

# TBS1000B/-EDU Series vs. Rigol DS1000E Series

## Competitive Fact Sheet

### Ease of Use

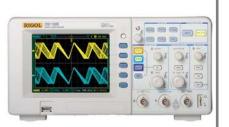
### Tektronix TBS1000B/-EDU Series

- √ 7 inch (800X480) high-resolution display with updated UI similar to Tek DPO oscilloscopes
- ✓ "Save" button for effortless waveform storage along
  with menu information
- ✓ Single button direct access to FFT, Single Trigger & SW applications
- ✓ Indexed, context sensitive help system with hyperlinks; works like a built-in manual.
- Probe Check button quickly verifies that the voltage probe is operating properly
- Trigger View button shows how the trigger settings affect the trigger signal
- AutoRange button adjusts the controls to automatically produce a usable display



### Rigol DS1000E Series

- 5.6 inch (320X234) resolution display with legacy user interface
- No dedicated button for quick waveform storage, also can't save menu information
- No direct access to FFT, Single Trigger & SW applications
- No help button, no help index and no hyperlinks make it difficult to access different topics
- No probe check function
- No trig view function
- No AutoRange function



# **Key Specifications Comparison**

	Tektronix TBS1000B/-EDU Series			Rigol DS1000E Series		
Channels	✓	2	✓	2		
Bandwidth	<b>✓</b>	50, 70, 100, 150, 200 MHz	×	50, 100 MHz		
Max. Sample Rate (All channels on)	✓	BW<100MHz: 1 GS/s BW> =100MHz: 2 GS/s	×	500 MS/s		
Max. Record Length (All channels on)	×	2.5k points	✓	8k points		
Auto Measurements	✓	Best-in-class 34 auto measurements	×	22 auto measurements		
Frequency Counter	✓	Dual-Channel	×	Single Channel		

	Tektronix TBS1000B/-EDU Series	Rigol DS1000E Series		
App Functions	TBS1000B:  ✓TrendPlot,  ✓Enhanced Limit test w/ dual waveforms based mask option  TBS1000B-EDU:  ✓CourseWare function  ✓Autoset Enable/Disable  ✓Ecosystem with free courseware on tek.com compatible with oscilloscope	No TrendPlot     Std Limit Test w/o dual     waveform based mask     option      No CourseWare function     No Autoset enable/disable     No courseware-like     Ecosystem on Rigol     website.		



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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	Rigol DS1000E	Bandwidth	Sample rate(all CHs on)	Sample rate/ Bandwidth
TBS1052B(-EDU)	50MHz	1GS/s	20 times	DSO1052E	50MHz	500MS/s	10 times
TBS1072B(-EDU)	70MHz	1GS/s	14.2 times				
TBS1102B(-EDU)	100MHz	2GS/s	20 times	DSO1102E	100MHz	500MS/s	5 times
TBS1152B(-EDU)	150MHz	2GS/s	13.3 times				
TBS1202B(-EDU)	200MHz	2GS/s	10 times				

# **Portability and Work Environment**

#### **Tektronix**

#### TBS1000B/-EDU Series

- Tektronix' customized integrated circuit minimizes the component count and increases reliability
- √ 300V<sub>RMS</sub> CAT II
- √ 2.0 kg weight
- ✓ Silent operation, no cooling fan
- ✓ Rubberized footing enhances stability on test benches
- ✓ Operating from 0°C to +50°C;
- √ 30 W max power consumption
- √ 5 year warranty



### Rigol

### **DS1000E Series**

- Large component count using offthe-shelf electronics
- 300V<sub>RMS</sub> CAT I.
  100V<sub>RMS</sub> CAT II.
- × 2.3 kg weight
- Contains a cooling fan
- Non rubberized footing, can move or slide accidentally.
- Operating from 10°C to +40°C;
- ★ 50 W max power consumption
- 3 year warranty



### 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 I<sup>2</sup>C, SPI, RS-232 and others.
- ✓ 1M Record Length
- 16 digital channels (MSO Series)

