# **CONDEC 3030 Hand-Held Pressure/Temperature Calibrator**

The compact CONDEC 3030 Pressure/Temperature calibrator weighs a little more than 1 lb for easy carrying, yet maintains rugged durability for outdoor use. This versatile instrument, when teamed with the CONDEC Source 3000 portable pressure source, offers a turnkey calibration solution.

CONDEC 3030 features two dual range high and low pressure models that measure inches of water to 10,000 psi and vacuum. It measures milliamps, volts and temperature when using optional RTD probe. This calibrator has an accuracy of 0.025% F.S.

This model has the additional feature of an external pressure module port, allowing for a great deal of flexibility.

In keeping with CONDEC's tradition of "Genuine Quality, Proven Performance", each instrument is tested and calibrated in an environmental chamber. This model also features a tough ABS water-resistant sealed case, sealed membrane keypad, and stainless steel internal pressure sensors that are gas and liquid compatible. What's more, with the optional RTD probe and available pressure modules, the versatility of the CONDEC 3030 Pressure/Temperature calibrator becomes even greater.

## **Applications**

- · Boiler feed pressure
- Condenser vacuum
- · Pneumatic system checks
- · Biomedical quality assurance
- · Pressure transfer standard
- Pressure transmitter, tranducer & switch testing
- · Temperature measurement
- · Gas custody transfer

## **Accessories**

#### 106594

Test port quick-disconnect adjustable adapter assembly, male coupling body to 1/8 NPT swivel other end, 5000 PSI (for hands-free display reading when used

between Source 3000 and CONDEC 3000 or CONDEC 3030)





### **Standard Features**

- Two dual range models standard (contact factory for additional models)
- 4 AA cells included, > 35-hours, typical usage
- Ranges from vacuum to 10,000 psi,
  -15 to 15 psi, -15 to 30 psi
- 0.025% of full scale
- 0.015% measurement of 0-24 mA or 0-30 VDC
- NIST Traceable Certificates provided
- RS-232/External module port standard
- Field carrying case and test leads included
- High-contrast Liquid Crystal Display (LCD), up to 3 process sub-regions
- Multi-engineering units standard: psi, bar, mbar, kPa, mPa, kg/cm², mmH₂O
  @ 4° C, mmH₂O
  @ 20° C, cmH₂O
  @ 4° C, cmH₂O
  @ 20° C, inH₂O
  @ 60° F, mmHg
  @ 0° C, inHg
  @ 0° C
- Built-in stainless steel sensor for gas and liquid compatibility
- Operating temperature 14° F to 122° F (-10° C to 50° C)
- Built-in damping function
- Min/Max pressure readings
- Percent error displayed
- Built in 24 VDC power supply to power unit under test
- RTD probe port standard
- Remote interface
- Instrument setup recall, 5 last used on power-up



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## specifications

#### **OPTIONS/ACCESSORIES:**

 106375
 CONDEC 3030 manual

 55092
 Test lead cable assembly

 106376
 RS-232 adapter cable

 106410
 RTD Probe PR100-385

106594 Test port quick-disconnect adjustable adapter assembly,

male coupling body to 1/8 NPT swivel other end, 5000 PSI (for hands-free display reading when used between Source

3000 test port and CONDEC 3000 or CONDEC 3030)

#### **PRESSURE RANGES:**

Gauge: 0.3\* psi, 1\* psi, 5 psi, 15 psi, 30 psi, 100 psi, 300 psi, 500 psi, 1000 psi, 3000 psi, 5000 psi, 10000 psi

Absolute: 15\* psi, 30\* psi, 100 psi, 300 psi Compound: -15 to 15 psi, -15 to 30 psi

Accuracy:

.3 psi ±0.10% F.S. 1 psi, 5 psi ±0.05% F.S. 15 psi through 3000 psi ±0.025% F.S. 5000 psi, 10000 psi ±0.035% F.S.

Isolated stainless steel pressure ports except those noted with an (\*) above.

#### **ELECTRICAL RANGES:**

0 to 24.000 mA or 0 to 30.000 VDC Accuracy:

mA  $\pm 0.015\%$  of reading  $\pm 0.002$  mA Volts  $\pm 0.015\%$  of reading  $\pm 0.002$  VDC

#### **TEMPERATURE:**

RTD (ohms) -40.0°C to 105.0°C (-40.0°F to 220.0°F)

Accuracy: ±0.015% of reading ±0.02 ohms;
or ±0.1°C @ 0°C for Pt100

#### **ENVIRONMENTAL TEMPERATURE:**

Operating  $-10^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$  (+14°F to +122°F) Storage  $-20^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$  (-4°F to +140°F)

#### **TEMPERATURE STABLITY:**

No effect on accuracy on all functions from 15°C to 35°C Add  $\pm 0.002\%$  F.S./°C for temps outside of 15°C to 35°C

#### MEDIA:

All gases and liquids compatible with 316 stainless steel and nickel-plated brass

#### **OPTIONAL LPT1000A PROBE:**

Meets PT-100 ALPHA 385 Class "A" specifications

#### **CONNECTORS/PORTS:**

Pressure - two 1/8" NPT External pressure module/RS-232 RTD probe

#### **EMI/RFI CONFORMANCE:**

EN50082-1: 1992 and EN55022: 1994 Class B

#### **POWER REQUIREMENTS:**

Battery: Four (4) standard AA cells Battery Life: > 35 hours, typical usage

#### **DIMENSIONS:**

8.3" H x 3.9"W x 1.8" D (21.082 x 9.906 x 4.572 cm)

#### **ACCESORIES INCLUDED:**

Test leads, carrying case, 4-AA alkaline batteries, NIST Certificate, and instruction manual

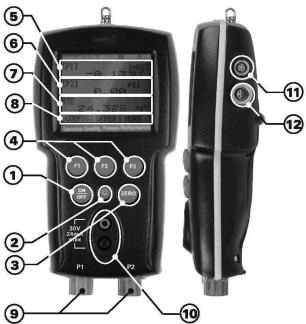
#### **WEIGHT:**

1 lb. 4 oz. (0.567 kg)

Above specifications 18°C to +28°C, unless otherwise noted.

#### **Control Functions**

- Power On/Off Key -This key is used to turn the calibrator on and off
- Display Backlight On/Off Key -This key is used to turn the display backlight on and off.
- 3. Zero Key -This key is used to zero pressure measurements.
- 4. Soft Function Keys -These keys are used primarily to configure the calibrator.
- UPPER Display Indicates what is being measured and the unit of measure (in one of 17 available pressure units). For mA and mA Loop functions, also indicates the percent of the 4 to 20 mA span.
- MIDDLE Display Indicates what is being measured and the unit of measure (in one of 17 available pressure units). For rnA and rnA Loop functions, also indicates the percent of the 4 to 20 mA span.
- LOWER Display Indicates what is being measured and the unit of measure (in one of 17 available pressure units). For rnA and rnA Loop functions, also indicates the percent of the 4 to 20 mA span.
- Main Menu Display Functions assigned to the three Function Keys (4) appear above each key. The functions displayed change as the operating mode and options are selected.
- 9. Internal Pressure Ports Internal Sensors PI (left) and P2 (right).
- 10. InputTerminals -These terminals are used to measure current, voltage, and a contact closure for switch test.
- External Module Input -This connection is used to interface with optional CONDEC-P Digital Pressure Modules (Module Adapter required).
- RTD Input -This connection accepts a Model LTP-100A PT-100 RTD for temperature measurements.





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