

# The TDS1000 and TDS2000 Series Oscilloscopes Aid In Education and Training Environments



Professors, lab managers and students place distinctive requirements on an oscilloscope. Often, price is the most important factor because multiple oscilloscopes are typically purchased to equip a lab or classroom. Industry-standard equipment is essential for students to learn with instruments that they will use in the real world. The oscilloscopes must be easy to learn and use, since students with various skill levels will use the instruments, and availability of course materials and curriculum is critical to the ease of instruction for the educator.

Combining high performance with ease-of-use and low cost, the TDS1000 and TDS2000 Series oscilloscopes are ideal instruments for classroom and research environments. These instruments represent the best low-cost, industry-standard oscilloscopes available, with unequalled reliability and ease-of-use – an indispensable tool for educators and their students.

## Industry-standard Oscilloscopes for Future Engineers

The TDS1000 and TDS2000 Series oscilloscopes update and extend the performance and ease-of-use features of their predecessor, the TDS200 Series, the digital oscilloscope of choice for many educational institutions around the world. Students are able to learn on oscilloscopes that they will find in today's work environment.

### ► **Bandwidth and Sample Rate**

These oscilloscopes deliver their full bandwidth and sample rate on all inputs simultaneously and provide exceptional measurement accuracy while minimizing the risk of aliasing; imperative for successful signal analysis and experimental conclusions in the classroom.

### ► **Fast Fourier Transform (FFT) Math Function**

A feature commonly found only in higher performance oscilloscopes, this function enables educators to teach the fundamental principles of harmonic analysis by producing an FFT (spectrum) display of a signal to analyze, characterize and troubleshoot circuits by viewing frequency and signal strength.

### ► **P2200 Probe**

The P2200 200 MHz 10X-1X switchable passive probe, offering accuracy, compatibility and reliability, is designed specifically for these oscilloscopes. With its switchable attenuation ranges, the matching P2200 probe comes standard with the oscilloscope (one per channel), making this instrument even more affordable.

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## Ease of Use for Instruction and Learning

All TDS1000 and TDS2000 Series models offer usability features that make them easy to learn and to use for students of various skill levels. An optional operator training kit, in addition to oscilloscope and probe primers, simplifies instruction for the professor.

### ▶ **Simple User Interface**

Frequently used controls are instantly accessible from the front panel in the form of familiar, analog-style knobs and buttons that simplify operation. Both families deliver vivid displays via a bright, high-contrast LCD with wide viewing angle that maintains full contrast at all sweep speeds and gain settings. The TDS2000 family offers a color LCD to make it even easier to read and interpret waveforms, especially when multiple traces are displayed.

### ▶ **Probe Check Wizard**

A built-in probe check wizard optimizes probe setup and improves measurement accuracy by guiding the user to properly compensate the probe and confirm the probe attenuation factor prior to making measurements.

### ▶ **Context-sensitive Help**

With just the push of a button, the user can bring up context-sensitive help instructions, including links to other related topics. Students can obtain on-the-spot instructions about the instrument's controls and procedures.

### ▶ **Compact Package with Security Loop**

Small and light, these instruments are compact enough to fit into the confines of a classroom and a security loop is provided to lock the oscilloscope in place when needed.

### ▶ **Instructional Materials**

The optional operator training kit and primers simplify instruction for the professor and make learning easier for the student. The kit provides extensive information and step-by-step lab exercises, and includes a self-paced CD-ROM manual and signal source board (hardcopy manual may be purchased separately). The XYZs of Oscilloscopes and ABCs of Probes primers offered free-of-charge provide a solid foundation of the basics of oscilloscopes and probes.