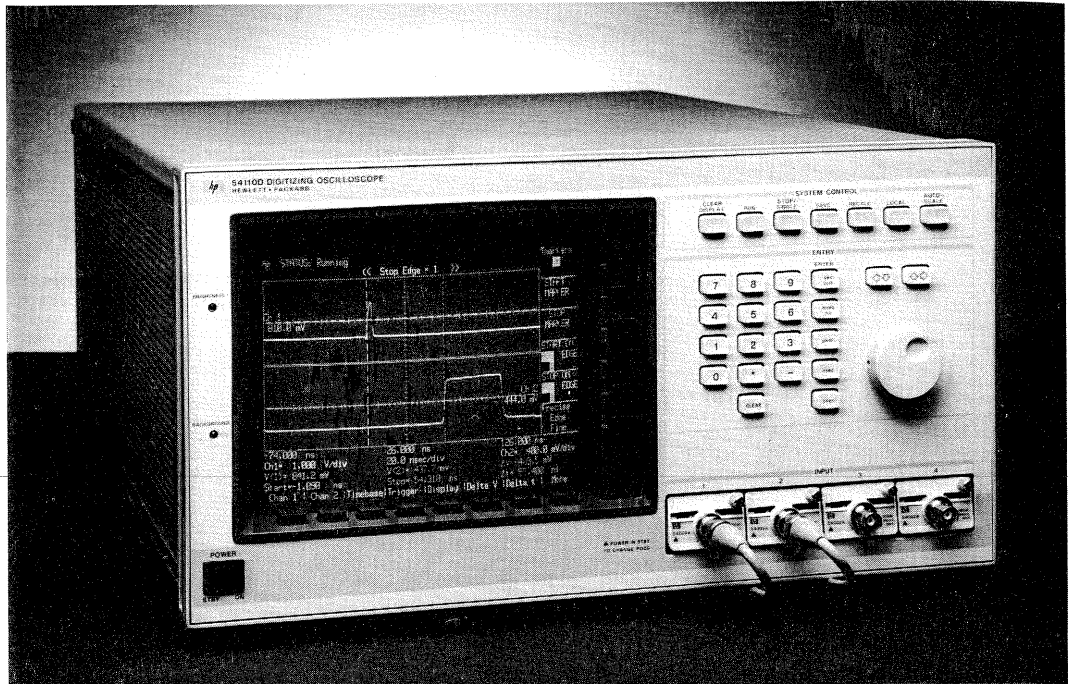




# OSCILLOSCOPES & WAVEFORM ANALYZERS

## Digitizing Oscilloscopes

### HP 54100-Series



HP 54110D - Color 1 GHz Digitizing Oscilloscope



### High-performance with an Easy-to-use Front Panel

In the HP 54100-series digitizing oscilloscopes, Hewlett-Packard combines an innovative oscilloscope architecture with state-of-the-art technologies, creating a general-purpose oscilloscope for engineers involved in analog as well as digital design and test. The HP 54100A/D, HP 54110D, and HP 54111D simplify analog time-domain measurements: they can make the measurements needed when working with the most recently developed logic families, and they can make standard measurements faster and more accurately than conventional oscilloscopes can.

#### HP 54100-Series Oscilloscopes

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

- 1 GHz bandwidth/10 ps resolution
- 40 megasample/second digitizing rate
- 10 bits vertical resolution with averaging
- 1k memory per channel

##### HP 54111D

- 1 gigasample/second digitizing rate
- 500 MHz repetitive bandwidth
- 250 MHz single-shot bandwidth
- 8 bits vertical resolution at reduced bandwidth
- 8k memory per channel

Whether you need fast single-shot performance with deep memory or high bandwidth with precise timing resolution, the HP 54100 series oscilloscopes are the easy-to-use, high-performance solution . . . with answers!

The HP 54100 series digitizing oscilloscopes produce more than graphical displays of waveforms . . . with automatic pulse parameter measurements, answers are only a key press away. Flexible display modes such as waveform averaging and infinite persistence give you

the analysis tool you need to extract noise or analyze worst case conditions. The HP 54100 series oscilloscopes provide total measurement solutions for the circuit designer or test engineer.

These oscilloscopes were designed with ease-of-use in mind. Automatic waveform scaling and save/recall setup registers make setting up the oscilloscope for your critical measurements a snap. A functional color display enhances interpretation multiple waveform displays and instant hardcopy output gives permanent documentation.

#### In Computer-aided Test . . .

Easily understood, English-like commands with a logical structure facilitate programming the 54100-series oscilloscopes in computer-aided test. Complete waveform data is available for analysis in a variety of formats. Acquire the data in the format you need and transmit it as a binary block quickly and efficiently.

#### In General-purpose, Digital Design . . .

Ease of use, automatic measurements, programmability, and precise time-interval measurements make the HP 54100-series scopes ideal for the designer's bench. By using special save/recall keys, you can step through a sequence of complex measurements, each having a different setup, without a controller.

#### In Data Communications . . .

Make eye-pattern and jitter measurements with the HP 54100 series scopes. Infinite persistence and waveform overlay simplify worst-case timing measurements. Different colors for the two vertical input channels, augmented by a third color where their traces overlap add new clarity to these measurements (HP 54110D and HP 54111D only).

Crystal-controlled time-base stability ensures accuracy when making long-term measurements. Use averaging to view signals in noise and use automatic waveform parameter measurements to check signal fidelity.