

RO-PDM Series

Portable Humidity and Temperature Transmitter



Figure 1: RO-PDM



Figure 2: RO-PDM Charging Port

FEATURES

- Dew point: -60°C to +95°C (factory default) for remote units
- RH 0-95%RH (non-condensing)
- Calibration performed down to -60C
- Speed Response: < 12second response time that is T63, 0 to 90%
- Pressure Rating: 750PSI
- Dew point accuracy:
+/- 1.0C from +40°C to -20°C
+/- 3.0C <-20C
- Three 4-20mA outputs or a RS232 (see configuration table)
- Temperature range: -40°C to +120°C

APPLICATIONS

- ENVIRONMENTAL CHAMBERS
- DRYERS
- COMPRESSED AIR
- PHARMACEUTICAL
- HVAC
- FURNACE AND INDUSTRIAL APPLICATIONS
- SEMICONDUCTOR
- DATA STORAGE

The RO-PDM Series

The RO-PDM series is a precision portable dew point transmitter that provides quick and accurate humidity, dew point and temperature measurements for compressed air applications. It has a wide temperature range of -60°C to 20°C at 25C ambient temperature and is resistant to most chemicals. This portable unit has two configurations, either AC powered or battery powered. The unit has flexibility where the sensor can be removed from the sample chamber and inserted directly into the process if needed

RO-PDM Series

Portable Humidity and Temperature Transmitter



Technical Information

Measurement Ranges	Dew Point: -60 °C to +95 °C Relative Humidity: 0-100% Temperature: -40 °C to +120°C (remote and duct mount only)
Probe Material	316 Stainless Steel (for remote and duct mount only)
Display	2x16 LCD Display, Shows three user selectable parameters.
Fitting	3/4" NPT Included (remote only)
Resolution	0.1 %
Output	4-20mA or RS232
Enclosure Dimensions	4.88" L X 3.70" W X 2.20" H
Cable Length	6 feet is standard. Contact factory for custom lengths. (For remote and duct mount units only).
Supply Voltage	18 to 30Vdc, unregulated, 200 mA max
Sensor	Polymer capacitive sensor
Analog Output scaled range Dew Point (4-20mA)	-60 °C to +40 °C
Analog Output scaled range Relative Humidity (4-20mA)	0 to 100% RH
Analog Output scaled range temperature °C (4-20mA)	-20°C to +120°C
Analog Outputs Pressure range (for units with pressure transducer) Psia	0-200psia
Analog Outputs Barometric Pressure Range (for units with pressure transducer) mbar	750mb to 1100mb
Operating Temperature	-25 °C to 200 °C
Accuracy	RH: ±1% H: ±1% over T range -20... 120C, +/- 0.6% over T range 15...40C Temperature: ±0.5°C over T range -20... 120C, +/- 0.2C over T range 15...40C

RO-PDM Series

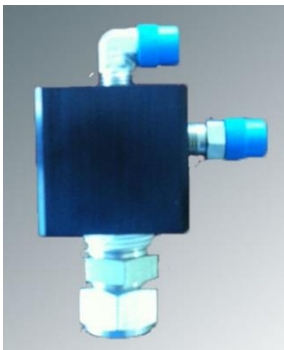
Portable Humidity and Temperature Transmitter



Ordering Configuration:

Model Type:	Description:
RO-PDM-AC	An AC portable temperature / dew point / RH transmitter with three 4-20mA outputs, a 2-line LCD display, 2 programmable relays, and a RS232 programmable output, Needle metering valve for flow adjustments and includes a NIST traceable calibration certificate
RO-PDM-BT	A battery powered temperature / dew point / RH transmitter with three 4-20mA outputs, a 2-line LCD display, 2 programmable relays, and a RS232 programmable output, Needle metering valve for flow adjustments and includes a NIST traceable calibration certificate
RO-PDM-AC-VP	An AC portable temperature / dew point / RH transmitter with three 4-20mA outputs, a 2-line LCD display, 2 programmable relays, and a RS232 programmable output, Needle metering valve for flow adjustments, vacuum pump and includes a NIST traceable calibration certificate
RO-PDM-BT-VP	A battery powered temperature / dew point / RH transmitter with three 4-20mA outputs, a 2-line LCD display, 2 programmable relays, and a RS232 programmable output, Needle metering valve for flow adjustments, vacuum pump and includes a NIST traceable calibration certificate
RO120-FRST	Field replaceable sensor tips with NIST traceable calibration certificate-plug-n-play-optional

Accessories:



PN: RO120-SC

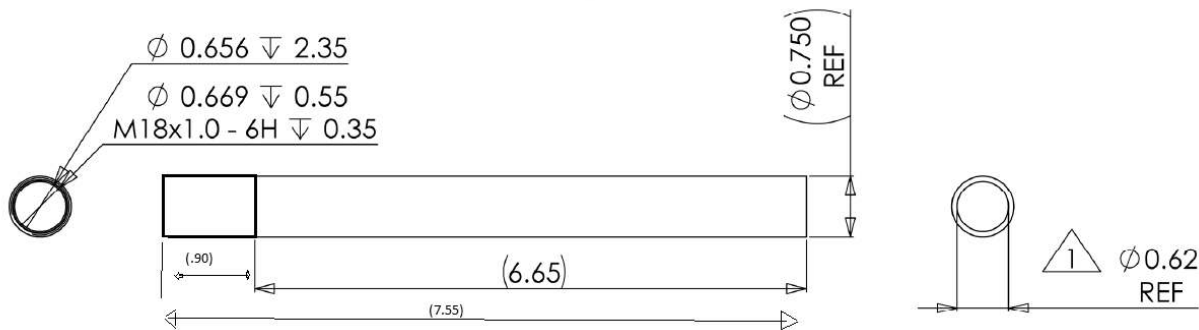
Sample Chamber for humidity transmitter

RO-PDM Series

Portable Humidity and Temperature Transmitter



Dimensions:



Dimensions

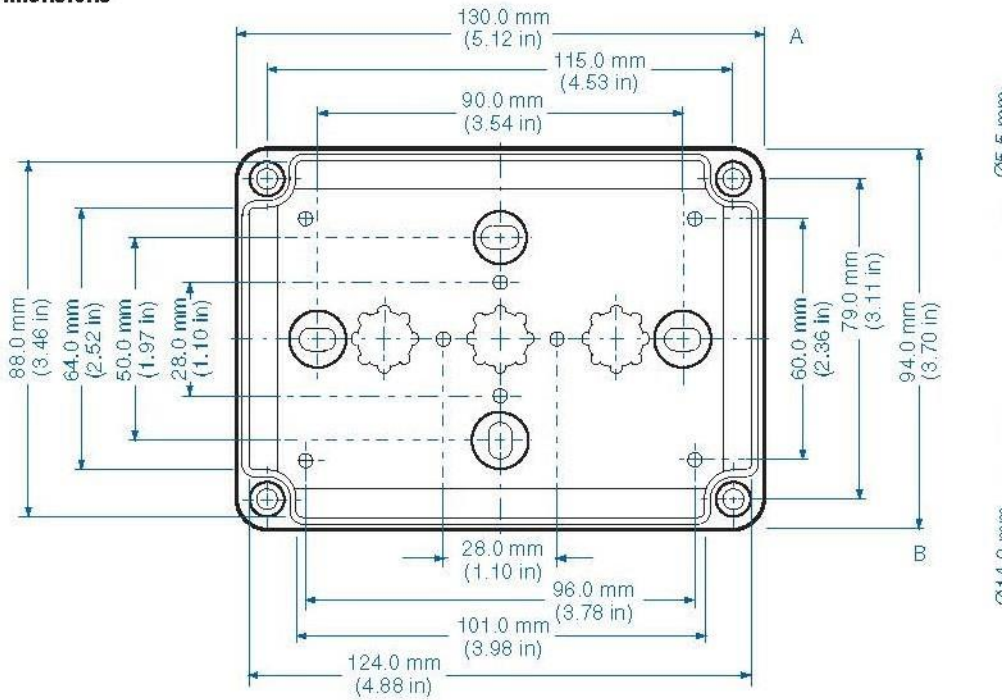


Figure 3: RO120 Enclosure Dimensions