

**The RO120** is a precision transmitter that provides quick and accurate humidity, barometric pressure, temperature, absolute pressure and dew point measurements in a wide range of applications. It has a wide temperature range of -40°C to 120°C and is resistant to most chemicals. This remote type transmitter comes standard with a 6 foot cable and is ideally suited for many different applications such as environmental chambers, compressed air, furnace and industrial applications. Roscid also offers a wall mount and duct mount configuration.



### Specifications:

#### ACCURACY:

RH:  $\pm 1\%$

Temperature:  $\pm 0.5^{\circ}\text{C}$

Dew point: Typically,  $\pm 2.0^{\circ}\text{C}$  above  $0^{\circ}\text{C}$ ;  $\pm 3.0^{\circ}\text{C}$  0 to  $-60^{\circ}\text{C}$

#### OPERATING RANGE:

RH: 0-95% (non-condensing)

T: (781)933-4007  
F: (978)719-6345  
E: info@roscid.com  
www.roscid.com





Temperature: -40°C to 120°C  
Wall-mount T-range 0C to  
+60C

Dew Point: -60°C to 95°C  
Pressure rated: up to  
700psia  
Typical model (RO120-P:  
transducer to 200psi, the  
RO120-PS transducer reads  
up to 400psi  
Barometric Pressure:  
1100mB +/-5 mB

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<b>Model Type:</b>	<b>Description:</b>
<b>RO120</b>	A temperature / dew point / RH transmitter with three 0-10V outputs and a RS232 programmable output
<b>RO120-B</b>	A temperature / barometric pressure / RH transmitter or dew point with three 0-10v outputs and a programmable RS232 programmable output
<b>RO120-P</b>	A temperature / Pressure (psia) / dew point transmitter with 6-foot cable, three 0-10v outputs and a RS232 programmable output
<b>RO120-PS</b>	A temperature / Pressure (psia) / dew point transmitter with 6-foot cable, three 0-10v outputs and a RS232 programmable output, pressure transducer readings to 400psi
<b>RO120-DIS</b>	A temperature / dew point / RH transmitter with a 2-line LCD display, three 4-20mA outputs, 2 programmable alarm relays and a RS232 programmable output
<b>RO120-B-DIS</b>	A temperature / barometric pressure / RH transmitter or dew point with a 2-line LCD display, three 4-20mA outputs, 2 programmable alarm relays and a RS232 programmable output
<b>RO120-P-DIS</b>	A temperature / Pressure (psia) / dew point transmitter with a 2-line LCD display, three 4-20mA outputs, 2 programmable alarm relays and a RS232 programmable output, transducer reads up to 200psi
<b>RO120-PS-DIS</b>	A temperature / Pressure (psia) / dew point transmitter with a 2-line LCD display, three 4-20mA outputs, 2 programmable alarm relays and a RS232 programmable output transducer reads up to 400psi
<b>RO120-W-DIS</b>	A wall mount temperature / dew point / RH transmitter with a 2-line LCD display, three 4-20mA outputs, 2 programmable alarm relays and a RS232 programmable output



<b>RO120-W-B-DIS</b>	A wall mount temperature / barometric pressure/RH transmitter with a 2-line LCD display, three 4-20mA outputs, 2 programmable alarm relays and a RS232 programmable output
<b>RO120-D</b>	A duct mount configuration with dew point/ temperature / RH transmitter with 6-foot cable, three 0-10v outputs and a RS232 programmable output
<b>RO120-D-B</b>	A duct mount configuration with temperature / barometric Pressure / RH transmitter or dew point with 6-foot cable, three 0-10v outputs and a RS232 programmable output
<b>RO120-D-DIS</b>	A Duct mount temperature / dew point / RH transmitter with a 2-line LCD display, three 4-20mA outputs, 2 programmable alarm relays and a RS232 programmable output
<b>RO120-D-B-DIS</b>	A duct mount temperature / barometric pressure/RH transmitter or dew point with a 2-line LCD display, three 4-20mA outputs, 2 programmable alarm relays and a RS232 programmable output
<b>RO120-SC</b>	RO120 Sample Chamber
<b>RO120-AB</b>	For RO120 probes only, an adapter board that the sensor plug into and the customer is allowed to hard wire to a terminal block

**GENERAL:**

**Speed of Response: 12 Second response time that is T63, 0 to 90%**

**Storage temperature 150C**

**Cable length: 6 feet, for other lengths contact factory: (for remote and duct mount configurations only)**

**Probe length: 8in (20.3cm): (for remote and duct mount configurations only)**

**Probe Material: 316 stainless steel (for remote and duct mount configurations only)**

**Filter: Sintered filter top, removable**

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(for remote and duct mount configurations only)

Sensor: Polymer-capacitive: for all configurations

Fitting: Adjustable  $\frac{3}{4}$  NPT (for remote only)

Connections: Screw terminals  
Wire (20-24awg) standard wire required



RO120-SC (Sample Chamber)



RO120-AB

Sample chamber dimensions (LWD): 5" (127mm) x 3.5" (88.9mm) x

2.125" (53.9mm)

**OPTIONAL:**

Sample test chamber:

Adapter Board

Field Replaceable Sensor tip:

RO120-SC

RO120-AB (for probe only)

FRRO for RO120

FRROP for RO120-P

FRROB for RO120-B

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**DIS:**

**A 2-line LCD display with three 4-20mA outputs, 2 programmable alarm relays and a RS232 programmable output**

**POWER REQUIREMENTS: 18 to 30Vdc, unregulated, 200 mA max**

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