

Tektronix MSO/DPO2000B Series vs. Rigol DS1000CA Series

Competitive Fact Sheet

Serial Triggering and Decode

Tektronix MSO/DPO2000B Series

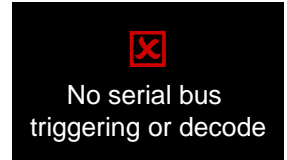
- ✓ **Bus Display** – Provides a higher level, combined view of individual signals that make up your bus.
- ✓ **Bus Decoding** – Decodes each packet on the bus and displays the value in hex, binary, decimal, or ASCII.
- ✓ **Serial Triggering** – Trigger on packet content such as start of packet, specific addresses, and unique identifiers.
- ✓ **Event Table** – View captured packets in a tabular view
- ✓ **Search** – Wave Inspector® navigation automatically searches for and marks user-defined events on packet content.



Time	Repeat Start	Address	Data	Following Ack	Event Table
-4.8750ns		00A1	505A 5C		Event Table
-3.8750ns		00A1	5030 5034		Event Table
-3.8750ns		00A1	2030 2A2C		Event Table
-2.8750ns		00A1	2030 2034		Event Table
-2.8750ns		00A1	3030 3A2C		Event Table
-1.8750ns		00A0	17		Event Table
-1.8750ns	X	00A1	0E	X	Event Table
-1.8750ns		002A2	F80E	X	Event Table
-1.8750ns		002A3	0000	X	Event Table
-4.8750ns		00252		X	Event Table
0S.500ns	X	001F3	77A7	X	Event Table
0S.500ns		002D3	0000	X	Event Table

Rigol DS1000CA Series

- ✗ No serial bus triggering or decode offered.
- ✗ No serial search offered.



Long Record Length Navigation and Search

Tektronix MSO/DPO2000B Series

Rigol DS1000CA Series



- ✓ 1 M point record.
- ✓ Wave Inspector® controls.
- ✓ Pan/Zoom controls make easy work of scrolling through long records.
- ✓ Play/Pause button scrolls the waveform across the screen automatically.
- ✓ Search/Mark controls enable you to search for events of interest, mark them, then navigate through the record mark-by-mark.

- ✗ 5,000 point record.
- ✗ Uses delayed mode and horizontal scale knob to zoom.
- ✗ Manual scrolling of horizontal position to scroll through data.
- ✗ No automated search capability.

Key Specifications Comparison

	Tektronix MSO/DPO2000B Series	Rigol DS1000CA Series
Channels Analog	✓ 2, 4 analog	✗ 2 analog
Channels Digital	✓ 16 (MSO Series only)	✗ No equivalent feature
Bandwidth	✓ 70, 100, 200 MHz	✓ 60, 100, 200, 300 MHz
Max. Sample Rate (All analog channels on)	✓ 1 GS/s	✓ 1 GS/s
Max. Record Length (All analog channels on)	✓ 1 M points	✗ 5 k points
Serial Triggering and Decode	✓ I ² C, SPI, CAN, LIN, RS-232/422 /485/UART	✗ No serial triggering or decode
Warranty	✓ 5-year	✗ 3-year

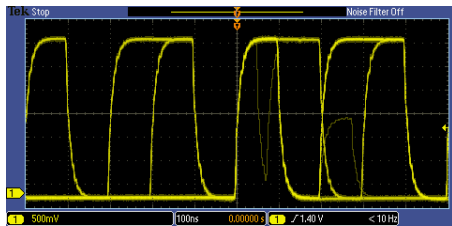
MSO/DPO2000B Series vs. Rigol DS1000CA Series

Competitive Fact Sheet

Capturing an Intermittent Pulse

Tektronix MSO/DPO2000B Series

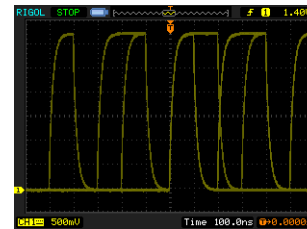
Infinite persistence stopped after 15 second capture



- ✓ 5,000 wfms/s capture rate.
- ✓ As shown, glitches and intermittent pulses are captured in 15 seconds.
- ✓ Variable persistence also available.

Rigol DS1000CA Series

Infinite persistence stopped after 10 minute capture

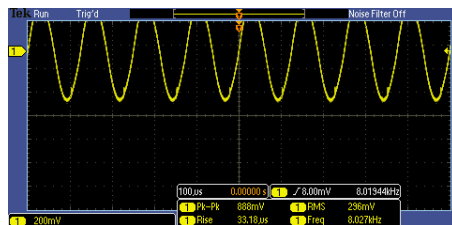


- ✗ No published waveform capture rate.
- ✗ No glitches or intermittent pulses were captured after 10 minutes of waiting.
- ✗ No variable persistence.

Automatic Measurements

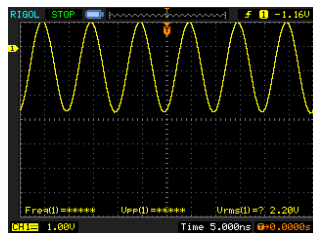
Tektronix MSO/DPO2000B Series

- ✓ Measurements work even when waveform is slightly off-screen.
- ✓ Measurements available on all input channels and Math.
- ✓ Measure and display up to 4 parameters. Or look at snapshot of all measurements for a given signal.



Rigol DS1000CA Series

- ✗ Measurement system quits if even one pixel of the waveform is off-screen.
- ✗ Measurement limited to channel 1 and 2.
- ✗ Measure and display 2 (or 3, if menu is cleared) parameters.



Horizontal Zoom

Tektronix MSO/DPO2000B Series

- ✓ Dedicated front panel buttons and knobs for quick access and control of zoom.
- ✓ High sample rate and sin(x)/x interpolation in zoom mode assures accurate waveform display.



Rigol DS1000CA Series

- ✗ Delayed zoom mode buried in menu and controls multiplexed with horizontal scale and position knobs.
- ✗ Linear interpolation in delayed zoom mode may distort displayed waveform.

