IP65 | 4-20 mA 0-10 V | RS485 Modbus

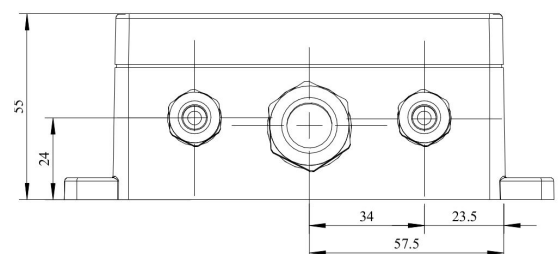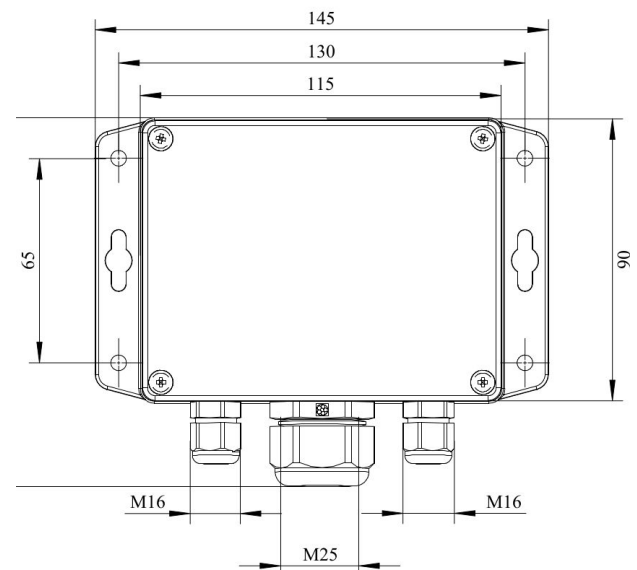# Hydrogen Sulfide Detector-Transmitter
E2638-H2S

CE

Features

- Accurate and stable measurement
- Easy to install robust enclosure
- Two analog outputs settable to 4-20 mA or 0-10 V
- RS485 Modbus RTU digital interface
- Relay option
- Attached or remote sensor
- LCD indicator option

Specifications

Calibration	Hydrogen sulfide H_2S	
Sensor type	Electrochemical	
Sampling method	Diffusion	
Typical detection range	0...100 ppm	0...2000 ppm
Maximum overload	500 ppm	4000 ppm
Resolution	1 ppm	1 ppm
Response time T90	< 30 s	< 25 s
Operating temperature	-30...+50 °C	-40...+50 °C
Signal update	Every 1 second	
Maintenance interval	6 months	
Sensor lifetime	> 2 years	
Self-diagnostics	Full functionality check at start-up	
Warm-up time	≤ 1 min	
Power supply	12...36 VDC (default)	
	24 VAC or 230 VAC as options	
Power consumption	< 2 VA	
Digital interface	RS485, Modbus RTU protocol	
Analog outputs	2 × 4-20 mA / 0-10 V, user settable	
Output scale width	Recommended: 20-100% of the range; > 10 × resolution in any case	
Enclosure	Grey ABS plastic, wall mount, protection class IP65	
Dimensions	H90 × W145 × D50 mm (housing only) H140 with cable glands	
Operating environment	Industrial indoor and outdoor locations	
Operating conditions	(operating temperature is specified above) 0.9...1,1 atm 15...90% RH non condensing Explosion-safe areas Non-aggressive atmosphere **NOTE!** We offer technical solutions for extreme humidity, please ask for more information.	

Dimensions

Ask for other versions or custom designed products

Additional options

Remote sensor probe	Protection IP65, shielded cable default cable length 3.0 m
Self-test button	Triggers both relays simultaneously; push-button switch

Relay outputs

Output relays	2 × SPST relays (closing contact), 250 VAC / 30 VDC, 5 A max
Default alarm set-points	For 0...100 ppm range: LOW: set 10; release 8 ppm HIGH: set 20; release 16 ppm For 0...2000 ppm range: determined by user within 5-95% of the range

Alarm signalling

Visual	Red and green LEDs
Acoustic	Buzzer 85 dB

LCD indicator

Operating temperature	0...+50 °C
Display dimensions	72 × 36 mm
Number of digits	3.5 7-segment
Character height	14 mm
Other features	Backlight
Protection class	IP50 (both for built-in and remote LCD options)

NOTE! Only one analog output is available for a version with LCD.
NOTE! LCD and LEDs can not be chosen simultaneously.
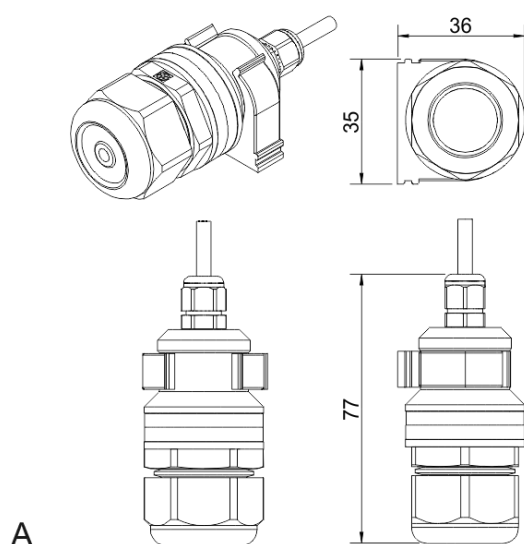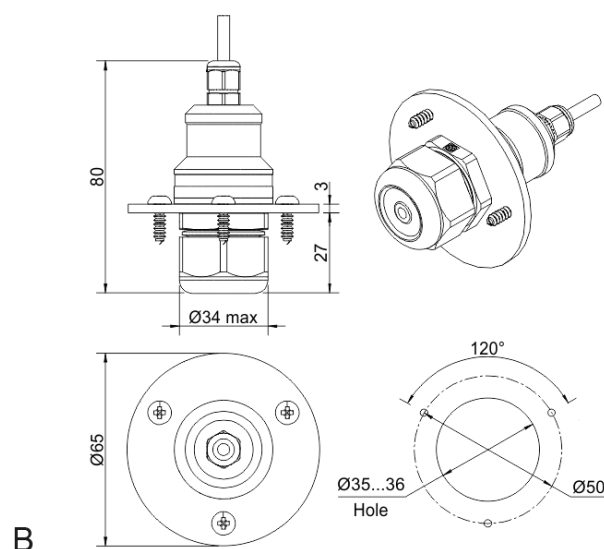
Version with built-in LCD indicator
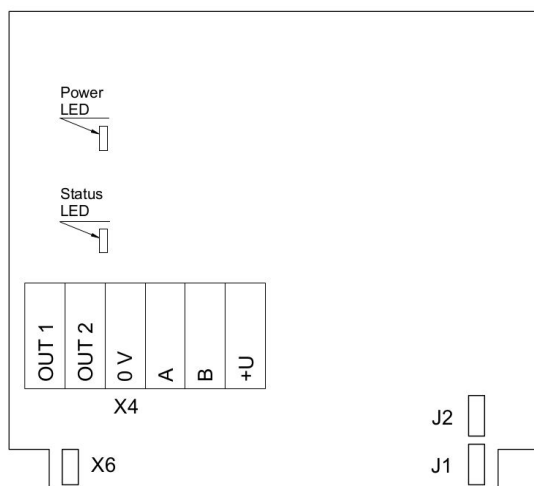

Version with remote LCD indicator

Remote probe

A

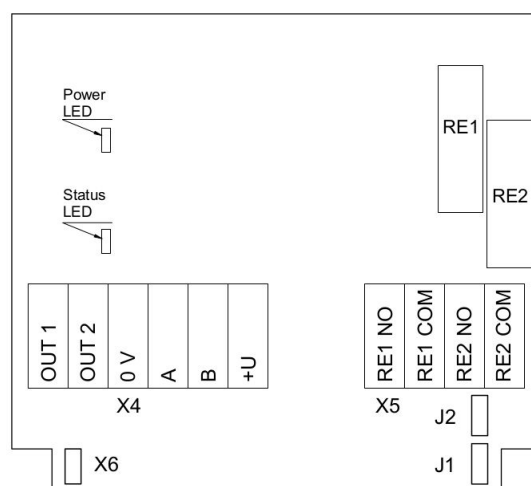Wall mount remote probe with fixing clamp (default version)

B

Remote probe with rubber flange and three self-tapping screws (on request)
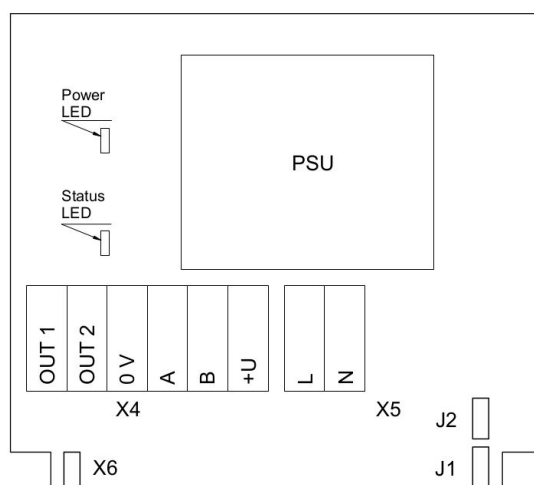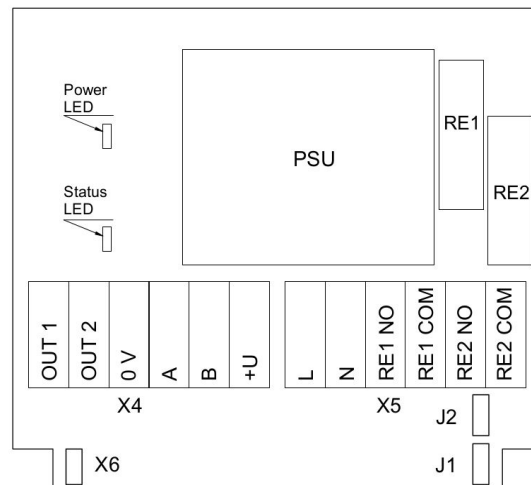
Connection diagrams

Version without PSU and relays

Version without PSU and with relays

Version with PSU and without relays

Version with PSU and relays

Jumpers

J1	OUT1 type (open: 4-20 mA; closed 0-10 V)
J2	OUT2 type (open: 4-20 mA; closed 0-10 V)
X6	Reset Modbus network parameters to default

X4 terminals

OUT1	4-20 mA / 0-10 V output
OUT2	4-20 mA / 0-10 V output
0V	0 V / 24 VAC Neutral (optional)
A	RS485 A / Data +
B	RS485 B / Data -
+U	+24 VDC / 24 VAC Phase (optional)

X5 terminals (optional)

L	90…265 VAC Phase
N	90…265 VAC Neutral
RE1 NO	Relay 1, normally open terminal
RE1 COM	Relay 1, common terminal
RE2 NO	Relay 2, normally open terminal
RE2 COM	Relay 2, common terminal