



Canada

270 Sherman Avenue N.

Hamilton, ON L8L 6N5

Phone: (905) 545 2003 • **Fax:** (905) 545 4248

Email: sales@nova-gas.com or websales@nova-gas.com **United States**

1925 Pine Avenue

Niagara Falls, NY 14301

Phone: (716) 285-0418 • **Fax:** (716) 282-2937

Item # Model 253, Model 253, Continuous Low Range Dew Point Analyzer, Wall mounted

The Nova 253 Series Continuous Analyzers for Low Range Dew Point have been designed primarily for accurate dew point analysis of heat treating atmospheres, instrument air, or other applications which may have typical dew points that are lower than what can be read by standard dew point analyzers, such as the Nova 257 Series. For analysis of dry non-corrosive industrial gases, or dry oil-free air. The dielectric ceramic sensor provides stable and accurate measurements and is not affected by most

[+ more](#)



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Specifications

Method of Detection

Dielectric polymer sensor that changes capacitance with moisture variation

Ranges Available

-112°F to +86°F
-80°C to +30°C

Resolution

1°

Accuracy & Repeatability	$\pm 2^{\circ}\text{C}$ Dew Point from -80 to -17°C ; $\pm 1^{\circ}\text{C}$ Dew Point from -17 to 30°C $\pm 2^{\circ}\text{F}$ Dew Point from -112 to 0°F ; $\pm 1^{\circ}\text{F}$ Dew Point from 0 to 86°F
Drift	$\pm 2\%$ of full scale per month maximum
Response Time (T-90)	Less than 60 seconds to T90 at higher dew points; Lower dew points may take an hour or more to dry down from ambient air
Ambient Temperature Range	-18 to 49°C 0 to 120°F
Linearity	$\pm 2^{\circ}\text{F}$ / $^{\circ}\text{C}$ over measurement range
Size & Weight	Approx. 51 x 41 x 26 cm @ 10 kg (20" H x 16" W x 10" D @ 20lbs)
Power	115 VAC, 60 Hz 220 VAC, 50 Hz also available
Output Options	4-20mA output, isolated or non-isolated
Alarms	High or low dew point alarm with relay contact
Hazardous Area Rating Options	General Purpose, Non-Hazardous

Applications

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For checking lower range dew points of air, hydrogen/nitrogen atmospheres or other dry-oil free gases.

Features

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- Low range of -80° to +30°C (or -112° to +86°F) dew point
- Rugged design that is easy to operate
- Use on any non-corrosive industrial gases or air
- Long-life dielectric ceramic sensor
- Can be calibrated in the field
- Bright digital readout
- Built-in sample pump or pressure regulator, and filter
- 4-20mA output, non-isolated
- NEMA 4 enclosure standard

Options

- High or Low dew point alarm
- Isolated 4-20mA recorder outputs
- NEMA 12, 4X, or rack mount enclosures available

Calibration

- On analyzed dry nitrogen for zero
- On known, current ambient air dew point for span
- Alternatively, the analyzer may be returned to Nova for a certified calibration

Unique Applications

The 253 Series may not be appropriate for use when ammonia or other corrosive gases 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.