

## GENERAL POLYTRONIC SYSTEMS LTD.

### GPS-179

Professional True RMS Industrial Digital Multimeter



IP67 dust and water proof  
True RMS

High resolution  
40,000 counts

GPS-179 is Professional digital multimeter which provides safe, reliable measurements with double molded plastic housing design and IP67 waterproof function. GPS-179's performance as True RMS AC/DC voltage and current measurement, 40000 counts resolution and a 0.06% basic DC accuracy is now within reach for the customer. The large LCD display, with analog bargraph and backlight, ensures that readings are easy to read under all circumstances.

#### • Features

- 40,000 counts high resolution (0.01mV, 0.01µA, 0.01Ω)
- Backlit LCD display
- True RMS measurement
- 1000V input protection on all ranges
- 4-20mA process loop measurements with % readout
- Data Hold/MAX/MIN recording mode
- Auto Power Off
- Peak capture mode
- Wide capacitance range

#### • Safety Conformance

- EN61010-1 CAT IV 600V, CAT III 1000V
- 1000V input protection on all ranges
- 10A/1000V & 0.5A/1000V fuses
- protection on current ranges



EMC & LVD  
EN: 61326  
EN: 61010-1  
EN: 61010-02-031



### Specifications

Function	Range	Resolution	Accuracy
DC Voltage	400mV	0.01mV	±(0.06% reading + 2 digits)
	4V	0.0001V	
	40V	0.001V	
	400V	0.01V	
	1000V	0.1V	
AC Voltage	400mV	0.1mV	±(1.0% reading + 5 digits)
	4V	0.001V	
	40V	0.01V	
	400V	0.1V	
	1000V	1V	
	All AC voltage ranges are specified from 5% of range to 100% of range		
DC Current	400µA	0.01µA	±(1.0% reading + 3 digits)
	4000µA	0.1µA	
	40mA	0.001mA	
	400mA	0.01mA	
	10A	0.001A	
	(20A: 30 sec max with reduced accuracy)		
AC Current	400µA	0.1µA	±(1.5% reading + 3 digits)
	4000µA	1µA	
	40mA	0.01mA	
	400mA	0.1mA	
	10A	0.01A	
	(20A: 30 sec max with reduced accuracy)		
All AC voltage ranges are specified from 5% of range to 100% of range			

NOTE: Accuracy is stated at 65°F to 83°F (18°C to 28°C) and less than 75% RH.

Function	Range	Resolution	Accuracy	
Resistance	400Ω	0.01Ω	±(0.3% reading + 9 digits)	
	4kΩ	0.0001kΩ		
	40kΩ	0.001kΩ		
	400kΩ	0.01kΩ		
	4MΩ	0.001MΩ		
Capacitance	40nF	0.001nF	±(2.0% reading + 10 digits)	
	400nF	0.01nF		
	4µF	0.0001µF		
	40µF	0.001µF		
	400µF	0.01µF		
	4000µF	0.1µF		
Frequency (electronic)	40Hz	0.001Hz	±(0.1% reading + 1 digits)	
	400Hz	0.01Hz		
	4kHz	0.0001kHz		
	40kHz	0.001kHz		
	400kHz	0.01kHz		
	4MHz	0.0001MHz		
	40MHz	0.001MHz		
	100MHz	0.01MHz		
	Not specified			
	Sensitivity: 0.8V rms min @ 20% to 80% duty cycle and <100kHz; 5Vrms min @ 20% to 80% duty cycle and >100kHz.			
Frequency (electrical)	40.00-400Hz	0.01Hz	±(0.5% reading)	
Duty Cycle	0.1 to 99.99%	0.01%	±(1.2% reading + 2 digits)	
	Pulse width: 100µs - 100ms. Frequency: 5Hz to 150kHz			
Temp (type-K)	-58 to 1832°F	1°F	±(1.0% reading + 4.5°F)	
	-50 to 1000°C	1°C	±(1.0% reading + 2.5°C)	
4-20mA%	-25 to 125%	0.01%	±50 digits	
	0mA=-25%, 4mA=0%, 20mA=100%, 24mA=125%			

Note: Accuracy specifications consist of two elements:  
 • (% reading) – This is the accuracy of the measurement circuit.  
 • (\* digits) – This is the accuracy of the analog to digital converter.

**Size(HxWxD):** 182mm x 82mm x 55mm

**Weight:** 360g

### • Accessories:

Test leads, 9V battery, Type K temperature probe and gift box with carrying case.

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