HCD5000™ Hydrocarbon Dewpoint Analyzer

KEY FEATURES

- ✓Direct, First Principle Measurement
- ✓Highly Reliable
- ✓No Consumables
- ✓Self Cleaning
- ✓Immune to Most Contaminants
- ✓Accurate and Unambiguous
- ✓No Calculation or Model Errors
- ✓Distinguishes Between Hydrocarbon and Water
- ✓Fully Automated
- ✓Works at Line Pressure
- ✓No Moving Parts
- ✓No Carrier Gas or Replacement Parts
- ✓Sensor Not Damaged by Contaminants, Slugs or Aerosols

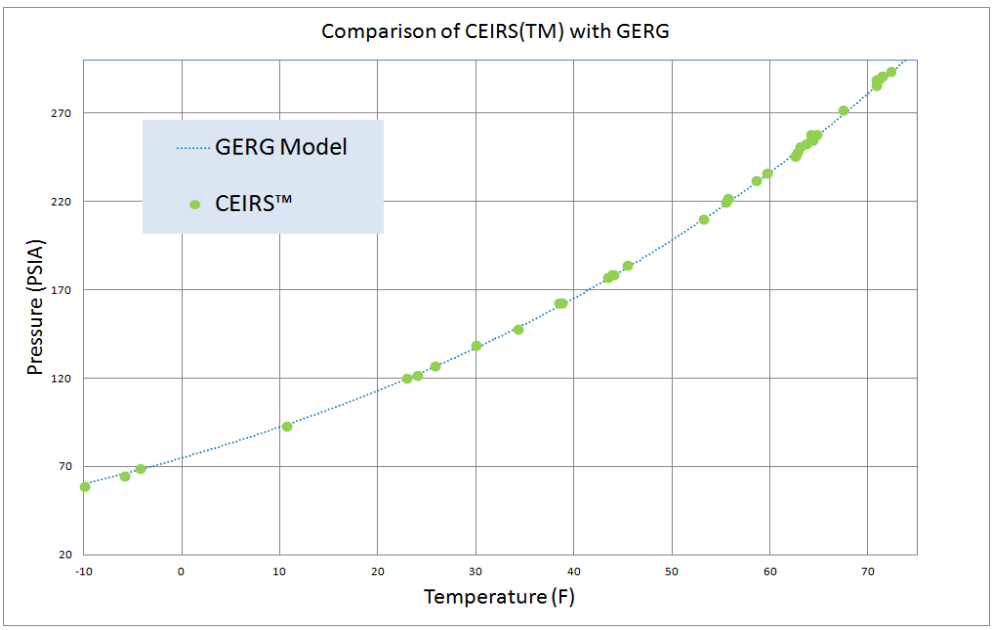
ZEGAZ Instruments HCD5000™ hydrocarbon dewpoint analyzer is the most advanced dewpoint measurement system available.

It has an accuracy of ±0.5 ºC (±0.9 º F), distinguishes between hydrocarbon and water dewpoints and provides highly accurate, measurements. It is based on CEIRS™ (Chilled-Evanescent Infrared Spectroscopy), a patented method.

ZEGAZ Instruments products are the only analyzers in the world that use CEIRS™, a spectroscopic approach that determines the dewpoint, while unambiguously determining whether it was water or hydrocarbon dewpoint.

The CEIRS™ method uses advanced IR technology. It is immune to contaminations. It is designed for remote operation at line pressure up to 2000psi. It provides 4 analog outputs as well as 3 digital alarms, and serial communications.

HCD5000™ has unprecedented accuracy and repeatability. The graph below shows the correlation between theoretical and HCD5000™ measured values.



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ZEGAZ instruments

SPECIFICATIONS

Performance

Dewpoint Measurement Range†	126°F (70 °C) below ambient temp.
Lowest Detectable Dewpoint	-40 °F (-40 °C)
Highest Detectable Dewpoint	+131°F (+55°C) 9 °F (5°C) below ambient temp.
Measurement Time	2-12 Minutes
Dewpoint Accuracy	±0.9 °F (±0.5 °C)
Dewpoint Repeatability	±0.4 °F (±0.2 °C)
Dewpoint Resolution	±0.1 °F (±0.1 °C)

Application Condition

Operating Temperature	-4 to 122°F (-20 to +60°C)
Storage Temperature	-22 to 140°F (-30 to +60°C)
Process Pressure	Up to 2000psi (135bar)
Flow Rate	0.3-1.5 SLM

Electrical and Communication

Input Voltage	100-264 VAC, DC Optional
Power Usage	120W Peak, <30W Average
Signal Outputs	4x4-20mA, 3xDO, RS-232, RS-485, Ethernet
Protocol	Modbus Gould RTU, Daniel RTU

Physical

Size (not including sample system)	14”x14”x6” (355x355x150mm)
Weight (not including sample system)	40lbs (18Kg)

Certification

Hazardous Location	CSA Class I, Div. 1, Group B,C&D, T6 ATEX/IECEX II 2 G Ex db IIB+H2 T6 Gb
Other	IP66, CE, ISO 9001

† The cooling range is a function of several different factors, including ambient temperature, flow rate, etc. and may be different