



ALOHA H₂O

Gas Analyzer for Trace Moisture in Ammonia

GASES & CHEMICALS

CEMS

ENERGY

ATMOSPHERIC

SEMI & HB LED

SYNGAS

LAB & LIFE SCIENCE

Designed for trace moisture in ammonia analysis, the ALOHA H₂O offers:

- Low parts per billion (ppb) moisture detection capability in ammonia (NH₃)
- Absolute measurement (freedom from calibration)
- Extremely low cost of ownership
- Great ease of use
- Wide dynamic range – over four orders of magnitude
- Unprecedented speed of response
- Clean technology

A superior analytical solution for your HB LED needs

The ALOHA H₂O moisture analyzer provides High Brightness LED makers with the exceptional detection limits, accuracy, reliability, speed of response and ease of operation that Tiger Optics customers have come to expect. Manufacturers of HB LEDs rely on Tiger Optics' family of proven Continuous-Wave Cavity Ring-Down Spectroscopy-based moisture sensors to ensure the ammonia gas used in the process are of the high quality necessary to produce the best performing LEDs.

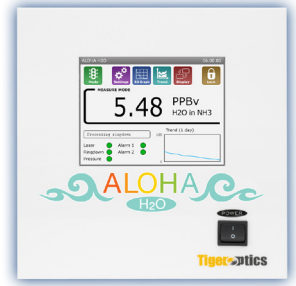
The ALOHA H₂O analyzer is extremely cost-effective, utilizing a very compact analyzer design. Users can measure moisture in ammonia and inerts. There are no off-line periodic sensor maintenance procedures, no span calibrations, no purifier replacement and no pump rebuilds required. The ALOHA H₂O is fully self-calibrating and the "bright" choice for your detection needs!

Tigeroptics

21ST CENTURY SPECTROSCOPY

ALOHA H₂O

Gas Analyzer for Trace Moisture in Ammonia



Performance, H₂O in NH₃:

| | |
|--|--------------------------------|
| Operating range | 0 – 20 ppm |
| Detection limit (LDL, 24 h peak-to-peak variation) | 10 ppb |
| Sensitivity (3σ) | 8 ppb |
| Accuracy (greater of) | ± 4% or 1/2 of LDL |
| Speed of response | < 3 minutes to 95% |
| Environmental conditions | 10°C to 40°C |
| | 30% to 80% RH (non-condensing) |
| Storage temperature | -10°C to 50°C |

Gas Handling System and Conditions*

| | |
|------------------|---|
| Wetted materials | 316L stainless steel 10 Ra surface finish |
| Gas connections | 1/4" male VCR inlet and outlet |
| Leak tested to | 1 x 10 ⁻⁹ mbar l / sec |
| Inlet pressure | 10 – 125 psig (1.7 – 9.6 bara) |
| Flow rate | Up to 1.8 slpm |
| Sample gases | Ammonia (NH ₃) and inert matrices |
| Gas temperature | Up to 60°C |

*Vacuum source required
U.S. Patent # 7,277,177

Dimensions

| | H x W x D [in (mm)] |
|---|--------------------------------------|
| Standard sensor | 8.73 x 8.57 x 23.6 (222 x 218 x 599) |
| Sensor rack (fits up to two sensors) | 8.73 x 19.0 x 23.6 (222 x 483 x 599) |

Weight

| | |
|-----------------|------------------|
| Standard sensor | 34 lbs (15.4 kg) |
|-----------------|------------------|

Electrical

| | |
|--------------------|--|
| Alarm indicators | 2 user programmable 1 system fault Form C relays |
| Power requirements | 90 – 240 VAC, 50/60 Hz |
| Power consumption | 40 Watts max. |
| Signal output | Isolated 4–20 mA per sensor |
| User interfaces | 5.7" LCD touchscreen 10/100 Base-T Ethernet 802.11g Wireless (optional) RS-232 Modbus TCP (optional) |

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