

Table 1-1. Model 5363B Specifications

INPUT REQUIREMENTS:

Operating Range: $\pm 10\text{V}$.
Damage Level: $\pm 30\text{V}$.
Minimum Input Voltage: 100 mV above and below the trigger point.
Minimum Pulse Width: Input signal must remain 100 mV below and above trigger point for at least 5 ns.

ABSOLUTE ACCURACY:

$$\pm 1 \text{ ns}^* \pm \frac{\text{START TLA} + \text{START NTE}}{\text{START slew rate}} \pm \frac{\text{STOP TLA} + \text{STOP NTE}}{\text{STOP slew rate}}$$

where TLA denotes trigger level accuracy and NTE denotes noise trigger error, defined below.

TRIGGER LEVEL ACCURACY:

Trigger Level	-5V to +9V	-5V to -10V	+9V to +10V
1 Trigger Level Accuracy	$\pm 8 \text{ mV} \pm 0.4 \text{ mV}/^\circ\text{C}$ $\pm 0.15\%$ trigger voltage	$\pm 1\%$ trigger voltage	50 mV
1 Differential Trigger Level Accuracy	$\pm 3 \text{ mV} \pm 0.3\%$ trigger voltage	$\pm 1\%$ trigger voltage	100 mV

Differential trigger level accuracy applies when both START and STOP trigger level voltages are set equal and identical waveforms applied.

1 After calibration and within the range of 100 mV or 8% of signal peak (whichever is greater).

NOISE TRIGGER ERROR: $\sqrt{e_i^2 + e_n^2}$ volts

where e_n = effective rms noise of the 5363B input (typically 125 μV)

e_i = rms input signal noise for a 350 MHz bandwidth

ENVIRONMENTAL: Operating temperature 0°C to 55°C .

SUPPLEMENTARY PERFORMANCE CHARACTERISTICS:

Describing nonwarranted typical performance parameters.

Effective Bandwidth: 350 MHz or 1 ns rise time.

Impedance: 1M ohms shunted by $<20 \text{ pF}$.

Voltage Resolution: 10 mV.

Delay Compensation Range: 2 ns adjustable about 0.0 or 10.0 ns.

Outputs to Counter: Separate START and STOP outputs; -0.5V to $+0.5\text{V}$ into 50 ohms, slew rate through zero volts exceeds 0.50V/ns.

Trigger Level Outputs: Trigger point setting $\pm 75 \text{ mV}$.

GENERAL

Power: 100, 120, 220, 240V ac ($+5\%$, -10%), 48-440 Hz; 40 VA max.

Weight: Net 3.0 kg (6.5 lbs). Shipping: 5.5 kg (12 lbs).

Dimensions: 88.1 mm H \times 212 mm W \times 295 mm D (3.5" \times 8.4" \times 11.6");

Probe length 122 cm (4 feet)

*Systematic error that can be eliminated with proper calibration and measurement techniques.