

Table 1-1. Specifications

## Measurement Configurations

	STATE	TIMING
1630A:	35	0
	0	8
	27	8
1630D:	43	0
	0	16
	35	8
	27	16
1630G:	65	0
	0	8
	57	8

Note: Number of timing channels halved in Glitch mode.

## Measurement Functions

## Memory

- Data Acquisition: 1024 words.
- Compare: 16 words (1630A/D, 1630G in [Edit Compare] mode). Entire trace for 1630G in [Full Compare] mode.
- Search: Memory may be searched for any pattern defined within a label set. All pattern matches in memory may be marked or separately displayed.

## Input Specifications

## Clock repetition rate

- Single Phase: 25 MHz with single clock and single edge specified.  
20 MHz with any ORed combination of clocks and edges.
- Multiplexed: Master Slave clock timing. Master clock must follow slave clock by at least 10 ns and precede next slave clock by 50 ns or more.

Clock Pulse Width:  $\geq 10$  ns at threshold.

RC: 100 kilohms  $\pm 2\%$  shunted by approx 5 pF at probe body.

Setup time: time data must be present prior to clock transition,  $\geq 20$  ns.

Hold time: time data must be present after clock transition, 0 ns.

Minimum swing: 600 mV p-p.

Minimum input overdrive: 250 mV or 30% of input amplitude, whichever is greater.

Maximum voltage:  $\pm 40$  volts, peak.

Threshold Range:  $-9.9$  volts to  $+9.9$  volts in 0.1-volt increments. Accuracy  $2.5\% \pm 120$  mV.

Dynamic Range:  $\pm 10$  volts about threshold.

Skew: Between channels in one pod:  $\leq 6$  ns.

Between channels in different pods:  $\leq 10$  ns.

(These specifications are true for input signal,  $V_H = -1.0V$ ,  $V_L = -1.6V$ ,  $V_{TH}$  at  $-1.3V$ , slew rate greater than 0.25 V/ns.)

Glitch: With glitch detection on, number of timing channels are halved. Minimum detectable glitch: 5 nsec width at threshold.

Table 1-1. Specifications (Cont'd)

Operating environment

- Temperature: 0° to 55° C (32° to 131° F), 20° to 30° C recommended.
- Humidity: up to 95% relative humidity at +40° C, 40% to 80% relative humidity recommended.
- Altitude: to 4600 m (15,000 ft).
- Vibration: vibrated in three planes for 15 min. each with 0.3 mm excursions, 5 to 55 Hz.
- Dimensions: dimensions are for general information only. If dimensions are required for building special enclosures, contact your HP field engineer. Dimensions are in millimetres and (inches).

