

# NOVA

Dependable Gas Analysis Solutions



## 207RT Series PORTABLE DEW POINT TRANSMITTER

### APPLICATIONS

For continuous dew point monitoring of atmospheric gas from endothermic generators.

### FEATURES

- Standard range of -40°F to +104°F (-40°C to +40°C)
- No moving parts
- 4-20mA output to controllers and recorders
- Long-life dielectric polymer sensor
- May be calibrated in the field
- Bright digital readout
- Runs on 12 to 24VDC
- Mounts anywhere on gas main between generator and furnace
- Sensor easily replaced if contaminated
- Factory calibrated to NIST traceable standards

### OPTIONS

- Display also available loose for remote panel mounting (207RT-PM)
- Also available with display and sensor only - as a spare during calibration or repair periods - flow-through chamber remains attached to process
- Calibration kit
- Power supply optionally available

### CALIBRATION

- Calibration is easily performed in the field using the optional calibration kit (Part no. NDPCK-02).
- Alternatively, the analyzer may be returned to Nova for a certified calibration



207RT - with flow-through chamber, rotameter, & attached display

## DESCRIPTION

The Nova 207RT Series Continuous Dew Point Transmitters have been designed primarily for accurate dew point measurement of atmosphere gas from endothermic gas generators. The 207RT may be mounted anywhere on the gas main between the generator and the furnace. The dielectric polymer sensor provides stable and accurate dew point measurements and is not affected by most gas compositions.

Because there is no built-in sample pump to draw in a sample, the positive pressure produced by the generator pushes the sample into the flow-through chamber. The sample flow is shown on a small rotameter with valve. The analyzer then reads and displays the dew point continuously.

## MODELS

- 207RT: with flow-through chamber, rotameter, and attached display
- 207RT-PM: same as 207RT except with display supplied loose for remote panel mounting
- 207NFT: sensor and display without flow-through chamber - for use as spare

## SPECIFICATIONS

*Nova reserves the right to specification changes which may occur with advances in design without prior notice.*

Description	
<b>Method of Detection:</b>	Dielectric polymer sensor that changes capacitance with moisture variation
<b>Ranges Available:</b>	-40°F to +104°F (-40°C to +40°C) Dew Point
<b>Resolution:</b>	1°F (1°C) Dew Point
<b>Accuracy and Repeatability:</b>	±1°F (±1°C) Dew Point
<b>Drift:</b>	Better than 1% of full scale per month
<b>Response Time (T-90):</b>	Less than 30 seconds
<b>Ambient Temperature Range:</b>	0° to 120°F (-18° to 49°C)
<b>Linearity:</b>	Better than 1°F (1°C) Dew Point
<b>Size and Weight:</b>	Approx. 10" L x 6" W x 4" D @ 5 lbs (26 x 15 x 10 cm @ 2.3 kg)
<b>Power:</b>	12 to 24VDC
<b>Output Options:</b>	4-20 mA included standard
<b>Alarms:</b>	none available

## UNIQUE APPLICATIONS

The 207RT Series should not be used to measure dew points in oily vapors or when trace amounts of sulfur trioxide (SO<sub>3</sub>), chlorine (Cl<sub>2</sub>), hydrogen chloride (HCl), or ammonia (NH<sub>3</sub>) are present. All Nova analyzers are built using proven technologies and techniques. If this product does not suit your application, please contact Nova at 1-800-295-3771. In many cases, we are able to build an analyzer specific to your needs.



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