

9. TECHNICAL SPECIFICATIONS

GENERAL

Detection method	Near IR laser scanning
IR-Source	Tunable laser diode
	Laser Class 1, eye safe
Detected gas	H ₂ S
Range	0 - 200 ppm*m (default)
Path length	5 - 75 m
Self-test	Continuous
Calibration	Factory set, no field recalibration
Safety Integrity Level	2 (Functional test interval of once per year)

PERFORMANCE

Accuracy	< ±8 ppm*m (<±4% of full range)
Repeatability	< ±8 ppm*m (<±4% of full range)
Response time	5 sec.

OPTICS

Alignment	±0.3°
Optics Heated (Transmitter and Receiver)	
Obscuration	>98% to signal Beam block (2 mA)
Optional:	Warning (3 mA)
	>90% to signal "Early clean optics"

OUTPUT SIGNAL

Standard	4-20 mA sink or source (factory set), max. load impedance 500 Ω, HART®
Fault signals	Fault 1 mA Beam block 2 mA Option: Warning 3 mA
Zero filter	The "Zero filter" is by default set to filter any noise/measurement below 10 % Full Scale.

ELECTRICAL

Power supply	24 V DC nominal, range 18-32 V DC
Power consumption	< 15 W (RX: <5W + TX: <10W)

Cable entry
System fuse

M25
Power to the GD1 shall be protected by 1A fuse

TEMPERATURE RANGE

Operating
ATEX Flameproof
IECEx Flameproof

-55°C to + 65°C (-67°F to +149°F)
-55°C to + 75°C (-67°F to +167°F)
-55°C to + 75°C (-67°F to +167°F)

ENVIRONMENTAL

Ingress protection
Humidity (operation)
Humidity (storage)

IP66 / IP67 IEC 60529
0 – 100% RH
0 – 95% RH

MECHANICAL

TX and RX Housing:

- Material
- Weight
- Dimensions

Stainless steel (ASTM 316)
6 Kg (12 lbs) (each)
Ref outline drawing

Junction Box:

- Material
- Weight
- Dimensions

GRP
2.0 Kg (4.4 lbs) (each)
Ref outline drawing

Total assembly weight

12 kg (26 lbs) (Tx or Rx + JB + bracket + plate)

OUTLINE DIMENSIONS

