

Technical Specifications

GPS-8145 Benchtop Multimeter			
Function	Range	Resolution	Accuracy
DC Voltage (V)	0 – 1000 V	1 μ V	\pm (0.08% rdg+10)
AC Voltage (V)	0 – 750 V	1 μ V	\pm (0.8% rdg+50)
DC Current (A)	0 – 20 A	1 μ A	\pm (0.2% rdg+10)
AC Current (A)	0 – 20 A	1 μ A	\pm (0.2% rdg+10)
Resistance (Ω)	0 – 60 M Ω	0.01 Ω	\pm (0.2% rdg+10)
Capacitance (F)	1 pF – 100 μ F	1 pF	\pm (2.5% rdg+50)
Frequency (Hz)	0.01 Hz – 100 MHz	0.01 Hz	\pm (0.1% rdg+5)
Temperature ($^{\circ}$ C/ $^{\circ}$ F)	-50 $^{\circ}$ C to +1300 $^{\circ}$ C [-58 $^{\circ}$ F to +2372 $^{\circ}$ F]	0.1 $^{\circ}$ C / 0.1 $^{\circ}$ F	\pm (1.5% rdg +10)
Function Generator	0.5 Hz – 5 kHz (square waveform output)	0.1 Hz	Duty cycle adjustable: 1–99%; voltage: 3V approx.
Display Count	Dual 80,000 counts + bargraph	—	—
Sampling Rate	4 readings/sec (bargraph: 40/sec)	—	—
Input Impedance	\geq 10 M (typical)	—	—
Fuse Protection	0.5 A / 250 V (mA/ A); 13 A / 250 V (20 A)	—	—
Interface	RS-232 serial port for PC logging	—	—

Measurement Category

CAT II up to 1000V

Overload Protection

Across all ranges including mV, voltage, current, resistance, capacitance, and frequency ranges. Audible alert on overload conditions.

Anti-interference and Input Protection

Includes PTCs, transistor clamps, MOV, and shunts for robust safety and stability.

Standard Accessories

Probes
Thermocouple
RS-232 cable
Mains power cable
CD software
Spare fuses

General Specifications

Part Numbers / Optional Accessories		
Code	Item	Part Number
GPS-8145	4 $\frac{7}{8}$ Digit Benchtop Multimeter	421060

Mass

Approx 1.4 kg

Dimension

248 x 205 x 88 mm (w x d x h) approx.

Operating

0 ~ 50 $^{\circ}$ C, relative humidity <75%

Storage

-20 ~ 60 $^{\circ}$ C, relative humidity <80%

Services

1-year warranty (subject to product registration with GPS Ltd)

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