



Ozone Detector-Transmitter

E2648-O3



Features

- Accurate and stable measurement
- Industrial IP66 wall mount housing
- Two analog outputs settable to 4-20 mA or 0-10 V
- RS485 Modbus RTU digital interface
- Two relays for alarm / ventilation control (option)
- Attached or remote sensor

Specifications

Calibration	Ozone O ₃	
Sensor type	Electrochemical	
Sampling method	Diffusion	
Detection ranges	0...5 ppm	0...1 ppm
Maximum overload	50 ppm	5 ppm
Resolution	0.01 ppm	0.01 ppm
Response time	< 60 s (T80)	≤ 90 s (T90)
Sensor lifetime	> 2 years	> 18 months
Maintenance interval	6 months	12 months
Operating temperature	-40...+50 °C	-20...+40 °C
Signal update	Every 1 second	
Self-diagnostics	Full functionality check at start-up	
Warm-up time	≤ 1 min	
Power supply options	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	Die-cast aluminium, wall mount, protection class IP66	
Dimensions	H120 × W125 × D57 mm	
Operating environment	Industrial indoor and outdoor locations	
Operating conditions	(operating temperature is specified above) 15...90% RH non-condensing; 0,9...1,1 atm Explosion safe areas Non-aggressive atmosphere NOTE! We offer technical solutions for extreme humidity, please ask for more information	

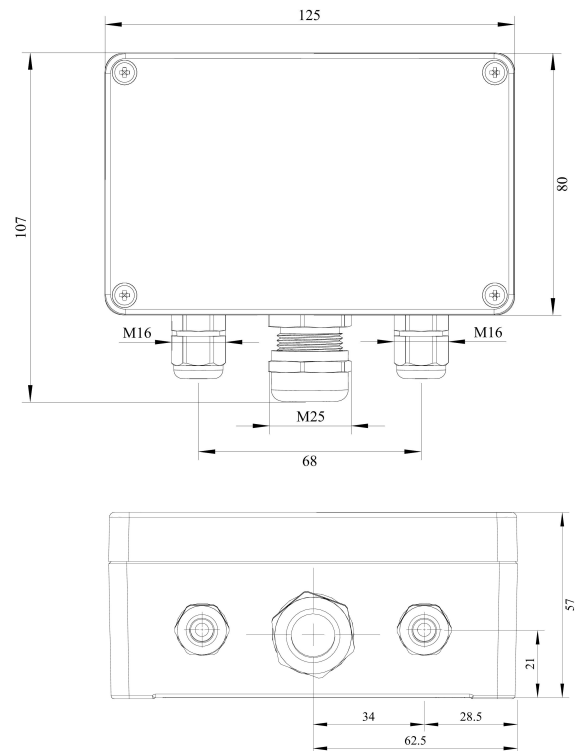
Relay option (ordering code R)

Output relays	2 × SPST relays (closing contact), 250 VAC / 30 VDC, 5 A max
Default alarm setpoints	RE1 (LOW): set 0.3 ppm, release 0.24 ppm RE2 (HIGH): set 1 ppm, release 0.8 ppm

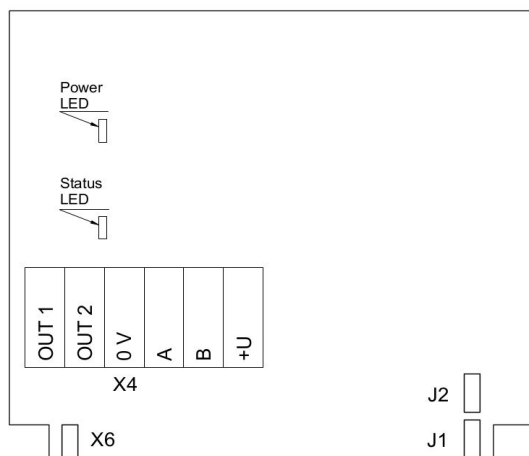
Other options

Remote sensor probe	protection IP65, shielded cable default cable length 3.0 m
---------------------	---

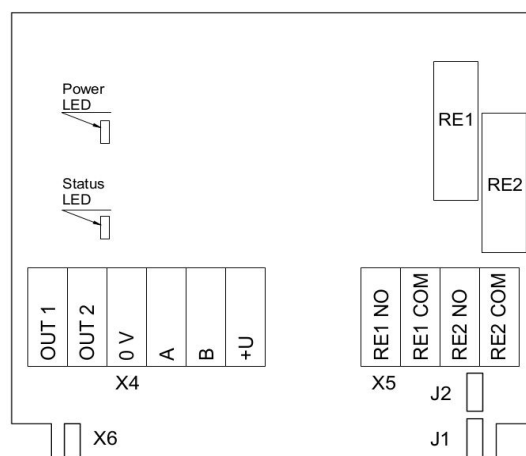
Dimensions



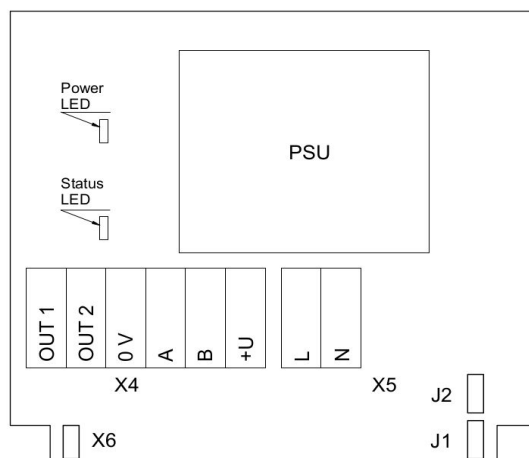
Connection diagrams



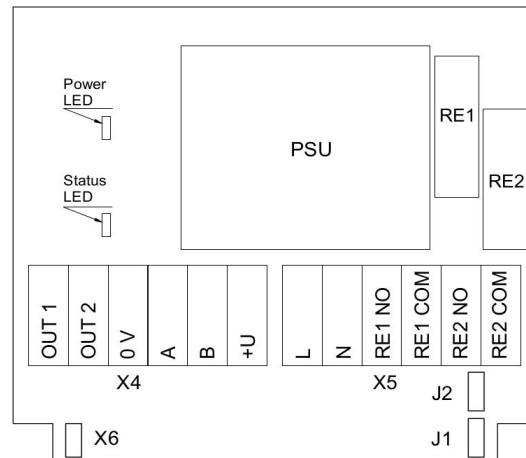
Version without PSU and relays



Version without PSU and with relays



Version with PSU and without relays



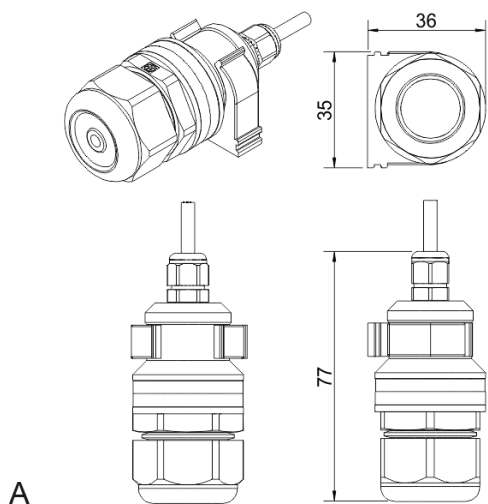
Version with PSU and relays

Jumpers

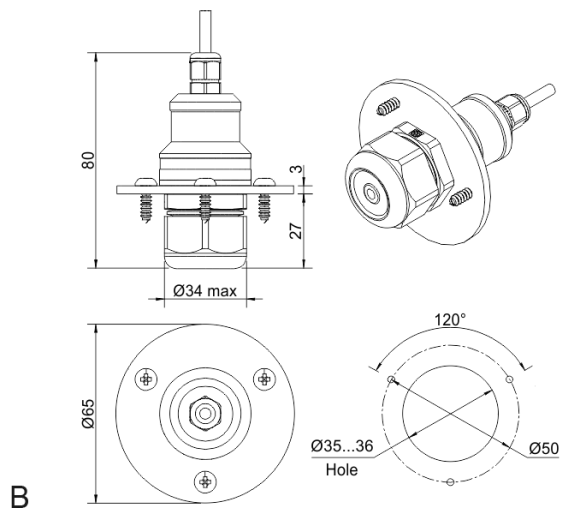
J1	OUT1 type (open: 4-20 mA; closed 0-10 V)
J2	OUT2 type (open: 4-20 mA; closed 0-10 V)
X6	Reset Modbus network parameters to default
X4 terminals	
OUT1	4-20 mA / 0-10 V output
OUT2	4-20 mA / 0-10 V output
0V	0 V / 24 VAC Neutral (optional)
A	RS485 A / Data +
B	RS485 B / Data -
+U	+24 VDC / 24 VAC Phase (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



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)

