

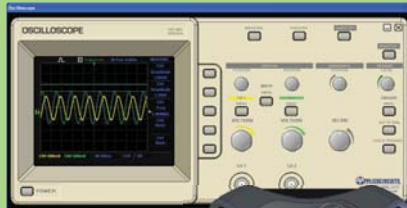
# The MiniLab

## E100

Applied Circuit's Revolutionary MiniLab

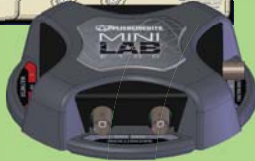
Features:

- Complete professional quality test bench
- Ultra compact size
- Familiar graphical interface
- Fraction of the price



### Oscilloscope

The MiniLab E100 Digital Storage Oscilloscope's performance, advanced features, and ease of use make it an invaluable tool for students, hobbyists, and professionals alike. With two channels, each providing 100MHz bandwidth and a real-time sampling rate of 250MSPS, the MiniLab provides outstanding performance at a low price.



The eBench software replicates the menus and controls of standard bench top test equipment, making the E100 Oscilloscope an excellent training platform for beginners. eBench also provides cursors, waveform math, and automatic measurements such as Amplitude, Period, Rise/Fall Times, Cycle RMS, etc., as well as many other features to empower advanced users.



### Function Generator

The MiniLab E100 Function Generator is a versatile and easy-to-use instrument, with a wide variety of applications in both analog and digital electronics.



At the heart of the instrument is a direct digital synthesizer (DDS) and a 10-bit, 25MSPS digital-to-analog converter, providing excellent frequency stability and precision from 0.1Hz to 5MHz for sine, triangle, square and pulse waveforms.

The E100's function generator also provides user control of amplitude, DC offset, and duty cycle. The DC offset control allows accurate biasing of analog circuits, as well as the generation of standard digital signals (TTL, CMOS, ECL, etc). In addition, the wide-range amplitude control - capable of producing an output ranging from 20mVpp to 9.5Vpp - gives the function generator ultimate flexibility.



### Digital Multimeter (DMM)

The MiniLab E100 DMM is a multipurpose tool designed for a variety of electronic measurements. The styling of its familiar hand-held DMM interface makes controlling the DMM easy and intuitive. The DMM provides industry standard measurements, such as voltage and current (AC and DC), resistance, continuity, and diode check. With advanced features like auto-ranging, Min/Max detect, measurement hold, and bargraph display, the DMM is a capable addition to the MiniLab E100 toolset.



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## Oscilloscope Features

- 100 MHz Bandwidth
- Sample rates up to 250MSPS per channel
- 2 scope channels
- 13 automatic measurements
- Waveform math operations
- Capture waveform as JPEG
- Export waveform data to XML and Excel
- Standard bench-top oscilloscope interface

## Function Generator Features

- Sine, triangle, square, pulse wave outputs
- 0.1MHz to 5 MHz with a 0.1 Hz resolution
- Direct digital synthesis for excellent stability
- 10-bit 25 MSPS digital-to analog converter
- Wide amplitude range; 20mV to 9.5V
- DC offset and duty cycle control
- 50-Ohm output impedance
- Standard bench-top function generator interface

## Digital Multimeter Features

- 3 1/2 digit DMM
- 2000 count resolution
- Full auto-ranging measurement
- Virtual digital display with bargraph
- Display HOLD feature
- Display MIN, MAX, AVG values
- AC/DC Voltage and Current measurements
- Resistance, Continuity, & Diode measurements
- Standard autoranging multimeter interface

# The MiniLab

The MiniLab E100 combines an Oscilloscope, Function Generator, and Digital Multimeter into one fantastic diagnostic tool. Designed for use by students in advanced electronics courses, the E100 is also ideal for electronics development. The E100 incorporates standard test probe connections, and it interfaces with Applied Circuits' eBench software to mimic test equipment that is currently used in labs across the world. The E100 is compact and portable – its footprint is the same as a CD, and it is only an inch thick! – occupying minimal space on already crowded desktops and workbenches. Unlike standard equipment, the E100 is software upgradable with new features and can be remotely controlled across the internet.\* The MiniLab E100 is a cost-effective, innovative choice for experienced developers and a great training platform for new users.

\* Through the use of Remote Desktop Sharing or similar software and services.



## Kit Includes

- 1 MiniLab
- 2 Oscilloscope Probe
- 3 Function Generator Lead
- 4 DMM Probes
- 5 USB Cable
- 6 5VDC Power Supply

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