

257 Series

CONTINUOUS DEW POINT ANALYZER









APPLICATIONS

For continuous dew point analysis of heat treat furnace gases, atmosphere gases, compressed air, and other similar applications.

FEATURES

- Standard range of -40° to 104°F (-40° to 40°C) Dew Point
- · Rugged design that is easy to operate
- · Use on any non-corrosive gas
- Long-life dielectric polymer sensor
- May be calibrated in the field
- Bright digital readout
- Built-in sample pump, oil vapor filter, and flow meter
- Sensor easily replaced if contaminated
- Factory calibrated to NIST traceable standards

OPTIONS

- Compressed Air Configuration for dew point at line pressure
- 4-20mA recorder output
- Calibration kit
- Carbon potential calculation, using input from customer-supplied Type K thermocouple

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



DESCRIPTION

The Nova 257 Series Continuous Dew Point Analyzers have been designed primarily for accurate dew point measurement of exothermic/endothermic heat treating atmospheres and other similar applications.

The dielectric polymer sensor provides stable and accurate dew point measurements and is not affected by most gas compositions (see below.) A built-in sample pump draws in samples that are of insufficient pressure from the process. The sample flow is shown on a small rotameter with valve. The analyzer then reads the dew point continuously.

MODELS

- 257N4: applications at atmospheric pressure
- 257CAA-B compressed air applications 5 to 125 psig
- 257CAA-C compressed air applications 5 up to 3000 psig

SPECIFICATIONS

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

Description	
Method of Detection:	Dielectric polymer sensor that changes capacitance with moisture variation
Ranges Available:	-40° to 104°F (-40° to 40°C) Dew Point (other ranges available)
Resolution:	1°F (1°C) Dew Point
Accuracy and Repeatability:	±1°F (±1°C) Dew Point
Drift:	Less than 1% of full scale per month
Response Time (T-90):	Less than 60 seconds after initial purge down
Ambient Temperature Range:	0° to 120°F (-18° to 49°C)
Linearity:	Better than 1°F (1°C) Dew Point
Size and Weight:	Approx. 20" H x 16" W x 10" D @ 20lbs (51 x 41 x 26 cm @ 10 kg)
Power:	115VAC 60 Hz (other voltages available)
Output Options:	4-20mA
Alarms:	High or low dew point alarms with LED (optional)

UNIQUE APPLICATIONS

The 257 Series should not be used to measure dew points when trace amounts of sulfur dioxide (SO₂), sulfur trioxide (SO₃), chlorine (Cl₂), hydrogen chloride (HCl), or ammonia (NH₃) 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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