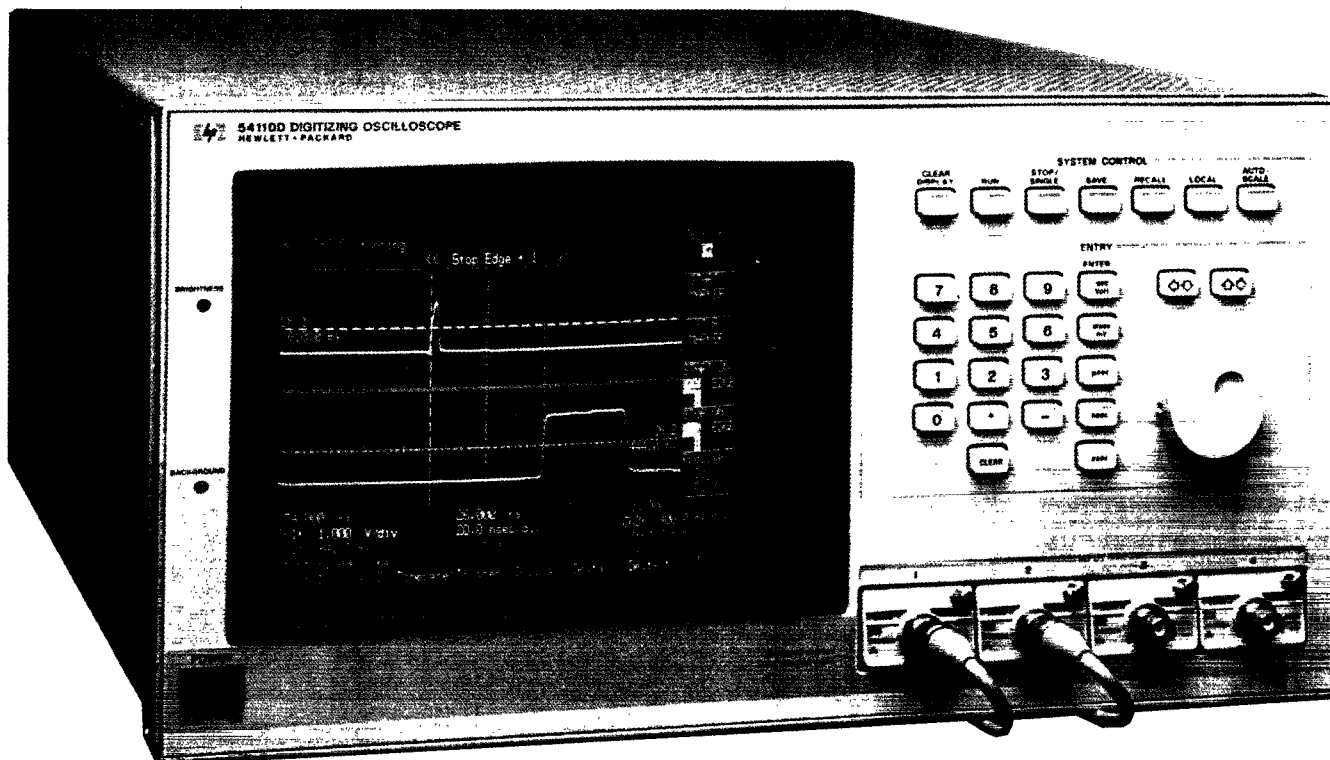


# OSCILLOSCOPES

## Digitizing Oscilloscopes

HP 54100A/D, 54110D

- 1-GHz bandwidth
- Auto pulse parameter and time interval measurements
- Digital storage
- Available with color or monochrome display
- Pre-trigger viewing
- Logic triggering capability



HP 54110D



### HP 54100A/D and HP 54110D Digitizing Oscilloscopes

As the speeds of analog and digital logic continue to increase, board and system designers need to pay even closer attention to high-frequency and transmission-line characteristics of their circuits. Design requirements are rigorous. Subnanosecond technology creates narrow and elusive pulses.

When a monochrome display is preferred, for example in a totally automatic test application, choose the HP 54100A or HP 54100D oscilloscope. These units require less rack height (7 in) than the HP 54110D (8.75 in) and have all of the same measurement features and specifications. The HP 54100A has one external trigger input, while the HP 54100D and HP 54110D have two.

#### High Bandwidth

The HP 54100 and 54110 unite a powerful 1-GHz bandwidth with a random repetitive sampling technique for viewing rarely occurring narrow waveforms. These oscilloscopes have 0.002 percent time base accuracy and 10 ps resolution for confident measurements of critical timing parameters in high-speed circuitry.

With random repetitive sampling, you can capture waveforms that occur thousands of screen diameters before the trigger event. This gives an effective memory depth of millions of bytes for finding causes of failures that occur long before the trigger.

#### High Resolution

Analyze perturbations within a waveform with high resolution. With vertical magnification and waveform averaging, small signal details can be viewed and measured with 10 bits of effective resolution.

#### Flexible Analysis

Only the HP 54100A/D and HP 54110D allow the display of either vertical channel versus the other. The 1-GHz bandwidth makes this feature valuable in measuring high-speed I-V device characteristics and transfer functions high-speed converters.

#### A Choice of Input Pods and Probes

The HP 54100 and 54110 inputs are configured with removable pods that can be chosen according to the application. Pods can be changed quickly and easily, and they occupy a minimum of storage space.

- 50- $\Omega$  inputs and probes for a wide variety of environments, without the expense of amplifier plug-ins.
- 1-GHz miniature active probes for densely packed, high-speed logic circuits.
- 1-M  $\Omega$  probes for circuits sensitive to resistive loading.
- 50- $\Omega$  BNC inputs for measurements where terminated lines are important.
- 100:1 probes for extended dynamic range.

For more information on the HP 54100/110 probing system, please refer to page 164.

#### Ordering Information

<b>HP 54100A</b> 1-GHz Digitizing Oscilloscope.	<b>Price</b> \$16,900
<b>Opt W30</b> Extended repair service. See page 671.	+ \$325
<b>HP 54100D</b> 1-GHz Digitizing Oscilloscope.	\$21,900
<b>Opt W30</b> Extended repair service. See page 671.	+ \$440
<b>HP 54110D</b> 1-GHz Digitizing Oscilloscope with Color Display	\$23,900
<b>Opt W30</b> Extended repair service. See page 671.	+ \$550
<b>Input Pods and Probes</b>	
<b>HP 54001A</b> 1-GHz Miniature Active Probe Pod	\$785
<b>HP 54002A</b> 50 $\Omega$ BNC Input Pod	\$140
<b>HP 54003A</b> 1 M $\Omega$ 10:1 Probe Pod	\$680