

## 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.*

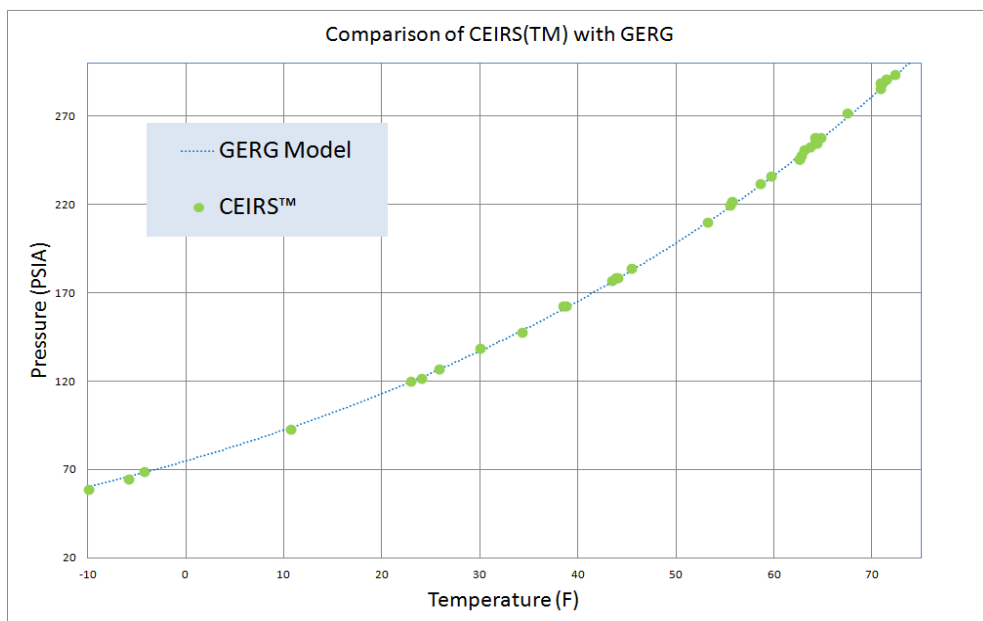
It has an accuracy of  $\pm 0.5$  °C ( $\pm 0.9$  ° F), distinguishes between hydrocarbon and water dewpoints and provides highly accurate, measurements. It is based on CEIRS™ (Chilled-Evanescent Infrared Spectroscopy), a patented method.



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.



## 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 140°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