

WDG HP/II/IQ SMART FLUE GAS OXYGEN ANALYZER

Close-coupled convective design for high particulate applications. Suitable for flue gas temperature up to 2800°F (1537°C). Completely field serviceable.



SPECIFICATIONS

Principle of Operation: Zirconium oxide for net oxygen measurement

Output Range: From 0-1% to 0-100% oxygen

Accuracy: $\pm 0.75\%$ of measured value or $\pm 0.05\%$ oxygen, whichever is greater

Response: 90% of a step change <30 seconds with 24" probe

Drift: < 0.1% of cell output per month (<0.005% O₂ per

month with 2% O₂ applied)

Max. Flue Gas Temp. / Probe Type:

1300°F (704°C) / 316 SS

1875°F (1024°C) / 310 SS

2800°F (1537°C) / Ceramic

Probe Lengths: 24", 36", and 48" (0.61m, 0.91m, and 1.22 m)

Max. Sample Dewpoint: 392°F (200°C). High dewpoint sensors are available for sample dewpoints up to 700°F (371°C).

Alarm: Alarm can be set to oxygen, start of calibration, start of verify, or both.

Contact Rating: 1 A, 30 V max., noninductive load, AC or DC

Diagnostics: Watchdog timer and service alarm (trouble alarm). System test for A/D, RAM, and EEPROM. Twenty entry event log.

Communications: RS-485, RS-232 (IQ Links), HART[®] Option available.

Analog Output: Isolated linear current output. Select O₂, cell temperature, thermocouple mV or cell mV. The output can be 4-20 mA, 0-20 mA, 20-4mA or 20-0 mA and is fully scalable. Hold or track during calibration and select degree of damping. Maximum load 1100 ohms.

Sample Pressure:

± 10 in. water gauge

Enclosure: Lift-off NEMA 3R, weather resistant, stainless steel. Optional hinged NEMA 4X (IP56), purged, and floor mount versions available.

Environment:

Ambient Temp: -5°F to 149°F (-20°C to 65°C)

Operating Temp: -20°C to 85°C (See Note 1)

Relative Humidity: 10% to 90%, non-condensing

Power Requirements: 115 VAC, $\pm 10\%$, 47-63 Hz, 640 VA max. (690 VA max. with floor mount option); 230 VAC, $\pm 10\%$, 47-63 Hz, 1890 VA max. (1940 VA max. with floor mount option)

Calibration: Oxygen cell lifetime extender. Calibrate or verify calibration. Store last calibration and verification data. Selectable calibration gas run time and process recovery time. Timed automatic calibration with optional Remote Calibration Unit.

Calibration Gas Requirements: Use calibration gases @ 10 psig, 1.5 scfh (0.70 kg/cm², 0.7 L/min.)
O₂ Span Gas: Air or from 1.0 to 100% O₂, balance N₂
O₂ Zero Gas: 2% or from 0.1 to 10% O₂, balance N₂

System Compliance:

EMC Directive: 2004/108/EC

Low Voltage Directive: 73/23/EEC

OPTIONAL

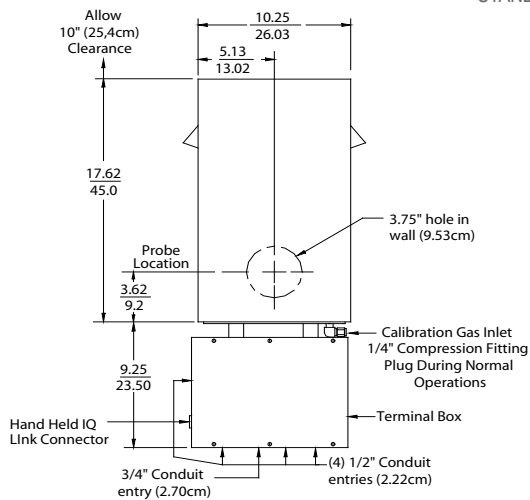
IQ Link provides a local interface to set up and display system parameters, initiate calibrations, initiate system tests, and troubleshooting. Handheld or dedicated wall mount versions available. Refer to Bulletin P-620 for more IQ Link information.

WDG HP/II/IQ ANALYZER

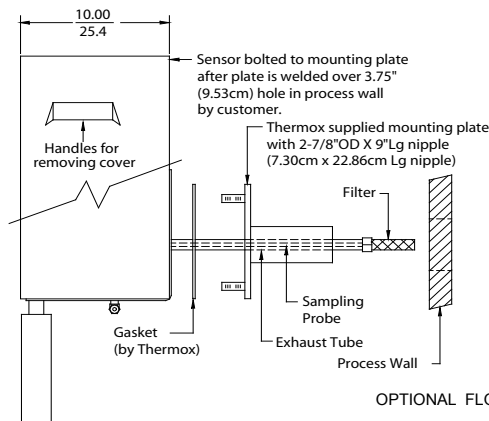
STANDARD LIFT-OFF SENSOR ENCLOSURE

APPROX. WEIGHT: 37.6 LB (17KG)

INCHES
CM



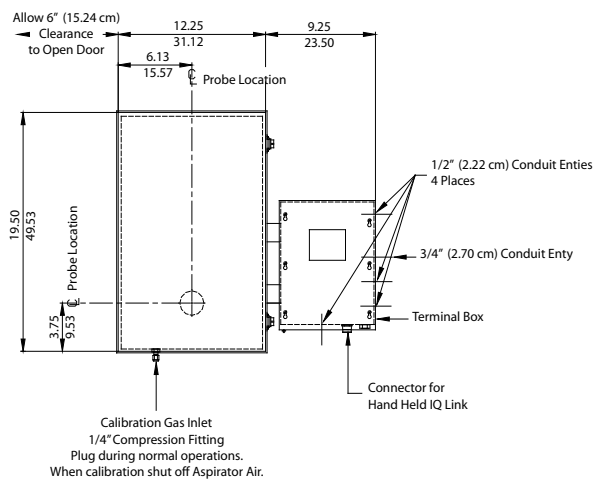
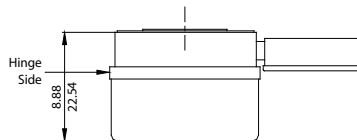
STANDARD MOUNTING - PREFERRED METHOD



OPTIONAL FLOOR MOUNT VERSION AVAILABLE (VERTICAL PROBE)

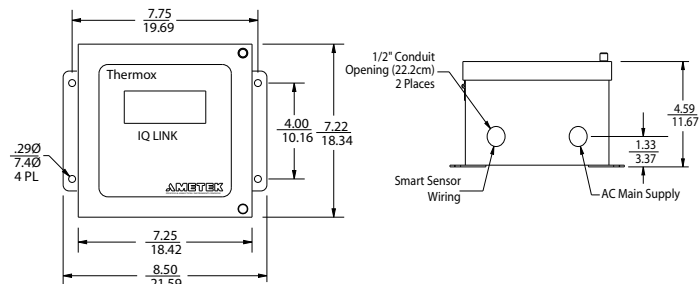
OPTIONAL: HINGED SENSOR ENCLOSURE

APPROX. WEIGHT: 53 LB (24 KG)



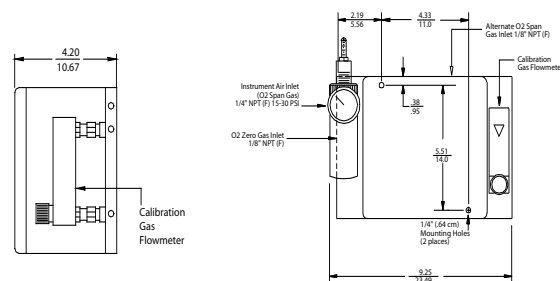
WALL MOUNT IQ LINK - OPTIONAL

APPROX. WEIGHT: 10 LB / 4.5 KG



REMOTE CALIBRATION UNIT

RCU ENCLOSURE NEMA 4X - APPROX. WEIGHT: 8.0 LB (3.6 KG)



NOTES:

1. Operating temperature of electronics inside the electronics housing is measured by IQ Link, RS247 Web Enabled Remote System, Series 200 Host, or Hart Communicator.
2. All static performance characteristics are with operating variables constant.
3. System accuracy referenced to 0.1 to 10% calibrated range.
4. Response is to calibration gas.

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P530 (8/07)

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