

TBS1000B/-EDU Series vs. GW Instek GDS-1000(A)-U Series

Competitive Fact Sheet

Ease of Use

Tektronix TBS1000B/-EDU Series

- ✓ 7 inch (800X480) high-resolution display with updated UI similar to Tek DPO scopes
- ✓ Indexed, context sensitive help system with hyperlinks; works like a built-in manual
- ✓ Shortcut buttons for reference waveform, default setup, horizontal position reset, 50% trigger setting, FFT and SW Apps
- ✓ Probe Check button to quickly verify that the voltage probe is operating properly
- ✓ Trigger View button to see how the trigger settings affect the trigger signal
- ✓ AutoRange button adjusts controls to produce a usable display of the input signal



GW Instek GDS-1000(A)-U Series

- ✗ 5.7 inch (320X234) resolution display with legacy user interface
- ✗ No help index and no hyperlinks make it difficult to jump between topics
- ✗ No shortcut buttons for reference waveform, default setup, horizontal position reset, 50% trigger setting, FFT or SW Applications
- ✗ No probe check function
- ✗ No trig view function
- ✗ No AutoRange function



Key Specifications Comparison

	Tektronix TBS1000B/-EDU Series	GW Instek GDS-1000(A)-U Series
Channels	✓ 2	✓ 2
Bandwidth	✓ 50, 70, 100, 150, 200 MHz	✓ 1000-U: 50, 70, 100MHz 1000A-U: 70, 100, 150MHz
Max. Sample Rate (All channels on)	✓ BW<100MHz: 1 GS/s BW>=100MHz: 2 GS/s	✗ 1000-U: 250 MS/s 1000A-U: 500 MS/s
Max. Record Length (All channels on)	✗ 2.5k points	✓ 1000-U: 4k points 1000A-U: 1M points
Auto Measurements	✓ Best-in-class 34 auto measurements	✗ 1000-U: 19 auto measurements 1000A-U: 27 auto measurements

	Tektronix TBS1000B/-EDU Series	GW Instek GDS-1000(A)-U Series
App Functions	TBS1000B: ✓TrendPlot, ✓Enhanced Limit test w/ dual waveforms based mask option	✗ No TrendPlot ✗ Std Limit Test w/o dual waveform based mask option
	TBS1000B-EDU: ✓ integrated CourseWare function ✓Autoset Enable/Disable ✓Ecosystem with free, oscilloscope compatible courseware available for download from tek.com	✗ No CourseWare function ✗ No Autoset enable/Disable ✗ No courseware-like Ecosystem on GW-Instek website.
Frequency Counter	✓ Dual-Channel	✗ Single Channel

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Higher Sample Rate/Bandwidth Ratio

The TBS1000B/-EDU series offers higher sample rate/bandwidth ratios which reconstruct waveforms more accurately and reduce the possibility of aliasing

Tektronix TBS1000B/-EDU	Bandwidth	Sample rate(all CHs on)	Sample rate/ Bandwidth	GW Instek GDS-1000A-U	Bandwidth	Sample rate(all CHs on)	Sample rate/ Bandwidth	GW Instek GDS-1000-U	Bandwidth	Sample rate(all CHs on)	Sample rate/ Bandwidth
TBS1052B(-EDU)	50MHz	1GS/s	20 times					GDS-1052-U	50MHz	250MS/s	5 times
TBS1072B(-EDU)	70MHz	1GS/s	14.2 times	GDS-1072A-U	70MHz	500MS/s	7.1 times	GDS-1072-U	70MHz	250MS/s	3.6 times
TBS1102B(-EDU)	100MHz	2GS/s	20 times	GDS-1102A-U	100MHz	500MS/s	5 times	GDS-1102-U	100MHz	250MS/s	2.5 times
TBS1152B(-EDU)	150MHz	2GS/s	13.3 times	GDS-1152A-U	150MHz	500MS/s	3.3 times				
TBS1202B(-EDU)	200MHz	2GS/s	10 times								

Reliability and Work Environment

Tektronix

TBS1000B/-EDU Series

- ✓ Tektronix' customized integrated circuit minimizes the component count and increases reliability
- ✓ 300V_{RMS} CAT II. Rated for measurements on circuits directly connected to mains
- ✓ 2.0 kg weight
- ✓ Silent operation, no cooling fan
- ✓ Rubberized footing enhances stability on test benches
- ✓ Operating altitude: <3000 meters
- ✓ 30 W max power consumption
- ✓ 5 year warranty on all models

GW Instek

GDS-1000(A)-U Series

- ✗ Large component count using off-the-shelf electronics
- ✗ 300V_{pk}(DC+AC peak) CAT II. Rated for measurements on circuits directly connected to mains
- ✗ 2.5 kg weight
- ✗ Contains a cooling fan
- ✗ Non rubberized footing, can move or slide accidentally.
- ✗ Operating altitude: <2000 meters
- ✗ 40 W max power consumption
- ✗ The limited life time warranty can be as short as 5 years
(LCD display warranty is only 1 year)

Other Advanced Featured Options from Tektronix

Tektronix TDS2000C Series

- ✓ 4 channel models with 70MHz, 100MHz & 200MHz bandwidths
- ✓ Limited life time warranty (at least 10 years)

Tektronix 4 channel TBS1000 Series

- ✓ 4 channel models with 60MHz, 100MHz & 150MHz bandwidths

Tektronix MSO2000B and DPO2000B Series

- ✓ Wave Inspector® Navigation and Search for efficient evaluation of records of up to 1 million points
- ✓ Decode, search and trigger on serial buses like I²C, SPI, RS-232 and others.
- ✓ 1M Record Length
- ✓ 16 digital channels (MSO Series)