

MDO/MSO/DPO4000B Series vs. LeCroy WaveSurfer MXs-B Series

Competitive Fact Sheet

Serial Triggering and Decode

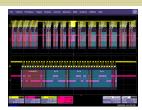
Tektronix MDO/MSO/DPO4000B Series

- √ Simple time-correlated and labeled bus form display with color coded decode
- ✓ Large easy to read tabular view with timestamp
- √ View all packets in memory whether on screen or not
- ✓ Wave Inspector ® controls seamlessly integrate serial into automated search
- ✓ Search the entire record whether on screen or not



LeCroy WaveSurfer MXs-B Series

- ★ Overlaid color coding obscures waveforms, is difficult to read, and waveforms are not labeled
- ▼ Table of packets in lower half of display only
- Only displays packets that are visible on screen
- Serial decode search is completely separate from WaveScan™
- Searches only serial decode information on screen and does not place marks





Navigation and Search

Tektronix MDO/MSO/DPO4000B LeCroy WaveSurfer MXs-B

- ✓ Dedicated Wave Inspector® front panel controls to quickly navigate and search through long records
- ✓ Same controls for analog, digital, and serial and parallel bus waveforms
- Search events found counter
- ✓ Automated search marks and search mark table



- Horizontal position used to scroll through data. Zoom uses multiple windows with multiplexed knobs.
- Serial decode search completely separate from WaveScan™.
- No search events found
- No marks (user or automated).



Key Specifications Comparison

	Tektronix MDO/MSO/DPO4000B Series		LeCroy WaveSurfer MXs-B Series	
Channels	✓	2, 4 (+16 digital on MDO/MSO models)	✓	2, 4 (+18 digital on MSO models)
Bandwidth	✓	100 MHz, 350 MHz, 500 MHz, 1 GHz	✓	200, 400, 600 MHz, 1 GHz
Max. Sample Rate (All channels on)	✓	5 GS/s (1 GHz, non-L models) 2.5 GS/s (other models)	√	2.5 GS/s (200 MHz model), 5 GS/s (others)
Max. Record Length (All channels on)	√	20 M (non-L models) 5 M	√	16 M
Serial Triggering and Decode	✓	I ² C, SPI, USB, Ethernet, CAN, LIN, RS-232/ 422/485/UART, FlexRay, I ² S/LJ/RJ/TDM, MIL-STD-1553	✓	I ² C, SPI, CAN, LIN, FlexRay, D-PHY, DigRF, RS-232/UART, USB2, Ethernet, I ² S/LJ/RJ/TDM, MIL-STD-1553, SENT
Standard Passive Probe	✓	1 GHz, 3.9 pF, 10 M Ω (1 GHz models) 500 MHz, 3.9 pF, 10 M Ω	×	500 MHz, 9.5 pF, 10 MΩ





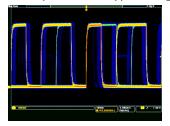
MSO/DPO4000B Series vs. LeCroy WaveSurfer MXs-B Series

Competitive Fact Sheet

Discovering an Intermittent Pulse / Standard Passive Probe Performance

Tektronix MDO/MSO/DPO4000B Series

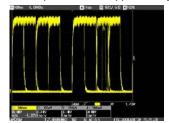
Infinite persistence stopped after 10 second capture



- >340,000 wfm/s capture rate, with colorand intensity-graded displays
- As shown, many glitches and intermittent pulses are captured in 10 seconds
- ✓ Persistence available in any capture mode
- √ 1 GHz probe (1 GHz models)
 500 MHz probe (100-500 MHz models)
- Probe Loading Input Capacitance 3.9 pF

LeCroy WaveSurfer MXs-B Series

Infinite persistence stopped after 1 minute capture



- Waveform capture rate not specified for normal acquisition.
- As shown, few glitches or intermittent pulses are captured in 1 minute.
- Persistence not available in WaveStream™ high speed capture mode.
- 500 MHz probe
- Probe Loading Input Capacitance ~9.5 pF

Digital Debug with MDO/MSO

Tektronix MDO/MSO4000B

- ✓ Per channel digital thresholds enable analysis of multiple logic families.
- ✓ Clocked or unclocked parallel bus decode.
- ✓ Event table for parallel bus decode.
- ✓ Green trace for logic highs (1), blue trace for logic lows (0).
- Channels can be displayed as a bus and/or individual signals.
- ✓ Digital channels can be grouped and/or independently moved in the display.



LeCroy WaveSurfer MXs-B MSO

- Digital thresholds limited to one per 9-channel digital probe pod. Limited ability to analyze multiple logic families.
- No clocked parallel bus decode.
- No event table for parallel bus decode.
- No color difference between a logical low and high value.
- Channels displayed as a bus waveform or as individual signals, but not both at the same time.
- Digital channels must be displayed in hardware order.



Dedicated Front Panel Controls

Tektronix

MDO/MSO/DPO4000B

- ✓ Per-channel vertical controls.
- ✓ Wave Inspector® controls make navigation and search easy.
- Quick front panel access to Math, Reference, Bus Setup, and Measurements.

LeCroy WaveSurfer MXs-B

- Multiplexed vertical controls.
- Multiplexed zoom controls.
- Windows UI requires using a touch screen and/or a mouse.



