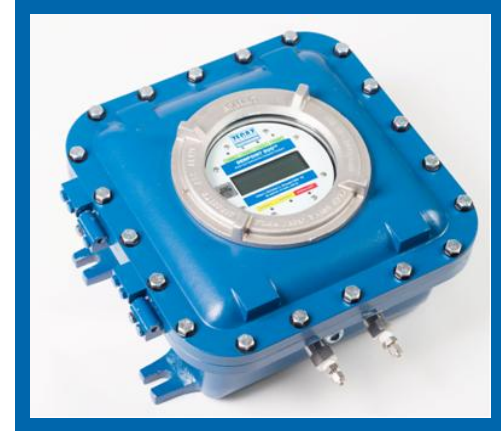


## KEY FEATURES

- ✓ Direct, First Principle Measurement
- ✓ NIST Tested
- ✓ 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 DewPoint Duo™ water and hydrocarbon dewpoint analyzer is the most advanced dewpoint measurement system available, capable of measuring both dewpoints simultaneously.

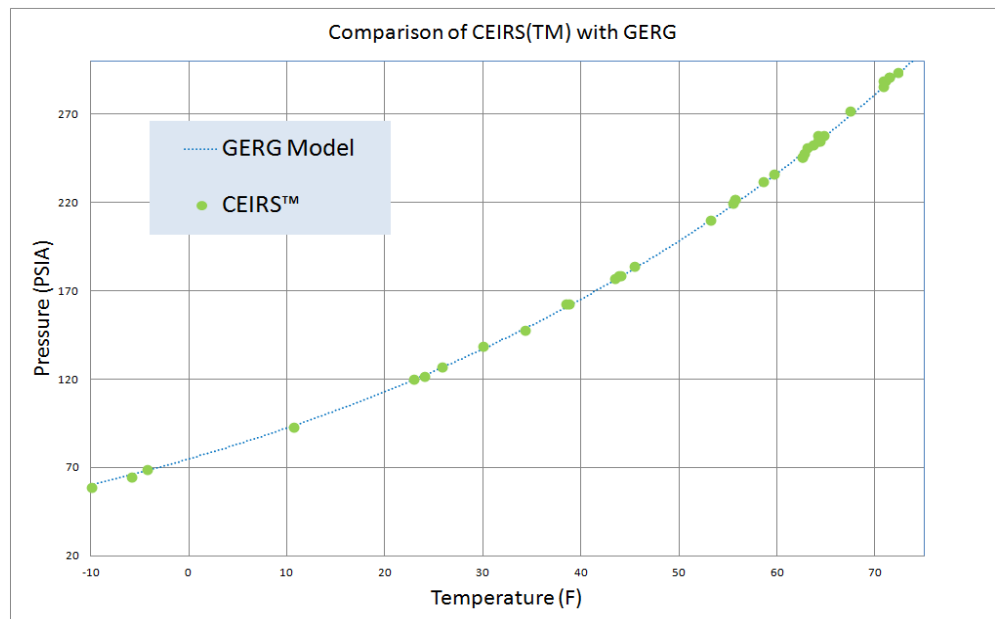
It has an accuracy of  $\pm 0.5$  °C ( $\pm 0.9$  ° F), distinguishes between hydrocarbon and water dewpoints and provides highly accurate, measurements. It is based on CEIRS™ (Chilled-Evanescent Infrared Spectroscopy), a patented method.



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.

DewPoint Duo™ has unprecedented accuracy and repeatability. The graph below shows the correlation between theoretical and DewPoint Duo™ 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)<br>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<br>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