GW Instek GDS-2000E series VS. Tektronix TBS-2000 series

Competitive Fact Sheet

Tektronix launched the new TBS-2000 series oscilloscope at the end of July, 2016. Compared with its DPO-2000 and 2000 series in the same class, TBS-2000 provides larger display: 9 inches, 20M per channel record length, updated UI, Cursor readout, and optional WiFi function, etc. The advantages that GDS-2000E can offer are shown in the following comparison between GDS-2000E and TBS-2000.

	GW Instek **GDS-2000E Series**	**Tektronix** **TBS2000**
Bandwidth	70/100/200MHz	70/100MHz
Max. Sample Rate (All channel on)	1GSa/s(2CH model) 500MSa/s (4CH model)	500MSa/s
waveform capture rate(wfm/sec)	120,000	10,000
Trigger type	Edge ,Pulse width ,Runt ,Video , Rise & Fall ,Alternate ,time out ,event - delay ,bus	Edge ,Pulse width ,Runt
Horizontal range	1ns~100s/div	2 ns/div ~ 100 s/div
Vertical range	1mV~10V/div	2mV-5V/div
Automated measurements	36	32
1M FFT	Yes	NA
Bus decode	I2C, SPI, UART ,CAN,LIN,	NA

Features of the GDS-2000E series

- Bandwidth: 200/100/70 MHz
- 10M record length per channel
- 1G Sa/s sample rate
- 120,000 wfm/s waveform update rate
- Provide digital filter function
- Provide I2C ,SPI ,UART ,CAN ,LIN trigger and decoding functions
- Data log function
- Waveform search function
- Segmented memory function\

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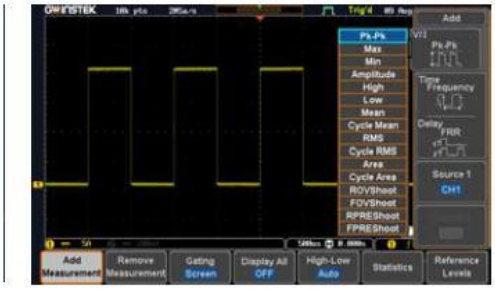
Automatic measurements

GW Instek GDS-2000E series

☑36 auto measurements



Tektronix TBS-2000 series

☒32 auto measurements

TBS-2000 has updated interface for measurement selections, but it provides fewer measurement selections. Compared with GDS-2000E, TBS-2000 does not have 4 delay selections (LRR,LRF,LFR,LFF)

Trigger Type selection

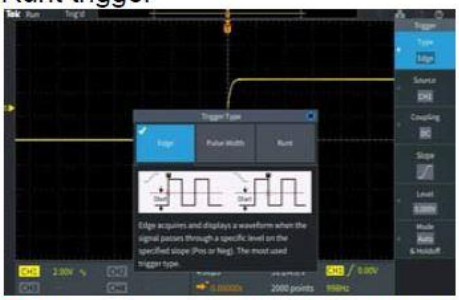
GW Instek GDS-2000E series

☑11 complete trigger selections

☑Complete trigger selections can correctly trigger signals that allows users to correctly observe waveforms.

Tektronix TBS-2000

☒ Only provide Edge ,Pulse width and Runt trigger

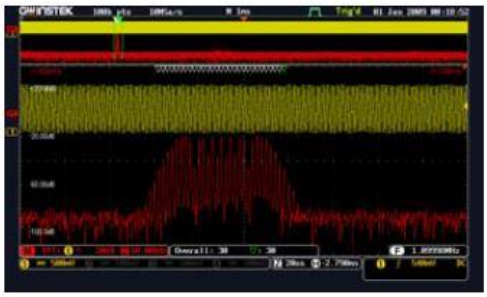


☒ Although UI was improved, it only provides three kinds of trigger

FFT display

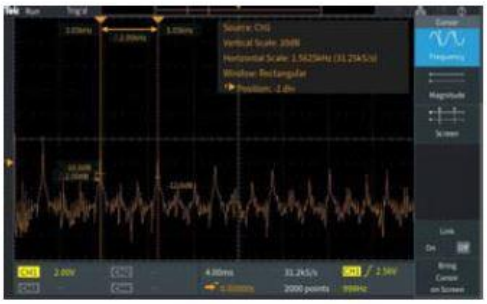
GW Instek GDS-2000E series

☑Provide high resolution 1M pts FFT display and FFT peak search function to display the frequency domain of modulated waveforms.



Tektronix TBS-2000 series.

☒ Although FFT display was updated, the frequency domain display is only 2kpts that is only good for normal waveforms.



Facts clarification

Tektronix TBS-2000 provides better record length of 20M/CH, 9" display and WiFi communications functions. After the comparison, GDS-2000E provides users with more practical specifications and functions. Other than the above-mentioned three advantages, GDS-2000E also provides faster waveform update rate of 120,000 wfm/s, and serial bus decoding function. Compared between the MSRP of the entry-level models of the two series, GDS-2000E is 44% lower than that of TBS-2000. To sum up, GDS-2000E is the better choice.

	
High waveform update rate can retrieve abnormal waveforms to elevate users' circuit debugging efficiency.	Standard features: I2C ,SPI ,UART ,CAN,LIN trigger and decoding functions