

# PSC-4000

## Process Signal Calibrator

### Features:

- Reads and simulates process control signals
- Memory for three (3) calibration points in each range
- Multiple input/output ranges for current and voltage modes
- Built-in 24 VDC source for powering two-wire transmitters
- Accuracy of 0.025% FS  $\pm$  1 LSD
- Large 32 character dot matrix display
- Test leads, carrying case, 4 AA batteries, NIST Certificate, and instruction manual included

The Martel Electronics PSC-4000 Process Calibrator is a portable, hand-held, full function voltage and current calibrator with the capability to both read and simulate common process control signals.

The PSC-4000 incorporates multiple input/output ranges for both current and voltage operating modes. When operated in the current mode, the calibrator can source, simulate, or read over a 0 to 24 mA range, with 0.01 mA resolution. It can also supply 24 VDC to power a two-wire transmitter, while simultaneously reading back its output both in milliAmps or % of full scale. When operated in the voltage range, the PSC-4000 can read or source over two ranges, 0 to 20.00 V, or 0 to 200.0 mV.

For convenience, up to three (3) calibration points can be stored in memory for each voltage or current range. These calibration points are non-volatile, and will remain in memory until the user changes them.



### Specifications

#### Input/Output Ranges

Current mode 0 to 24.00 mA; -25%/ $+125\%$

Voltage mode 0 to 200.0 mV

0 to 20.00 V

$\pm 0.025\%$  of FS,  $\pm 1$  LSD; input/output

#### Input Impedance

Current mode 20 Ohms

Voltage mode 1 MegOhm

#### Load Drive

Current mode up to 1,000 Ohms

Voltage mode  $\pm 20$  mA

$\pm 0.01\%/\text{ }^{\circ}\text{C}$  of FSR

#### Temperature Stability

#### Environmental

Operating temperature 0 to 50  $\text{ }^{\circ}\text{C}$

Storage temperature -20 to +60  $\text{ }^{\circ}\text{C}$

#### Display

32 character; 2 x 16 dot matrix

3x3 embossed domed keys

4- AA cells, or optional AC adapter

#### Keypad

#### Power Requirements

Battery life 25 hours

Read mode 10 hours (20 mA source)

Source mode 7"H x 3.8"W x 1.6"D

#### Dimensions

Ni-Cad charger

#### Accessories

PSC-4000

10077

1001-9V

Process Signal Calibrator

AA Ni-Cad Batteries (4 req'd)

AC Adapter/Charger

**MARTEL**  
ELECTRONICS