

# NOVA

Dependable Gas Analysis Solutions

## 203 Series

### PORTABLE LOW RANGE DEW POINT ANALYZER



#### APPLICATIONS

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

#### FEATURES

- Low range of  $-112^{\circ}$  to  $+68^{\circ}$ F (or  $-80^{\circ}$  to  $+20^{\circ}$ C) Dew Point
- Easy to operate
- Fast warm-up and response
- Use on any non-corrosive industrial gases or air
- Long-life aluminum oxide sensor
- Can be calibrated in the field
- Large LCD digital readout with backlight
- Built-in sample pump, filter, and flow meter
- No external adjustments to make
- Rugged bench top enclosure

#### OPTIONS

- Recorder outputs of 0-1V or 4-20mA
- Rugged "K" style weathertight suitcase enclosure
- High or low dew point alarm
- Built-in sampling pump



Bench Top (BT) Enclosure  
Model 203BP-BT



Suitcase (K) Enclosure  
Model 203K

NOVA ANALYTICAL SYSTEMS

[www.nova-gas.com](http://www.nova-gas.com)

## DESCRIPTION

The Model 203 Series Portable Dew Point Analyzers have been designed primarily for accurate dew point measurement of dry non-corrosive industrial gases, or dry oil-free air. The aluminum oxide sensing element varies its electrical capacitance in direct proportion to variances in the sample gas dew point.

The 203 Series can have either a built-in pressure regulator for positive pressure samples, or a built-in sample pump for atmospheric pressures, or both. The sample flow is shown on a flowmeter on the front or top panel. The dew point is shown on a large LCD display with a switchable backlight. A 0-1V or 4-20mA output is optionally available. Some models have rechargeable battery operation.

Please contact Nova for the correct version for your application.

## SPECIFICATIONS

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

Description	
<b>Method of Detection:</b>	Aluminum oxide capacitance sensor
<b>Ranges Available:</b>	-112° to +68°F (-80° to +20°C) (other ranges available on special order)
<b>Resolution:</b>	1°F Dew Point (1°C)
<b>Accuracy and Repeatability:</b>	± 1°F from -76° to +68°F Dew Point; ± 2°F from -112° to -76°F ± 1°C from -60° to +20°C Dew Point; ± 2°C from -80° to -60°C
<b>Drift:</b>	± 1°F Dew Point max. for temperatures between -20 to +40°F ± 0.5°C Dew Point max. for temperatures between -29 to +4°C
<b>Response Time (T-90):</b>	Less than 30 seconds at higher dew points; Lower dew points may take up to 1 minute (sensor must be in pre-dried state)
<b>Ambient Temperature Range:</b>	0° to 120°F (-18° to 50°C)
<b>Linearity:</b>	± 2°F / C over measurement range
<b>Size and Weight:</b>	BT style - approx. 9" H x 8" W x 10" D @ 8 lbs (23 x 20 x 25 cm @ 3.6 kg) K style - approx. 14" W x 6" H x 10-1/2" D @ 12 lbs (35 x 15 x 26 cm @ 5.5 kg)
<b>Power:</b>	115VAC 60 Hz for recharging (230VAC 50 HZ also available)

## UNIQUE APPLICATIONS

The 203 Series should not be used to measure dew points when trace amounts of acidic gases such as sulfur dioxide (SO<sub>2</sub>), 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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