

TBS1000B/-EDU Series vs. Uni-T UTD2000CEL Series

Competitive Fact Sheet

Ease of Use

Tektronix TBS1000B/-EDU Series

- ✓ Updated UI similar to Tek DPO oscilloscopes
- ✓ Dedicated vertical controls for each channel
- ✓ Shortcut buttons for single trigger, default setup, reference waveform, 50% trigger setting, FFT and SW applications
- ✓ Indexed, context-sensitive help system with hyperlinks; works like a built-in manual
- ✓ Probe Check button to quickly verify that the voltage probe is operating properly
- ✓ Trigger View button shows how the trigger settings affect the trigger signal
- ✓ AutoRange button adjusts controls to produce a usable display



Uni-T UTD2000CEL Series

- ✗ Legacy user interface
- ✗ Vertical controls are multiplexed
- ✗ No shortcut buttons for single trigger, default setup, reference waveform, 50% trigger setting, FFT and SW applications
- ✗ 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 | | Uni-T UTD2000CEL Series | | | | | | | |
|---|--|--|--|----------------------|--|--------------------------------|-------------------------|--|--|--|
| Channels | ✓ | 2 | ✓ | 2 | | | | | | |
| Bandwidth (MHz) | ✓ | 50, 70, 100, 150, 200 MHz | ✗ | 50, 100 | | | | | | |
| Max. Sample Rate (All channels on) | ✓ | BW<100MHz: 1 GS/s BW>=100MHz: 2 GS/s | ✗ | 1GS/s | | | | | | |
| Max. Record Length (All channels on) | ✗ | 2.5k points | ✓ | 512k points | | | | | | |
| Auto Measurement | ✓ | Best-in-class 34 auto measurements | ✓ | 28 auto measurements | | | | | | |
| Frequency Counter | ✓ | Dual-Channel | ✗ | Single-Channel | | | | | | |
| App Functions | | | <table border="1"> <thead> <tr> <th></th> <th>Tektronix TBS1000B/-EDU Series</th> <th>Uni-T UTD2000CEL Series</th> </tr> </thead> <tbody> <tr> <td></td> <td> TBS1000B: ✓TrendPlot, ✓Enhanced Limit test w/ dual waveforms based mask option TBS1000B-EDU: ✓ integrated CourseWare function ✓Autoset Enable/Disable ✓Ecosystem with free, oscilloscope compatible courseware available for download from tek.com </td> <td> ✗ No TrendPlot ✗ Standard Limit Test w/o dual waveform based mask option ✗ No CourseWare function ✗ No Autoset enable/disable ✗ No courseware-like Ecosystem on Uni-T website. </td> </tr> </tbody> </table> | | | Tektronix TBS1000B/-EDU Series | Uni-T UTD2000CEL Series | | TBS1000B: ✓TrendPlot, ✓Enhanced Limit test w/ dual waveforms based mask option TBS1000B-EDU: ✓ integrated CourseWare function ✓Autoset Enable/Disable ✓Ecosystem with free, oscilloscope compatible courseware available for download from tek.com | ✗ No TrendPlot ✗ Standard Limit Test w/o dual waveform based mask option ✗ No CourseWare function ✗ No Autoset enable/disable ✗ No courseware-like Ecosystem on Uni-T website. |
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Competitive Fact Sheet

Higher Sampling 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 | Uni-T UTD2000CEL | Bandwidth | Sample rate(all CHs on) | Sample rate/Bandwidth |
|-------------------------|-----------|-------------------------|-----------------------|------------------|-----------|-------------------------|-----------------------|
| TBS1052B(-EDU) | 50MHz | 1GS/s | 20 times | UTD2052CEL | 50MHz | 1GS/s | 20 times |
| TBS1072B(-EDU) | 70MHz | 1GS/s | 14.2 times | | | | |
| TBS1102B(-EDU) | 100MHz | 2GS/s | 20 times | UTD2102CEL | 100MHz | 1GS/s | 10times |
| TBS1152B(-EDU) | 150MHz | 2GS/s | 13.3 times | | | | |
| TBS1202B(-EDU) | 200MHz | 2GS/s | 10 times | | | | |

Portability and Work Environment

Tektronix TBS1000 Series

- ✓ Tektronix' customized integrated circuit minimizes the component count and increases reliability
- ✓ 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

Uni-T UTD2000CEL Series

- ✗ Large component count using off-the-shelf electronics
- ✗ 2.2 kg weight
- ✗ Contains a cooling fan
- ✗ Non rubberized footing, can move or slide accidentally.
- ✗ Operating from 0°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 I²C, SPI, RS-232 and others.
- ✓ 1M Record Length
- ✓ 16 digital channels (MSO Series)