GPS LTD.

GPS-925

Multifunction Process Calibrator



Source and Measure, in One Hand.

A handheld calibrator that sources and measures voltage, current, millivolts, resistance, frequency, thermocouples and RTDs to 0.02% of reading. On a site visit it replaces a current source, a voltage source, a resistance box, an electronic potentiometer and a frequency meter.

Two isolated channels measure and source at the same time, so a transmitter can be driven and read in one setup. The 24 V loop supply powers a transmitter disconnected from the plant, and the current output works actively or passively, including two-wire transmitter simulation. Manual step, automatic step, 0–100% step and ramp outputs cover valve and loop checks.

The case is sealed to IP67 and every signal terminal is protected against misconnection to 220 V. Six AAA cells give up to 50 hours on alkaline batteries, and the 12 V adapter runs the instrument and charges rechargeable cells.

KEY FEATURES

- 0.02% of reading on DC voltage, millivolts and current
- Source and measure on two isolated channels
- 8 thermocouple and 4 RTD types, cold-junction compensation
- 24 V loop supply · active and passive mA output
- Step, ramp and two-wire transmitter simulation
- IP67 · 220 V misconnection protection on every terminal

IDEAL FOR

- Pressure and temperature transmitter calibration
- Control loop checks and fault finding
- Process instrument maintenance
- Commissioning on chemical and process plant
- Calibration and research laboratories

TECHNICAL SPECIFICATIONS

GPS-925 Multifunction Process Calibrator	
Measure, DC Voltage	0 to 60 V (upper display ±30 V) · ±0.02% of reading + 2 counts
Measure, DC mV	−15 to 125 mV · ±0.02% of reading + 2 counts
Measure, DC Current	0 to 24 mA · ±0.02% of reading + 2 counts
Measure, Resistance	0 to 440 Ω: ±0.15 Ω (2/3-wire), ±0.1 Ω (4-wire) · 400 to 3200 Ω: ±1.0 Ω (2/3-wire), ±0.5 Ω (4-wire)
Measure, Frequency	1 Hz to 99.999 kHz · ±0.01% of reading + 1 count
Source, DC Voltage	0 to 10 V · ±0.02% of reading + 2 counts · maximum load 1 mA
Source, DC mV	−15 to 125 mV · ±0.02% of reading + 2 counts
Source, DC Current	0 to 24 mA, active or passive · ±0.02% of reading + 2 counts · 20 mA into 1000 Ω
Source, Resistance	10 to 440 Ω: ±0.15 Ω · 400 to 3200 Ω: ±1.0 Ω
Source, Frequency	0.2 Hz to 20 kHz · ±0.01% of reading + 1 count · square wave ≥4.5 Vp-p
Thermocouples	J, K, T, E, R, S, B, N · measure and source · 0.1 °C resolution
Cold Junction	Automatic or manual · ±1.5 °C, not included in the thermocouple accuracy
RTDs	Pt100, Pt1000, Cu50, Cu100 · measure and source · 3- and 4-wire detected automatically
Loop Supply	24 V DC for transmitters disconnected from the plant
Output Modes	Manual step, automatic step, 0–100% step and ramp · two-wire transmitter simulation
Display	Dual display, white LED backlight with adjustable brightness · automatic power-off, 1 to 30 min
Interface	RS232 for PC communication
Power Supply	6 × AAA (LR03 alkaline or R03 NiMH), up to 50 h on alkaline · 12 V / 1 A adapter



WHAT'S IN THE BOX

- GPS-925 main unit · aluminium carry case
- Test probe leads, red and black
- Stackable 4 mm test leads, red and black
- Insulated test clips (4)
- 12 V / 1 A power adapter · user manual

OPTIONAL · Rechargeable R03 cells (6) · RS232 communication cable
POWER · 6 × AAA cells or the 12 V / 1 A adapter

GENERAL SPECIFICATIONS

Code	Item	Part Number
GPS-925	Multifunction process calibrator, 0.02%, source and measure, IP67	**800600**

Please contact us for pricing and availability.

MASS
650 g

DIMENSIONS
200 × 96 × 47 mm

OPERATING
−10°C to 55°C · accuracy specified at 18°C to 28°C

TEMPERATURE COEFFICIENT
±0.005% of full scale per °C outside 18°C to 28°C

WARRANTY
1 year (subject to product registration)

BATTERY LIFE
Up to 50 hours on alkaline cells