

MSO/DPO2000B Series vs. GWinstek GDS2000A Series

Competitive Fact Sheet

Advanced Probe Interface

Tektronix MSO/DPO2000B Series



- ✓ Probe menu on oscilloscope interacts directly with probe
- ✓ Direct connection to current probes (including ac/dc), differential probes, and single-ended active probes
- ✓ Simpler deskewing of probes

GW Instek GDS2000A Series



- ✗ No communications between oscilloscope and probe
- ✗ Cannot directly connect to current probes, and active probes

Measurement Accuracy

Tektronix MSO/DPO2000B Series

- ✓ You can trust Tek MSO/DPO2000B for reliable measurement results.
DC gain accuracy: $\pm 3\%$ for 10 mV/div to 5 V/div
 $\pm 4\%$ for 2 mV/div to 5 mV/div

GW Instek GDS2000A Series

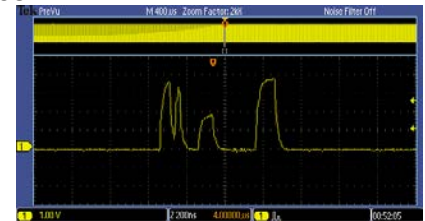
- ✗ DC gain accuracy: $\pm(3\% \times |\text{Readout}| + 0.1 \text{ div} + 1 \text{ mV})$ when 2mV/div or greater is selected

Vertical Scale	Signal Pk to Pk	Tektronix DPO/MSO2000B DC gain accuracy (mV/V)	GW Instek GDS2000A DC gain accuracy (mV/V)	Tektronix DPO/MSO2000B DC gain accuracy (%)	GW Instek GDS2000A DC gain accuracy (%)
2mV	12mV	$\pm 0.08 \text{ mV}$	$\pm 1.38 \text{ mV}$	$\pm 4\%$	$\pm 27\%$
5mV	30mV	$\pm 0.20 \text{ mV}$	$\pm 1.95 \text{ mV}$	$\pm 4\%$	$\pm 22\%$
10mV	60mV	$\pm 0.3 \text{ mV}$	$\pm 2.9 \text{ mV}$	$\pm 3\%$	$\pm 21\%$
100mV	600mV	$\pm 3 \text{ mV}$	$\pm 20 \text{ mV}$	$\pm 3\%$	$\pm 19\%$
1V	6V	$\pm 0.03 \text{ V}$	$\pm 0.191 \text{ V}$	$\pm 3\%$	$\pm 19\%$

Horizontal Zoom

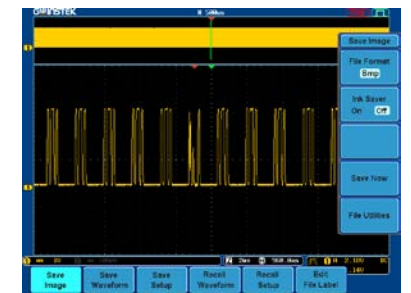
Tektronix MSO/DPO2000B Series

- ✓ Dedicated front panel buttons and knobs for quick access and control of zoom
- ✓ Zoom range from 1x to 10kx to see the details of the waveform



GW Instek GDS2000A Series

- ✗ Zoom mode buried in menu and controls multiplexed with horizontal scale and position knobs
- ✗ Zoom range from 1x to 2kx, less details are shown in zoom window.



www.tektronix.com/mso2000B

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Competitive Fact Sheet

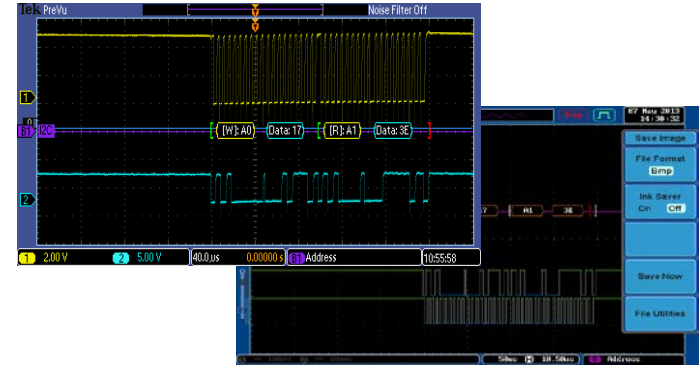
Serial Triggering and Decode

Tektronix MSO/DPO2000B Series

- ✓ **Decoding Options** – I²C, SPI, CAN, LIN, RS-232/422/485/UART. Can show any 2 decoded bus on screen.
- ✓ **Decoding channel** – both analog and digital channels use for serial bus decoding.
- ✓ **RS-232/422/485/UART**– Decodes each packet on the bus and displays the value in hex, binary, decimal, or ASCII. Data bits can be chosen from 7,8,9 bits.
- ✓ **Data Decoding** – Color coded packet marked with packet type information.

GW Instek GDS2000A Series

- ✗ **Decoding Options** – only I²C, SPI, UART. Only decode one bus at one time.
- ✗ **Decoding channel** - Serial Bus decoding only on digital channels
- ✗ **UART** – value cannot be shown in ASCII. Only 8 bits option available.
- ✗ **Data Decoding** – not fully decoded I2C data with no information indicating address or data and directions.



Long Record Length Navigation and Search

Tektronix MSO/DPO2000B Series



- ✓ 1 M points on all channels. Wave Inspector® controls.
- ✓ Pan/Zoom controls make easy work of scrolling through long records.
- ✓ Save up to 1m points to external storage.
- ✓ Search entire memory record and mark every event that meets the search criteria

GW Instek GDS2000A Series

- ✗ Reduce to 500k points when turn on interleaved channel and run at normal/auto mode.
- ✗ Uses horizontal scale knob to zoom.
- ✗ Save maximum 5000 points to external storage.

Other Specifications and Features

	Tektronix MSO/DPO2000B Series		GW Instek GDS2000A Series	
Channels Analog	✓	2, 4	✓	2, 4
Channels Digital	✓	16 (MSO only)	✓	Optional 8 or 16
Bandwidth	✓	70, 100, 200 MHz	✓	70, 100, 200, 300 MHz
Max. Record Length(All analog channels on)	✓	1 M points on all channels	✗	1 M pts, reduce to 500k pts in normal/auto mode
Segmented memory	✗	No	✓	Yes
Max. Sample Rate (All channels on)	✓	1 GS/s	✓	1 GS/s
Serial Triggering and Decode (Optional)	✓	I ² C, SPI, CAN, LIN, RS232/422/485/UART	✗	I ² C, SPI, RS-232/UART
DC Gain Accuracy	✓	+/-3%, 5V/div to 10mV/div. +/-4%, 5mV/div and 2mV/div.	✗	±(3% × Readout + 0.1div + 1mV) when 2mV/div or greater is selected
Display Size (resolution)	✗	7.0-inch wide format (480 x 234)	✓	8-inch standard format (800x480)
Save waveform	✓	Save 1M pts	✗	Save maximum 5k pts
Warranty	✓	5-year	✗	3-year (1 yr on Display)