

# Smart Bench Essentials Test Instruments

Test, analyze, and share collaboratively



Share your story to win a complete set of Smart Bench Essentials instruments!

Learn more about the Smart Bench Essentials Challenge contest.

[Learn More](#)

## HIGHLIGHTS

### Four Instruments - One Connected Interface

Keysight Smart Bench Essentials harnesses the power of four unique instruments through one powerful graphical interface with integrated data management and analysis.

Together with PathWave software, you can now:

- configure, control, and monitor multiple instruments from a single screen
- automate workflows from test set up to report generation
- access lab instruments remotely with your peers, to test, analyze, and share
- manage an entire lab through a single screen interface

## SMART SOFTWARE FOR A SMART BENCH

With PathWave BenchVue software applications, you can configure your instruments quickly and operate all of them together on the same PC. BenchVue stores all your data on your PC and exports data in standard formats for analysis and reporting.

[Check Out PathWave BenchVue Software](#)



## MANAGE AND ENABLE ACCESS FROM ANYWHERE

PathWave Remote Lab Access and Lab Management software applications provide complete remote setup of your basic instrument with web-based lab management and scheduling administration, instrument control, and remote access for measurement and analysis, including:

- secure cloud-based remote lab scheduling and session booking
- centralized lab configuration, multi-bench lab setup, and instrument control
- remotely switch measurement points during a lab session

Check out these PathWave software applications

[PW9111EDU — PathWave Lab Management and Control software](#)

[PW9112EDU — PathWave Remote Lab Access software](#)

# DISCOVER THE SMART BENCH ESSENTIALS SERIES

Smart Bench Essentials is a complete lab bench solution. With a 30-Watt triple-output power supply, single- or dual-channel 20 MHz function generators, a 5.5-digit digital multimeter, and a 50 MHz oscilloscope, the Smart Bench Essentials has everything needed for a basic bench, plus powerful software that integrates measurement and analysis across the portfolio. Check out our highlights video to learn more.

[Learn More About Smart Bench Essentials Series](#)

## EXPLORE THE SMART BENCH ESSENTIALS FAMILY

### EDU33210A Series Function Generator

Up to 20 MHz Frequency Range

Single- or Dual-channel function generators offer six built-in modulation types, 17 popular waveforms to simulate typical applications for testing, and 16-bit arbitrary waveform capability

### EDU36311A Triple-Output DC Power Supply

2 Channels of 30V / 1A and 1 Channel of 6V / 5A

With three electrically isolated channels with a total of 90 W clean and reliable power, this power supply includes over-voltage protection, over-current protection, and over-temperature protection to prevent damage

### EDU34450A Digital Multimeter

5.5-Digits Resolution

A dual display 5.5-digit digital multimeter with up to 110 readings/s for speed-critical tests, plus generous internal memory for logging up to 5,000 data points

### EDUX1052A / G Dual-Channel Oscilloscope

50 MHz Bandwidth

Proven InfiniVision technology that gives you professional-level measurements you can trust. It comes with a built-in 20-MHz function generator

## SMARTER WITH KEYSIGHT UNIVERSITY

Get a head start by signing up for online learning classes at Keysight University to enhance your engineering knowledge of signal measurement techniques. Learn best practices for testing the latest standards and techniques with free boot camp classes. Or take a masterclass and go deep into hot topics led by industry experts.

[Check Out Our Keysight University Courses](#)



## SMART BENCH ESSENTIALS SERIES RESOURCES

### Data Sheets and Product Fact Sheets

[EDU36311A Triple Output Bench Power Supply](#)

[EDU33210 Series 20 MHz Function/Arbitrary Waveform Generators](#)

[EDU34450A 5½-Digit Dual-Display Digital Multimeter](#)

### Flyers and Solution Briefs

[Industry-Ready Remote Access Lab](#)

[Streamline Lab Management and Teaching With BenchVue Lab Management and Control Solution](#)

[Work Seamlessly and Productively with Modern Test Workbenches](#)

### Blog Posts

[Waveform Modulation with Your Function Generator](#)

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