

# 40 MHz Analog Oscilloscopes



**1541D**

## Model 1541D

40 MHz, Dual-Channel Oscilloscope

- 5mV/div sensitivity
- 19 calibrated sweeps
- Video sync separators
- X10 sweep magnification

## Specifications

model

1541D

### VERTICAL AMPLIFIERS (CH 1 and CH 2)

Sensitivity	5 mV/div to 5 V/div, 1 mV/div, with X5 gain
Accuracy	5 mV/div to 5 V/div, $\pm 3\%$ (X5 gain), $\pm 5\%$
Input Impedance	1M $\Omega$ $\pm 2\%$ , 25pF $\pm 10\%$
Frequency Response	DC to 40 MHz (-3dB), DC to 7 MHz (-3dB) at X5 gain
Rise Time	8.8 ns (Overshoot $\leq 5\%$ )
Operating Modes	CH 1; CH 2; DUAL; Alternate/Chop; ADD
Chop Frequency	Approximately 250kHz
Max Input	400 V (DC + AC peak)

### SWEEP SYSTEM

Sweep Speed	0.2 $\mu$ s/div to 0.2 s/div in 1-2-5 sequence; 20 steps, vernier control provided
Accuracy	$\pm 3\%$
Sweep Magnification	10x
Hold Off Time	5:1 Continuously variable

### TRIGGERING

Trigger Modes	Auto, Norm
Trigger Source	Ch 1, CH 2, LINE, EXT, ALT
Trigger Coupling	AC, TV-V, TV-H, NORM

### HORIZONTAL AMPLIFIER (Input through EXT TRIG)

X-Y Mode	CH1: Y axis, CH2: X axis
Sensitivity	Same as vertical CH1
Accuracy	Y axis $\pm 3\%$ , X axis $\pm 6\%$
Input Impedance	same as vertical CH1
Frequency Response	DC to 1MHz (-3dB)

### CRT

Display Area	6 inches diagonal, rectangular screen with internal graticule 8 x 10 div (1 div = 1 cm)
Accelerating Voltage	12 kV
Trace Rotation	Front panel adjustable
Phosphor	B31

## Other Specifications

Calibrating Voltage	1kHz positive square wave, 2Vp-p, $\pm 3\%$
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### ENVIRONMENT

Within Specified Accuracy	50° to 95°F (10° to 35°C), $\leq 85\%$ RH
Full Operation	32° to 104°F (0° to 40°C), $\leq 85\%$ RH
Storage	-4° to 158°F (-20° to +70°C)
Power Requirements	100/120/220/240 V $\pm 10\%$ , 50/60 Hz, approximately 38W
Dimensions (HxWxD)	12.8 x 15.7 x 5.2" (324 x 398 x 132 mm)
Weight	16.8 lbs. (7.6 kg)

## Accessories

Three Year Warranty

SUPPLIED:	Instruction Manual, Two PR-33A x1/x10 Probes or equivalent, AC Power Cord, Spare Fuse
OPTIONAL:	PR-32A Demodulator Probe, PR-37A x1/x10/REF Probe, PR-100A x100 Probe, PR-55 High Voltage x1000 Probe, LC-210A Carrying Case