

# DPC-30

## Pneumatic Calibration System

*Small, lightweight,  
and accurate —  
take your test bench  
to the field!*



### Features

- ▲ Works with compressed plant air
- ▲ 0.001 PSI resolution,  $\pm 0.035\%$  accuracy
- ▲ Dual digital display — PSI & mA or voltage
- ▲ Gage, differential, and vacuum modes
- ▲ Selectable engineering units
- ▲ Pressure switch test
- ▲ Rugged case to withstand factory floor environment

The Martel Electronics DPC-30 is a highly accurate, digital calibrator for pneumatic field instrumentation, including valve actuators, P/I transmitters, controllers, gauges, switches, and recorders. It is especially suitable for checking 3 to 15 PSI systems. Its dual precision regulators enable output of set and variable pressures to control devices, while the switching manifold allows fast selection among the pressure ports. The unit simultaneously displays pressure and either mA or VDC, and has a built-in loop power supply. Accuracy is  $\pm 0.035\%$  of full scale for all ranges.

### Specifications

|                              |  |
|------------------------------|--|
| <b>Pressure</b>              |  |
| Ranges                       | -5 to 30.000 PSI   |
| Accuracy                     | $\pm 0.035\%$ F.S. $\pm 1$ LSD; $23\text{ }^\circ\text{C} \pm 5\text{ }^\circ\text{C}$   |
| Engineering Units            | PSI, Bar, mBar, kg/cm <sup>2</sup> , mm Hg, in Hg, kPa, in H <sub>2</sub> O @ $4\text{ }^\circ\text{C}$ , in H <sub>2</sub> O @ $20\text{ }^\circ\text{C}$ , in H <sub>2</sub> O @ $60\text{ }^\circ\text{F}$ , cm H <sub>2</sub> O @ $4\text{ }^\circ\text{C}$ , cm H <sub>2</sub> O @ $20\text{ }^\circ\text{C}$ , mm H <sub>2</sub> O @ $4\text{ }^\circ\text{C}$ |
| Modes                        | gage, differential, vacuum (vacuum to -5 PSI)  |
| <b>Electrical</b>            |  |
| Ranges                       | 0 to 52.000 mA<br>0 to 20.000 VDC  |
| Accuracy                     | 4-20 mA/10-50 mA $\pm 0.025\%$ F.S.; $23\text{ }^\circ\text{C} \pm 5\text{ }^\circ\text{C}$  |
| Voltage                      | $\pm 0.025\%$ F.S.; $23\text{ }^\circ\text{C} \pm 5\text{ }^\circ\text{C}$   |
| Current Overload Protection  | 1/8 A fuse   |
| <b>Temperature Stability</b> | $\pm 0.01\%/^\circ\text{C}$ for both pressure and electrical for temperatures outside of $23\text{ }^\circ\text{C} \pm 5\text{ }^\circ\text{C}$  |
| <b>Loop Power</b>            | 24 VDC $\pm 10\%$ ; supply built-in  |
| <b>Environmental</b>         |  |
| Operating temperature        | 32 to 122 $^\circ\text{F}$ / 0 to 50 $^\circ\text{C}$  |
| Storage temperature          | -20 to 60 $^\circ\text{C}$   |
| <b>Media Compatibility</b>   |  |
| All pressure ranges          | clean, non-corrosive gasses  |
| <b>Connections</b>           |  |
| Pressure                     | 1/8" FNPT  |
| Current                      | banana jacks on 3/4" centers   |
| Pressure Switch Test         | dry, (unpowered) contacts only, nominal 24 mA @ 24 VDC excitation current supplied to contacts   |
| <b>Display</b>               | 16 x 2 line dot matrix LCD<br>dual pressure and mA or V readout  |
| <b>Power Requirements</b>    | internal Ni-Cd battery or AC adapter that simultaneously charges the battery and powers the unit   |
| <b>Dimensions</b>            | 13" x 12" x 6"<br>(330.2 x 304.8 x 152.4 mm) HWD   |
| <b>Weight</b>                | 12 lbs. (5.45 Kg)  |
| <b>Accessories Included</b>  | Test leads, AC adapter/charger, hard shell carrying case, instruction manual, and NIST Certificate   |

### Ordering Information

| Description                  | Model  |
|------------------------------|--------|
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