



GPS-925

Multifunction Process Calibrator



Source and Measure, In One Hand.

A handheld process calibrator that sources and measures voltage, current, millivolts, resistance, frequency, thermocouples and RTDs, so one instrument replaces a current source, a voltage source, a resistance box and a frequency meter on a site visit.

Accuracy is 0.02% of reading on the principal electrical ranges. Measurement and output run at the same time, so a transmitter can be driven and its response read without swapping instruments or leads mid-check. Manual step, automatic step, 0 to 100% step and ramp output run a linearity check without dialling in each point.

Sealed to IP67 against dust and temporary immersion, with automatic protection of any signal terminal misconnected to 220 V. Eight thermocouple types and four RTD types are measured and simulated with automatic or manual cold junction compensation, and three-wire and four-wire connections are identified automatically.

KEY FEATURES

- Source and measure V, mA, mV, Ω , Hz, thermocouples and RTDs in one instrument
- 0.02% of reading on the principal electrical ranges
- IP67 sealed · automatic protection against 220 V on any signal terminal
- 8 thermocouple types and 4 RTD types with cold junction compensation
- Manual step, automatic step, 0 to 100% step and ramp output
- 24 V loop supply · automatic three and four-wire identification

IDEAL FOR

- Loop checking and 4–20 mA transmitter calibration
- Temperature indicator, controller and recorder calibration
- Process plant maintenance and fault diagnosis
- Chemical, petrochemical and utilities work
- Laboratories, research institutes and teaching

TECHNICAL SPECIFICATIONS

GPS-925 Multifunction Process Calibrator	
Accuracy	0.02% of reading on the principal electrical ranges · 0.05% on selected millivolt and output ranges
Voltage, measure	0 to 60.000 V, ± 30 V displayed · 0.02% +2
Voltage, source	0 to 10.000 V · 0.02% / 0.05% +2
Current, measure	0 to 24.000 mA · 0.02% +2
Current, source	0 to 24.000 mA, active or passive · 0.02% / 0.05% +2
Millivolts, measure	-15.000 to 80.000 mV and 80.00 to 125.00 mV · 0.02% / 0.05% +2
Millivolts, source	-15.000 to 99.999 mV and 100.00 to 125.00 mV · 0.02% / 0.05% +2
Resistance, measure	2 and 3-wire: 0.00 to 440.00 Ω at 0.15 Ω , 400.0 to 3200.0 Ω at 1.0 Ω · 4-wire: 0.10 Ω and 0.5 Ω respectively
Resistance, source	10.00 to 440.00 Ω at 0.15 Ω · 400.0 to 3200.0 Ω at 0.50 Ω
Frequency, measure	1.000 to 99.999 Hz, 100.00 to 999.99 Hz, 1000.0 to 9999.9 Hz, 10.000 to 99.999 kHz · 0.01% +1
Frequency, source	0.20 to 200.00 Hz, 200.0 to 2000.0 Hz, 2.000 to 20.000 kHz · 0.01% +1
Thermocouples	J, K, T, E, R, S, B and N · measure and simulate · automatic or manual cold junction compensation
RTDs	Pt100, Pt1000, Cu50 and Cu100 · measure and simulate · automatic three and four-wire identification
Output functions	Manual step, automatic step, 0 to 100% step and ramp
Loop supply	24 V DC for two-wire transmitters · mA measured with loop power on the upper display
Pressure	Optional external intelligent pressure module for on-site pressure transmitter calibration
Protection	IP67 · automatic protection of any signal terminal misconnected to 220 V
Display	Split MEASURE and SOURCE display · white LED backlight with manual brightness adjustment and automatic power off
Interface and power	RS232 · six AAA cells or mains adaptor · user-accessible battery cover



WHAT'S IN THE BOX

- GPS-925 main unit
- Test leads for voltage, current and resistance
- Mains adaptor
- Aluminium carry case, foam lined
- Quick start guide with warranty details

IP RATING · IP67 dust tight and protected against temporary immersion

POWER · Six AAA cells or mains adaptor · automatic power off

GENERAL SPECIFICATIONS

Code	Item	Part Number
GPS-925	High precision multifunction process calibrator	800600

An external intelligent pressure module is available for pressure transmitter calibration. Please contact us for pricing and availability.

MASS

350 g

OPERATING

-10°C to 55°C, $\leq 90\%$ RH non-condensing · storage -20°C to 60°C

WARRANTY

1 year (subject to product registration)

DIMENSIONS

185 × 93 × 47 mm (l × w × d) approx.

PROTECTION

IP67 · 220 V terminal protection on all signal terminals

CERTIFICATION

CE · EMC: EN 61326-1 · Safety: EN 61010-1