

► GD1 H2S

H2S laser detection barrier



Technical specifications

Technology: H2S laser barrier with absorption infrared

IR source: Class 1 tunable laser diode, non-hazardous for eyes

Calibration: Factory-set, no on-site recalibration

Available scales: 0-200 ppm*m, 0-500 ppm*m, 0-1000 ppm*m, 0-2000 ppm*m, 0-5000 ppm*m ou 0-20 000 ppm*m

Performances:

- Range: 5 - 75 m
- Autotest: Continuous
- Accuracy: < ±4% of full scale
- Stability: < ±4% of full scale
- Response time: < 5 seconds

Optics:

- Alignment ±0.30°
- Optics: Heated (transmitter and receiver)
- Fouling: Resistant to 98% signal loss

Power supply: 24 Vcc (18 to 32 Vcc)

Power consumption: < 15W

Output signals: 4-20 mA (selectable as sink or source) and HART protocols

Operating conditions:

- Temperature: -55 to + 65°C
- Humidity: 100% HR

Certifications:

- ATEX (transmitter and receiver): II2G Ex d IIC T6/T5 Gb
- Degree of protection: IP66/IP67 DIN 60529
- SIL: Compatible with SIL2 systems

Materials: Stainless steel 316L (transmitter and receiver)

Warranty: 5 years

Product description

The **GD1 H2S laser detection barrier** has been designed to provide reliable detection in the most demanding environments, such as offshore platforms or water treatment sites. It uses a tunable laser diode for long-range and high reliability. This new technology delivers exceptional performance and minimum maintenance.

Unlike other toxic gas detection principles (semiconductor or electrochemical cell), the **GD1** requires no recalibration and can replace numerous point sensors. Optical and mechanical designs ensure rapid response, long shelf life, excellent stability, and low maintenance and operating costs.

The heart of this linear H2S detection barrier is a tunable laser diode that makes the **GD1** insensitive to disturbances such as sun, rain, and fog. The laser uses a specific absorption line that eliminates interference with other compounds. It is certified for use in ATEX zones and compatible with SIL2 system.

► GD1 specifications and assets

- H2S detection laser barrier with a range of 5 to 75 meters
- High sensitivity for personal safety, with virtually instantaneous response time
- Optical system tolerant to vibration and misalignment
- Heated optics (anti-condensation) on transmitter and receiver
- Factory calibration for life, no on-site calibration required
- No sensitive elements, no sleep effect
- Insensitive to interference, no drift
- Compatible with SIL2 systems
- Standard Hart output
- 5-year warranty

