

OSCILLOSCOPES

Digitizing Oscilloscopes (cont'd)

HP 54600A

External Trigger (Cont'd.)

Coupling	dc, HF rej., and noise rej.
Input R&C	1 M Ω , approximately 13 pF
Maximum Input	400 V (dc + peak ac)

X-Y Operation

Z-Blanking	TTL High blanks trace
Bandwidth	X and Y same as vertical system
Phase Difference	$\pm 3^\circ$ at 100 kHz

Display System

Display	7-inch Raster CRT
Resolution	255 vertical by 500 horizontal points
Controls	Front-panel intensity control
Graticule	8 \times 10 grid or frame
Autostore	Autostore saves previous sweeps in half-bright display and the most recent sweep in full-bright display

Acquisition System

Maximum Sample Rate	20 MSa/s
Resolution	8 bits
Simultaneous channels	Channels 1 and 2 or channels 3 and 4
Record length	4,000 points (2,000 single-shot)
Maximum update rate	1,000,000 points/s
Single-shot bandwidth	2 MHz, single-channel 1 MHz, dual-channel
Peak detect	50 ns glitch capture (100 ns dual-channel) at sweep speeds of 50 μ s/div and greater
Average	Number of averages selectable at 8, 64, or 256

Advanced Functions

Automatic Measurements Voltage:	Measurements are continuously updated: V_{avg} , V_{rms} , V_{pp} , V_{top} , V_{base} , V_{min} , and V_{max}
Time:	Frequency, Period, + Width, - Width, Duty Cycle, Rise Time, and fall time
Cursors:	Manually or automatically placed

Setup Functions

Autoscale:	Sets the vertical and horizontal deflection and the trigger level
Save/recall:	16 front-panel setups
Trace memory:	Two volatile pixel memories

Power Requirements

Line voltage range	100 Vac to 240 Vac
Line voltage selection	Automatic
Line frequency	45 Hz to 440 Hz
Max power consumption	220 VA

General

Size (excluding handle)	172 mm H \times 322 mm W \times 317 mm D (6.8 in \times 12.7 in \times 12.5 in) (excluding handle)
Weight	6.2 kg (14 lb)
Safety	CSA certification and IEC 348, UL 1244

¹Temperature is $\pm 10^\circ$ C from calibration.

²Use full scale of 80 mV for 2 mV/div and 5 mV/div ranges.

³Use full scale of 50 ns for 2 ns/div.

⁴Tested to Hewlett-Packard environmental specification section 758 for Class B-1 products.