



GPS-179

Handheld Multimeter



KEY FEATURES

- 40 000 count display with analogue bargraph
- True RMS with peak capture
- 4 to 20 mA loop, read as current and as %
- 0.01 mV, 0.01 μ A and 0.01 m Ω resolution
- 1000 V protection on every range
- IP67 · CAT IV 600 V and CAT III 1000 V

IDEAL FOR

- Process and instrumentation loops
- Field and plant maintenance
- Solar and wind installations
- Panel and switchgear diagnostics
- Automotive and EV electrical work

Bench Resolution, In A Toolbox.

A 40 000 count True RMS handheld resolving to 0.01 mV, 0.01 μ A and 0.01 m Ω , with a basic DC voltage accuracy of $\pm 0.06\%$. That is nearly seven times the display resolution of the GPS-176 and an order of magnitude better on DC volts.

Process work is what separates it. A 4 to 20 mA loop is read as a current and as a percentage of span at the same time, so a transmitter at a quarter of scale reads 8 mA and 25% together rather than needing the arithmetic done on site.

True RMS on both AC paths, so a distorted waveform reads correctly rather than optimistically, and a peak capture mode that catches the transient an averaging meter never sees. Hold, maximum and minimum are on the front panel.

Sealed to IP67 and double moulded, with 1000 V protection on every range and both current paths fused at 1000 V. Rated CAT IV 600 V at the origin of an installation and CAT III 1000 V downstream of it.

MEASUREMENT RANGES

Range	Accuracy	Resolution	Notes
Measurement ranges · 40 000 count display with analogue bargraph · true RMS AC			
DC voltage to 1000 V	±0.06%	10 µV	Basic figure · 1000 V protection on every range
AC voltage to 1000 V	±1.0%	10 µV	True RMS · basic figure
DC current to 10 A	±1.0%	0.01 µA	Fused at 500 mA and 10 A, both 1000 V
AC current to 10 A	±1.5%	0.01 µA	True RMS · basic figure
Process loop, 4 to 20 mA	—	—	Read as a current and as a percentage of span at the same time
Resistance to 40 MΩ	±0.3%	10 mΩ	Basic figure
Capacitance to 40 mF	±3.5%	10 pF	Basic figure
Frequency to 10 MHz	±0.1%	0.001 Hz	Basic figure
Duty cycle to 99.90%	±1.2%	0.10%	Measured on the frequency path
Temperature to 760 °C	±1.0%	0.1 °C	Type K probe supplied · probe error not included
Diode	—	—	With audible indication
Continuity	—	—	With beeper

Figures above are basic accuracy: the best available across the ranges of each function, at the maximum range and resolution stated. They are not range-by-range figures, and accuracy on the lowest and highest range of a function will differ from the basic figure. Temperature accuracy excludes the error of the thermocouple probe. Range-by-range detail is in the operating manual supplied with the instrument.



WHAT'S IN THE BOX

- GPS-179 meter
- Test lead set
- Type K temperature probe
- 9 V battery
- Carrying case
- User manual

AVAILABLE SEPARATELY · Spare fuses, 500 mA/1000 V and 10 A/1000 V, and replacement test leads are available from GPS.

GENERAL SPECIFICATIONS

Code	Item	Part Number
GPS-179	Handheld multimeter, 40 000 count autoranging, true RMS with peak capture, 4 to 20 mA loop, IP67, CAT IV 600 V	404179

DISPLAY

40 000 count LCD with an analogue bargraph and a backlight

RANGING

Automatic, with manual selection on the voltage, current and resistance functions

PROCESS LOOP

4 to 20 mA read as a current and as a percentage of span together, so a transmitter reads 8 mA and 25% at once

TERMINALS AND PROTECTION

1000 V protection on every range · 500 mA 1000 V fuse on the µA and mA path · 10 A 1000 V on the 10 A path

COMPLIANCE

EN 61010-1 and EN 61010-2-031 · CAT IV 600 V and CAT III 1000 V · EN 61326 for EMC

ENVIRONMENT AND SIZE

183 × 82 × 55 mm · 447 g

RESOLUTION

0.01 mV on voltage · 0.01 µA on current · 0.01 mΩ on resistance

TRUE RMS AND PEAK

True RMS on AC voltage and AC current · peak capture for transients an averaging measurement would miss

MATH AND HOLD

Hold · maximum and minimum recording · automatic power off

INGRESS

IP67 against dust and water · double moulded housing

POWER

9 V battery · automatic power off · low battery indicator

WARRANTY

1 year, subject to product registration with GPS