, D9–D17	D0–D8, D9–D17
Threshold Selections	TTL, ECL, CMOS, PECL, LVDS, User Defined	TTL, ECL, CMOS, PECL, LVDS, User Defined	TTL, ECL, CMOS, PECL, LVDS, User Defined

Digital Channels – Acquisition

Sample Rate	1 GS/s	1 GS/s	1 GS/s
Record Length	10 Mpts/Ch	10 Mpts/Ch	10 Mpts/Ch
Minimum Detectable Pulse Width	2 ns	2 ns	2 ns
Maximum Input Frequency	250 MHz	250 MHz	250 MHz

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Trigger System						
Trigger Modes	Normal, Auto, Single, and Stop					
Trigger Sources	Any input channel, External, Ext/10, or line; slope and level unique to each source (except for line trigger)					
Trigger Coupling	DC, AC, HFRej, LFRej					
Pre-trigger Delay	0–100% of full scale					
Post-trigger Delay	0–10,000 divisions					
Trigger Hold-off	1 ns to 20 s or 1 to 1,000,000,000 events					
Internal Trigger Level Range	±4.1 div from center					
External Trigger Range	EXT/10 ±4V; EXT ±400 mV					
Trigger Modes	Edge, Glitch, Width, Logic (Pattern), TV (NTSC, PAL, SECAM, HDTV–720p, 1080i, 1080p), Runt, Slew Rate, Interval (signal or Pattern), Dropout, Qualified (State or Edge)					
Probes						
Standard Probes	One PP009 (5 mm) per channel					One PP011 (5 mm) per channel
Probing System	BNC and LeCroy ProBus for Active voltage, current and differential probes					
Measure, Zoom, and Math Tools						
Measurement Parameters	Up to 6 of the following parameters can be calculated at one time on any waveform: Amplitude, Area, Base (Low), Delay, Duty, Fall Time (90%–10%), Fall Time (80%–20%), Frequency, Maximum, Mean, Minimum, Overshoot+, Overshoot-, Period, Peak-Peak, Phase, Rise Time (10%–90%), Rise Time (20%–80%), RMS, Skew, Standard Deviation, Top (High), Width+, Width-. Measurements can be gated.					
Zooming	Use front panel QuickZoom button, or use touch screen or mouse to draw a box around the zoom area.					
Math Functions	Functions include Sum, Difference, Product, Ratio, Absolute Value, Averaging (summed and continuous), Derivative, Envelope, Enhanced Resolution (to 11-bits), Floor, Integral, Invert, Reciprocal, Rescale (change scale and units), Roof, Square, Square Root and FFT (up to 1 Mpts with power spectrum output and rectangular, VonHann, and FlatTop windows). 1 math function may be defined at a time, 2 functions may be chained together.					
Display System						
Display Type	Color, 10.4" TFT-LCD Touch Screen					
Display Resolution	SVGA: 800 x 600 pixels					
Connectivity						
Ethernet Port	10/100/1000Base-T Ethernet interface (RJ-45 connector)					
USB Ports	(5) USB Ports					
GPIB Port (Optional)	Supports IEEE – 488.2					
External Monitor Port	Standard 15-pin D-Type SVGA-compatible DB-15 connector					
Remote Control	Via Windows Automation, or via LeCroy Remote Command Set					
Network Communication Standard	VXI-11 or VICP, LXI Class C Compliant					
Physical						
Dimensions (HWD)	260 mm x 340 mm x 152 mm Excluding accessories and projections (10.25" x 13.4" x 6")					
Net Weight	7.26 kg. (16.0 lbs.)					