

CGAS-D-HF Transmitter

Digital Transmitter with Electrochemical Hydrogen Fluoride (HF) Sensor

Dimensions: Size	5.0 x 5.0 x 3.0 in (127 x 127 x 76 mm) (without optional splash guard)
Weight	14 oz / 400 g
Construction:	Black ABS / Polycarbonate blend, water/dust tight, corrosion resistant
Sensor: Type	Electrochemical
Life Span	Approximately 2 years (application dependent)
Gases Detected:	Hydrogen Fluoride (HF)
Sensor Range:	0 – 10 ppm
System Power:	4-wire: 16-30 VDC, 3W, Class 2 4-wire: 12-27 VAC, 50-60 Hz, 3 VA, Class 2
Temperature:	0°C to +40°C (32°F to 104°F)
Humidity:	15 to 90% non-condensing, abrupt change of RH might cause a zero reading transient.
Indicators:	LCD digital display, 2 line x 16 character, backlit
Communication	BACnet® MS/TP (version 1 rev 14) RS-485, or Modbus® RTU (version 1.1b3) RS-485
Relay:	Optional SPDT relay rated 30 volts, 2 amp max
Audible:	None
Minimum Detection:	0.1 ppm (with regular calibration maintenance of sensor)
Accuracy:	no data available
Repeatability:	no data available
Sensitivity Drift:	<10% per 6 months
Response Time (T₉₀):	<90 seconds at 20°C / 68°F calculated from 4 min exposure time
Resolution:	Display resolution 0.1 ppm (100 ppb), sensor resolution <0.2 ppm at 20°C / 68°F
Warm Up Time:	4 minutes after power up (to full operation)
Cross Sensitivity:	C ₂ H ₄ O ₂ @ 100 ppm = 100 ppm, Alcohols @ 1,000 ppm = 0 ppm, CO ₂ @ 5,000 ppm = 0 ppm, CO @ 100 ppm = 0 ppm, Cl ₂ @ 1 ppm = 0.7 ppm, Hydrocarbons @ % range = 0 ppm, H ₂ @ 3,000 ppm = < 1 ppm, HCl @ 10 ppm = 6 ppm, SO ₂ @ 20 ppm = 16 ppm
Safety:	Automatic resetting thermal overload fuse (reset capabilities to 500 times)
Wiring:	VDC or VAC (ground referenced) 4-conductor shielded, 16 AWG stranded within conduit, network wiring (daisy-chain)
Sensor Mounting:	Heavier than air. Mount 6 - 12 in / 15 - 30 cm from the floor (or lowest point)
Monitoring Area:	3000 ft ² / 279 m ²
Certifications: (tested to)	CSA: C22.2 NO.205-12 UL: UL508 (Edition 18): 2018 CE: EMC Directive 2014/30/EU, EN50270:2015, Type 1, EN61010 Listed by BTL RoHS compliant circuit boards This device complies with part 15 of the FCC Rules
Note:	HF diffuses relatively quickly through porous substances & is a dangerous gas that boils near room temperature. Never install gas detectors in the direct path of moving air.

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