



Tektronix®

# Own the future.

We may not know the future, but we know the people who will get us there.

Give them every advantage with Tektronix and Keithley world-class test and measurement solutions.

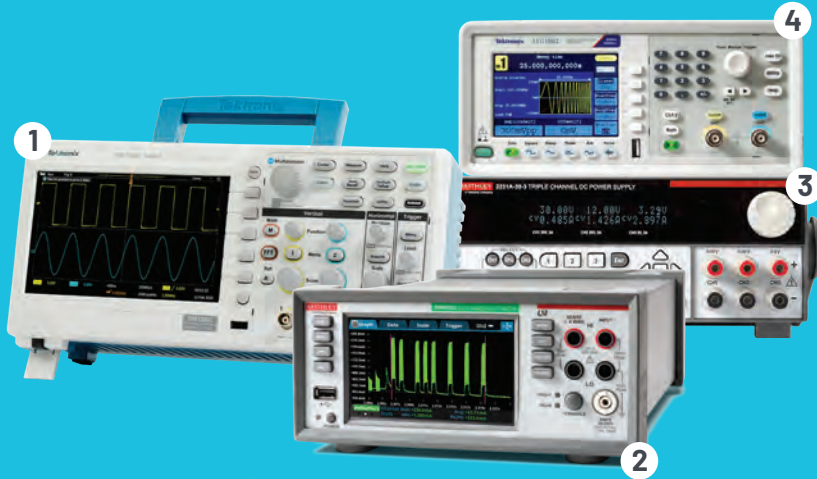


## Recommended Education Bench Configurations

Start with one of these four configurations to create the bench best suited for your students.

## 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 to give your students the engineering fundamentals they need.



- 1 TBS1000C Oscilloscope  
One probe per channel included.
- 2 DMM6500 Digital Multimeter
- 3 2231A-30-3 Power Supply
- 4 AFG1062  
Arbitrary Function Generator

Contact for pricing >



TekScope™ / KickStart



Service Plans

## Power Electronics Engineering Lab

With the advancements in electronics, design and implementation skills place 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.

- 1 TBS2000B Oscilloscope or  
3 Series MDO Oscilloscope  
One probe per channel included.
- 2 TCP0030A Current Probe
- 3 DMM6500 Digital Multimeter
- 4 2230 Power Supply
- 5 AFG31000  
Arbitrary Function Generator



Contact for pricing >



TekScope™ / KickStart



Service Plans

## Embedded Design Lab

With the increased functionality of modern devices, embedded designs are becoming more and more complex. Students will encounter difficult issues and need to learn how to perform root cause analysis throughout their projects. This embedded design bench features the new 2 Series MSO that enables future engineers to be ready for any problem at any location.



- NEW!**
- 1 2 Series MSO Oscilloscope  
One probe per channel included.
  - 2 DMM6500 Digital Multimeter
  - 3 2231A-30-3 Power Supply
  - 4 AFG31000  
Arbitrary Function Generator

Contact for pricing >



TekScope™ / TekDrive / KickStart

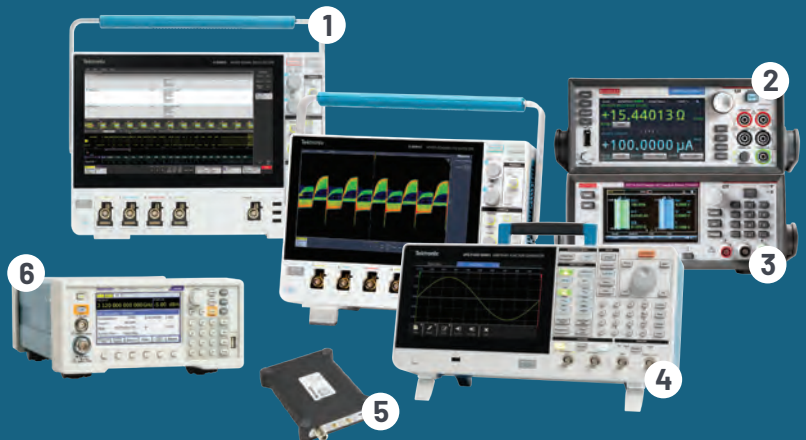


Service Plans

## 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 configuration includes components you'll need to enable your students to learn challenging designs with total confidence.

- 1 3 Series MDO or 4 Series MSO Oscilloscope  
One probe per channel included.
- 2 2450 Source Measure Unit
- 3 2281S Battery Simulator
- 4 AFG31000  
Arbitrary Function Generator
- 5 RSA306B USB Spectrum Analyzer
- 6 TSG4100  
Vector Signal Generator



Contact for pricing >



TekScope™ / TekDrive / KickStart / SignalVu-PC Software



Service Plans

# Recommended Bench Product Descriptions

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

## Oscilloscopes

### [2 Series MSO Oscilloscope](#) › **NEW!**

The 2 Series MSO is a full-featured oscilloscope in a compact, portable form factor that feels like a tablet. The unique set of features makes this scope perfect for students exploring the instrument with a help button that provides context-applicable solutions in real-time.

**One probe per channel included.**

### [3 Series MDO Oscilloscope](#) ›

With a touchscreen interface and built-in spectrum analyzer, this scope is perfect for the student RF analysis lab.

**One probe per channel included.**

### [TBS2000B Oscilloscope](#) ›

Featuring bandwidths up to 200 MHz and four channels, familiar, easy to use controls, context sensitive help system and a standard 5-year warranty. Perfect for the beginning engineering lab.

**One probe per channel included.**

### [TBS1000C Oscilloscope](#) ›

With built-in features for educators and a user interface designed for hands-on learning, you get affordable performance in a compact design for your beginners engineering lab.

**One probe per channel included.**

## 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.

### [TIVP Isolated Probe](#) ›

The 200 MHz TIVP02 Isolated Probe offers a differential voltage range of  $\pm 2500$  V and delivers accurate differential measurements on reference voltages slewing  $\pm 60$  kV at 100 V/ns or faster.

## Digital Multimeters

### [DMM6500 Digital Multimeter](#) ›

Leading touchscreen bench DMM with built-in premium features for the education lab.

## Power Supplies

### [2230 Power Supply](#) ›

Series 2230 Power Supplies include two 30 V/1.5 A channels plus a 6 V channel with up to 5 A output for powering digital circuits.

### [2231A-30-3 Power Supply](#) ›

This DC power supply is ideal for testing a wide range of devices in the education lab.

### [2281S Battery Simulator](#) ›

The 2281S uses a model to emulate the response of a battery over its discharge cycle so you can estimate battery life and analyze product performance over the life of the battery.

## Arbitrary Function Generators

### [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 to learn faster, work smarter, and invent easier.

## USB Spectrum 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.

## 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 for the engineering student.

## Software and Service

### [TekScope™ PC Analysis Software](#) ›

Get the analysis capability of an award-winning oscilloscope on your PC. Analyze waveforms anywhere, anytime.

### [TekDrive Collaborative Data Workspace](#) ›

Collaborate easily by storing, organizing, managing, and sharing data and files. Preview and analyze supported waveform data types on any device with no extra software.

### [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.

### [Service Plans](#) ›

Tektronix offers a range of warranty and service plans to protect your investment and extend the length of your coverage. Find the plan that is right for you.



To learn more about recommended bench configurations, click the product links or visit: [Tek.com/education](https://www.tek.com/education)

# Resources

## What's New & How-to

### [Software for Remote Teaching Labs >](#)

Efficient, intuitive remote education solutions that combine with our oscilloscopes, DMMs, DAQ systems, or other tools to put engineering theory into practice.

### [TekScope >](#)

TekScope deliver the analysis capabilities of the latest Tektronix oscilloscopes to your PC. Analyze waveforms anywhere, anytime.

### [TekDrive >](#)

With the TekDrive collaborative T&M data workspace, you can upload, store, organize, search, download, and share any file type from any connected device.

### [TekDrive Python SDK >](#)

The Python SDK for TekDrive simplifies automation and scripting by providing a fully installable Python library that abstracts the TekDrive API into a collection of simple Python functions.

### [KickStart Software >](#)

Start measuring in minutes without complex programming with this instrument control software for bench instruments and Tektronix oscilloscopes.

### [Next Generation Isolated Probes >](#)

Learn the theory of operation and performance capabilities of an optically isolated measurement system that offers complete galvanic isolation to accurately resolve high bandwidth, high voltage differential signals in the presence of large common mode voltages.

### [How to Do Double Pulse Test with the AFG31000 >](#)

Learn a simplified process for performing double pulse testing right from the touchscreen interface of the AFG.

### [Your Next IoT Lab >](#)

From Bluetooth to WLAN, make sure your product meets the latest wireless standards.

### [How to Select Your Wi-Fi Module >](#)

This guide offers best practices for selecting the optimal chipset or module integration.

## Selector Guides

### [Entry Oscilloscopes >](#)

### [Probe Selection Guide >](#)

## More Resources

### [The Anatomy of an Oscilloscope Poster >](#)

### [Oscilloscope Fundamentals: Capturing Your Signal Poster >](#)

### [Worldwide Spectrum Allocations Poster >](#)

### [Keithley Low Level Measurements Handbook - Seventh Edition](#)



## Visit Our Learning Center

Learn how to use Tektronix equipment to troubleshoot system anomalies, provide measurement insights, debug and troubleshoot, and more.

[Tek.com/learning-center](https://www.tek.com/learning-center)

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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.

## The top **25** engineering & tech universities

trust their programs and their students' futures to Tektronix

## After **75** 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.

### Problem Solving from Any Location



**"The most exciting thing to me about the (2 Series MSO) product was the touchscreen and measurement functions. With an electric vehicle, having something like this (2 Series MSO) that we can take to a test day and help diagnose the car or learn more about what kind of data we are seeing is super valuable."**

Katarina, Oregon State University Student

### Enhancing Engineering Education Coventry University



**"I have no doubt that collaborating with Tektronix to kit out our facilities with such high-quality equipment will help us take the faculty's offering to a whole new level."**

Nik Tsanov, Development Officer (Electronics)  
Coventry University

### Inspiring the Next Generation of RF Engineers - University of Oklahoma



**"Our 10 new RF workstations are a win for professors from a research perspective and a teaching perspective because now we have another tool to give the students, so they have the best chance possible to understand the material and excel... It's great for industry because they're getting a need filled. And it's great for the students because now there is a new opportunity to learn and master the material."**

Dr. Jay McDaniel

### Temple University's IDEAS Hub



**"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

To learn more about empowering your students with Tek, visit:

**[Tek.com/education](https://www.tektronix.com/education)**

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