

Specifications

Mechanical and Electrical Specifications

Table 3-1 lists the electrical and mechanical specifications for the P6810, P6860, and P6880 Probes. The electrical specifications apply when the probe is connected between a compatible logic analyzer and a target system.

Refer to the *Tektronix Logic Analyzer Family User Manual* for a complete list of specifications, including overall system specifications.

Table 3-1: Electrical and mechanical specifications

Characteristic	P6810	P6860	P6880
Threshold accuracy	$\pm (25 \text{ mV} \pm 1\% \text{ of setting})$	$\pm (25 \text{ mV} \pm 1\% \text{ of setting})$	$\pm (25 \text{ mV} \pm 1\% \text{ of setting})$
Input resistance	$20 \text{ k}\Omega \pm 1\%$	$20 \text{ k}\Omega \pm 1\%$	$20 \text{ k}\Omega \pm 1\%$
Input capacitance	$<1.0 \text{ pF}$	0.7 pF (typical)	0.7 pF (typical)
Minimum digital signal swing	300 mV	300 mV	150 mV each side
Maximum nondestructive input signal to probe	$\pm 15 \text{ V}$	$\pm 15 \text{ V}$	$\pm 15 \text{ V}$
Delay from probe tip to module input connector	$7.70 \text{ ns} \pm 80 \text{ ps}$	$7.70 \text{ ns} \pm 60 \text{ ps}$	$7.70 \text{ ns} \pm 80 \text{ ps}$
Probe length	1.8 m (6 ft)	1.8 m (6 ft)	1.8 m (6 ft)

NOTE. Because the length of all three probes are electrically similar, they can be interchanged without problems.

Single podlet input capacitance is 0.7 pF , but podlets in a group will have 1 pF input capacitance.

Table 3-2 shows the environmental specifications for all three probes. The probes are designed to meet Tektronix standard 062-2847-00 class 5.

Table 3-2: Environmental specifications

Characteristic	P6810	P6860	P6880
Temperature			
Operating	0 °C to + 50 °C	0 °C to + 50 °C	0 °C to + 50 °C
Non-operating	- 51 °C to 71 °C	- 51 °C to 71 °C	- 51 °C to 71 °C
Humidity	10 °C to 30 °C 95% relative humidity	10 °C to 30 °C 95% relative humidity	10 °C to 30 °C 95% relative humidity
	30 °C to 40 °C 75% relative humidity	30 °C to 40 °C 75% relative humidity	30 °C to 40 °C 75% relative humidity
	40 °C to 50 °C 45% relative humidity	40 °C to 50 °C 45% relative humidity	40 °C to 50 °C 45% relative humidity
Altitude			
Operating	10,000 ft (3,048 m)	10,000 ft (3,048 m)	10,000 ft (3,048 m)
Non-operating	40,000 ft (12,192 m)	40,000 ft (12,192 m)	40,000 ft (12,192 m)
Electrostatic immunity	6 kV	6 kV	6 kV