



20 MHz Dual-Trace

- Dual or single trace operation
- 1 mV/div sensitivity
- AUTO/NORM triggered sweep operation with AC, TVH, TVV and line coupling
- Calibrated 19 step time base with x 10 magnifier
- Compact low-profile design

Model 2120

SPECIFICATIONS

VERTICAL AMPLIFIERS (Ch 1 and Ch 2)
Sensitivity: 5 mV/div to 5 V/div, 1 mV/div to 1 V/div at X5.
Attenuator: 10 steps in 1-2-5 sequence. Vernier control provides full adjustment between steps.
Accuracy: $\pm 3\%$, $\pm 5\%$ at X5.
Input Resistance: 1 M Ω $\pm 2\%$.
Input Capacitance: 35 pF $\pm 5\%$.
Frequency Responses: 5 nV to 5 V/div; DC to 20 MHz (-3dB); X5: DC to 10 MHz (-3dB).
Rise Time: 17.5 ns, X5: 35 ns.
Operating Modes: CH 1: CH 1, single trace.
 CH 2: CH 2, single trace.
 ALT: dual trace, alternating.
 CHOP: dual trace, chopped.
 ADD: algebraic sum of CH 1 + CH 2.
Polarity Reversal: CH 1 only.
Maximum Input Voltage: 400 V (DC to AC peak).
Maximum Undistorted Amplitude: DC to 20 MHz: 4 divisions.
 DC to 10 MHz: 8 divisions.

SWEEP SYSTEM

Sweep Speed: 0.5 $\mu\text{s}/\text{div}$ to 0.5 s/div in 1-2-5 sequence, 19 steps. Vernier control provides fully adjustable sweep time between steps.
Accuracy: $\pm 3\%$.
Sweep Magnification: 10x, $\pm 6\%$.

TRIGGERING

Triggering Modes: AUTO (free run) or NORM.
Trigger Source: CH 1, CH 2, ALT, EXT, LINE.

Maximum External Trigger Voltage: 200 V (DC + AC peak).
Trigger Coupling: AC 30 Hz to 30 MHz.
 TV H Used for triggering from horizontal sync pulses.
 TV V Used for triggering from vertical sync pulses.

TRIGGER SENSITIVITY:

Coupling	Bandwidth	Int	Ext
AC	30 Hz-30 MHz	.5 div	500 mV
TV V	10 Hz-1.5 kHz	.5 div	500 mV
TV H	3 kHz-30 MHz	.5 div	500 mV

HORIZONTAL AMPLIFIER (Input through channel 2 input)

X-Y Mode: Switch selectable using X-Y switch. CH 1: Y axis. CH 2: X axis.
Sensitivity: Same as vertical channel 2.
Accuracy: Y-Axis: $\pm 3\%$. X-Axis: $\pm 6\%$.
Input Impedance: Same as vertical channel 2.
Frequency Responses: DC to 2 MHz typical (-3dB); to 50 V horizontal deflection.
X-Y Phase Difference: Approximately 3° at 50 kHz.
Maximum Input Voltage: Same as vertical channel 2.

CRT

Type: Rectangular with internal graticule.
Display Area: 8 x 10 div (1 div = 1 cm).
Accelerating Voltage: 2 kV.
Phosphor: P31.
Trace Rotation: Electrical, front panel adjustable.

OTHER SPECIFICATIONS

Calibrating Voltage: 1 kHz ($\pm 10\%$) Positive Square Wave, 0.2 V p-p ($\pm 2\%$).
CH 1 Output: (on rear panel).
Output Voltage: 50 mV/div (into 50-ohm load).
Output Impedance: Approximately 50 ohms.
Frequency Response: 20 Hz to 10 MHz, -3dB , into 50 Ω . 20 Hz to 20 MHz, -6dB , into 1 M Ω .

ENVIRONMENT

Within Specified Accuracy: $+10^\circ$ to $+35^\circ\text{C}$, $\pm 85\%$ R.H.
Full Operation: 0° to 40°C , $\pm 85\%$ R.H.
Storage: -20° to $+70^\circ\text{C}$.
Power Requirements: 100/120/220/240 VAC $\pm 10\%$, 50/60 Hz, approximately 35 W.
Dimensions: (WxHxD) 12.6 x 5.1 x 14.2" (320 x 130 x 361 mm)
Weight: Approximately 15 lbs (6.75 kg)

2120/2125 ACCESSORIES SUPPLIED:
 Two 10:1 Probes, AC Power Cord, Spare Fuse.

2120/2125 OPTIONAL ACCESSORIES:

Demodulator Probe—PR-32;
 Deluxe 10:1/direct Probe—PR-37A;
 10:1/direct Probe—PR-33A;
 Deluxe 100:1 Probe—PR-100A;
 Deluxe Carrying Case—LC-210

See pages 63-66 for specifications.



20 MHz Dual-Trace, with Delayed Sweep

- All features of Model 2120 plus:
- Delayed sweep in 19 ranges
- Built-in component tester for capacitors, inductors, diodes, transistors, zener diodes
- 23 step time base to 0.1 $\mu\text{s}/\text{div}$
- Deluxe handle/tilt stand

Model 2125

SPECIFICATIONS

Same as Model 2120 above, except as follows

SWEEP SYSTEM

Operating Modes: Main, mix (both main sweep and delay sweep displayed), or Delay (only delay sweep displayed), X-Y.
Main Sweep Speed: 0.1 $\mu\text{s}/\text{div}$ to 2.0 s/div in 1-2-5 sequence, 23 steps. Vernier control provides fully adjustable sweep time between steps.
Accuracy: $\pm 3\%$.
Sweep Magnification: 10X, $\pm 5\%$.

Delayed Sweep Speed: 0.1 $\mu\text{s}/\text{div}$ to 0.1 s/div in 1-2-5 sequence, 19 steps.
Holdoff: Continuously variable for Main sweep up to 10 times normal.
Delay Time Position: Continuously variable to control percentage of display that is devoted to main and delay sweep.

COMPONENT TESTER

Components Tested: Resistors, Capacitors, Inductors, and Semiconductors.
Test Voltage: 12 V rms maximum (open).

Test Current: 30 mA maximum (shorted).
Test Frequency: Line Frequency (60 Hz in USA).

OTHER SPECIFICATIONS

Power Requirements: Approximately 40 W.
 All other operating specifications are the same as model 2120