Aurora 19
Reliable Moisture Measurement

GE’s Aurora 19 analyzer uses tunable diode laser absorption spectroscopy (TDLAS) to accurately measure moisture in a variety of background gases. The Aurora 19 analyzer is suitable for installation in safe areas and operates over a wide range of environmental conditions. Aurora 19’s fast response immediately alerts when moisture concentrations are out of compliance; once corrected, gas can be quickly cleared for process normalization.

The Aurora 19 analyzers have an intuitive interface that makes them easy to learn, configure and operate. With a local service team to support them, you have the confidence of knowing that Aurora 19 analyzers are always ready for immediate moisture measurement. With power and gas lines easily connected, the Aurora 19 moisture analyzer provides a wide range of reliable measurement with accuracy and fast response you need for immediate alerts to process upsets or out-of-compliance moisture concentrations.
Specifications

**Range**
- Calibrated Range: 0 to 5000 ppmv
- Lower Detect Level: 5 ppmv
- Dew/Frost Point\(^1\): -85.9°F to 27.3°F (-65.5°C to –2.6°C frost point @ STP of 25°C, 14.696 psia)
- Process Dew/Frost Point\(^2\): Process or equivalent dew point/frost point by calculation with process pressure signal (4-20 mA) or constant

**Absolute Humidity**
- 0.24 to 237 (3.8 to 3,803 mg/m\(^3\)) lbs/MMSCF

**Accuracy**
- Parts Per Million by Volume: +2% of reading or 4 ppmv
- For CO\(_2\) applications: +3% of reading or 5 ppmv
- Repeatability: ±2 ppmv (parts per billion by volume) below 200 ppm. 1% above 200 ppm

**Pressure**
- Operating Sample Cell Pressure: 69 to 172 Kpa (10 to 25 psia)
- Process Pressure: 102 psig (0.69 MPa)

**Flowrate**
- Sample Cell Flowrate: 10 to 60 SLH (0.4 to 2 SCFH); 30 SLH (1 SCFH) nominal
- By-pass Fast Loop: 5 to 10X of flowrate through sample cell

**I/O**
- Display: Backlit LCD. Three programmable simultaneous parameters. Alphanumeric status and diagnostic display. LEDs for power, laser temperature stability, keypad lockout
- Power Analyzer: 100-240 VAC, 50-60 Hz
- Analog Outputs: Three 0/4-20 mA DC (source) with 500 ohm load. User programmable for any parameter and scalable. Complies with NAMUR protocol for analog signals
- Analog Input: Loop powered 4-20 mA input for remote pressure transmitter. Aurora supplies 24 VDC
- Digital Interface: Two programmable digital communications ports RS232, RS485 with multidrop capability and assignable address, MODBUS RTU protocol
- User Interface: Programmable “through-the-glass” via magnetic stylus

**Enclosure**
- Ingress Protection: IP-54
- Net Weight: 37 kg (100 lb)
- Dimensions: 6.97 H (177) x 19.92 L (506) x 18.86 W (479)
- Temperature:
  - Operating: -20 to 65°C (-4 to 149°F)
  - Storage: -20 to 70°C (-4 to 158°F)

For more information, visit [www.ge-mcs.com](http://www.ge-mcs.com)