Fundamental Teaching Lab

Prepare future engineers for tomorrow's exciting challenges with an affordable yet powerful suite of entry level test equipment. This bench configuration includes the hardware, software and service components you'll need to give your students the engineering fundamentals they need.
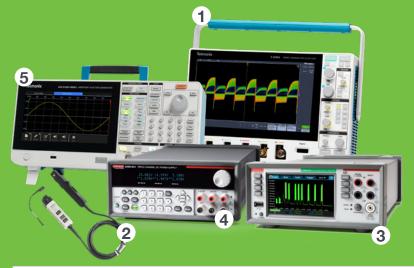

NEW! **1** **TBS2000B Oscilloscope**
Compatible passive probes included (one per channel).

2 **DMM6500 Digital Multimeter**

3 **2231A-30-3 Power Supply**

4 **AFG1062**
Arbitrary Function Generator

TekSmartLab™

Oscilloscopes				Bench products		
Model	Stock code	Bandwidth	Channels	Model	Stock code	Description
TBS2072B	3364863	70MHz	2	DMM6500	2840447	Bench digital multimeter
TBS2102B	3364865	100MHz	2	2231A-30-3	2444841	Bench power supply
TBS2074B	3364864	70MHz	4	AFG1062	2496690	Arbitrary function generator
TBS2202B	3364867	200MHz	2			
TBS2104B	3364855	100MHz	4			
TBS2204B	3364868	200MHz	5			

Electronics Engineering Lab

With the advancements of electronic design, design and implementation skills have particular emphasis on analog and mixed-signal circuits, serial bus decoding, power management, wireless communications and rapid prototyping. This configuration provides students with the instruments to help them learn real world applications.

NEW! **1** **3 Series MDO Oscilloscope**
Compatible passive probes included (one per channel).

2 **TCP0030A Current Probe**

3 **DMM6500 Digital Multimeter**

4 **2231A-30-3 Power Supply**

5 **AFG31000**
Arbitrary Function Generator

Oscilloscopes								Bench products/accessories		
Model	Stock code	Bandwidth	Channels	Model	Stock code	Bandwidth	Channels	Model	Stock code	Description
MDO32-100	3104063	100MHz	2	MDO34-100	3104068	100MHz	4	DMM6500	2840447	Bench digital multimeter
MDO32-200	3104064	200MHz	2	MDO34-200	3104069	200MHz	4	TCP0030A	2318650	Current probe
MDO32-350	3104065	350MHz	2	MDO34-350	3104070	350MHz	4	AFG31102*	2916182	Arbitrary function generator, 100MHz, 2-ch
MDO32-500	3104066	500MHz	2	MDO34-500	3104071	500MHz	4	*available in bandwidths up to 1GHz and 4-channel versions		
MDO32-1000	3104067	1GHz	2	MDO34-1000	3104073	1GHz	4			

Next-Generation RF/Wireless Lab

With the rapid evolution of wireless technologies and the complexity of IoT designs, your students need modern bench equipment that will prepare them to succeed in the real world. This bench configuation includes components you'll need to enable your students to learn challenging designs with total confidence.

NEW!

① 3 Series MDO Oscilloscope
Compatible passive probes included (one per channel).

② 2450 Source Measure Unit

③ 2280S Power Supply

④ AFG31000
Arbitrary Function Generator

⑤ RSA306B USB Signal Analyzer

⑥ TTR500
USB Vector Network Analyzer

⑦ TSG4100
Vector Signal Generator

Kickstart Software   **SignalVu-PC Software**

Oscilloscopes								Bench products/accessories		
Model	Stock code	Bandwidth	Channels	Model	Stock code	Bandwidth	Channels	Model	Stock code	Description
MDO32-100	3104063	100MHz	2	MDO34-100	3104068	100MHz	4	2450	2840447	Source measure unit
MDO32-200	3104064	200MHz	2	MDO34-200	3104069	200MHz	4	2280S	2318650	Power supply
MDO32-350	3104065	350MHz	2	MDO34-350	3104070	350MHz	4	AFG31102*	2916182	Arbitrary function generator, 100MHz, 2-ch
MDO32-500	3104066	500MHz	2	MDO34-500	3104071	500MHz	4	RSA306B	2525987	USB spectrum analyser
MDO32-1000	3104067	1GHz	2	MDO34-1000	3104073	1GHz	4	TTR500	2750403-2750404	USB vector network analyser
								TSG4100	2468190-2468195	Vector signal generator

available in bandwidths up to 1GHz and 4-channel versions

Make sure your students and the world's future engineers have the right tools for today and tomorrow.

Save with Education Pricing Program

We've made it easy for schools and universities to equip their engineering labs with world-class test and measurement equipment at an affordable price.

Qualified schools enjoy a 15% discount off all products.

Educators Save 15%

Recommended Bench Product Descriptions

These products were chosen to meet the unique needs of the education lab.

Oscilloscopes

3 Series MDO Oscilloscope › NEW!

With a touchscreen interface and built-in spectrum analyzer option, this scope is perfect for the student RF analysis lab. **Compatible passive probes included (one per channel).**

TBS2000B Oscilloscope › NEW!

Featuring bandwidths up to 200 MHz and 4-channels, familiar, easy to use controls, context sensitive help system and a standard 5-year warranty. Perfect for the beginning engineering lab. **Compatible passive probes included (one per channel).**

TBS1000C Oscilloscope › NEW!

Featuring bandwidths up to 200 MHz, 2-channels and a 5-year warranty. The innovative courseware system integrates lab exercises with step-by-step instructions for students.

Probes

TCP0030A Current Probe ›

You can use the TCP0030A current probe to make accurate measurements from DC to 120 MHz. The probe combines proven Hall-effect technology with the Tektronix TekVPI® oscilloscope interface.

Digital Multimeters

DMM6500 Digital Multimeter › Leading touchscreen bench DMM with built-in premium features for the education lab.

Power Supplies

2231A-30-3 Power Supply ›

Multi-channel programmable DC power supply ideal for testing a wide range of devices in the education lab.

2280S Power Supply ›

Delivers up to 192W of low output noise power and superior load current measurement sensitivity. Built-in plotting functions offers plenty of versatility for your education bench.

Arbitrary Function Generator

AFG1062 Arbitrary Function Generator ›
A building block for an education bench solution, this AFG generates all of the waveforms needed for a teaching lab.

AFG31000 Arbitrary Function Generator ›
A high-performance AFG with built-in arbitrary waveform generation, real-time waveform monitoring, and the largest touchscreen on the market. Perfect for the modern teaching lab.

Source Measure Units

2450 Source Measure Unit ›
Simultaneously sources and measures current. The touchscreen interface minimizes the learning curve and enables students and to learn faster, work smarter, and invent easier.

USB Signal Analyzers

RSA306B USB Signal Analyzer ›
This affordable RSA enables students to capture results of experiments, perform analysis, and generate lab reports on their laptops, saving time and optimizing learning opportunities.

USB Vector Network Analyzer

TTR500 USB Vector Network Analyzer ›
A full-featured 2-port, 2-path VNA at a breakthrough price. Now students can validate S-parameters of real-world RF designs for comparisons against simulations.

Vector Signal Generators

TSG4100 Vector Signal Generator ›
Generates a variety of RF signals starting from true DC up to 6 GHz, with up to 200 MHz modulation bandwidth, the TSG4100 offers mid-range RF performance, ideally suited for the engineering student.

Software and Service

TekSmartLab™ ›
Manage your lab with ease using TekSmartLab, a network-based lab instrument management solution for quickly setting up and efficiently managing basic electronics in engineering laboratories at colleges and universities.

SignalVu-PC Software ›
Used with Tektronix spectrum analyzers and oscilloscopes to help students and professors validate RF/Wireless designs directly from their own computer.

Kickstart Software ›
KickStart simplifies what you need to know about the instrument so that in just minutes you can take the instrument out of the box and get real data on your device.

Total Product Protection ›
Protect your investment with a complete service plan providing coverage for all of your test and measurement lab equipment.

To learn more about recommended bench configurations, click the product links or visit: **Tek.com/education**

Temple University's IDEAS Hub

The Challenge:

Temple University's engineering program was growing quickly, and its students had lots of hands-on homework to do but limited access to the tools and equipment they needed.

The Solution:

Temple partnered with Tektronix to determine which test and measurement equipment would give their students the tools they needed to have an advantage over other engineering graduates entering the workforce.

"

"I think it's important to have the latest technology because engineering is always growing. So if we're up to the latest standard then we can better ourselves when we get into the actual field."

Temple University Mechanical Engineering Student

Queensboro Community College

The Challenge:

Queensboro Community College's electronic engineering program was limited by lack of equipment for its radio frequency courses. They needed to find a way to provide students with essential hands-on learning opportunities with modern instruments.

The Solution:

Tektronix partnered with QCC to deliver a cost effective yet cutting-edge RF bench solution that gives students the tools and experience they need to have an advantage over other engineering graduates entering the workforce.

"

"I'm so proud of the lab because it gives us the opportunity to teach the physical aspects of radio frequency that cannot be taught with simulation."

Enrique Haro
Adjunct Instructor and Telecommunications Course Director

The top 25 engineering & tech universities

trust their programs and their students' futures to Tektronix

After 70+ years of innovation

Tek continues to plow nearly 20% of our product revenue right back into R&D to create tools that will help tomorrow's engineers take the world further, faster.

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