



## 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 <sub>3</sub>   |
| Sensor type             | Electrochemical  |
| Sampling method         | Diffusion  |
| Typical detection range | 0...5 ppm  |
| Maximum overload        | 50 ppm   |
| Resolution              | 0.01 ppm   |
| Response time T80       | < 60 s   |
| Sensor lifetime         | > 2 years  |
| Maintenance interval    | 6 months   |
| 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)<br>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;<br>> 10 × resolution in any case  |
| Enclosure               | Die-cast aluminium, wall mount,<br>protection class IP66   |
| Dimensions              | H120 × W125 × D57 mm   |
| Operating environment   | Industrial indoor and outdoor locations  |
| Operating conditions    | -40...+50 °C; 15...90% RH non-condensing;<br>0,9...1,1 atm; explosion safe areas<br>Non-aggressive atmosphere<br><b>Note!</b> We offer technical solutions for<br>extreme humidity, please ask for more<br>information |

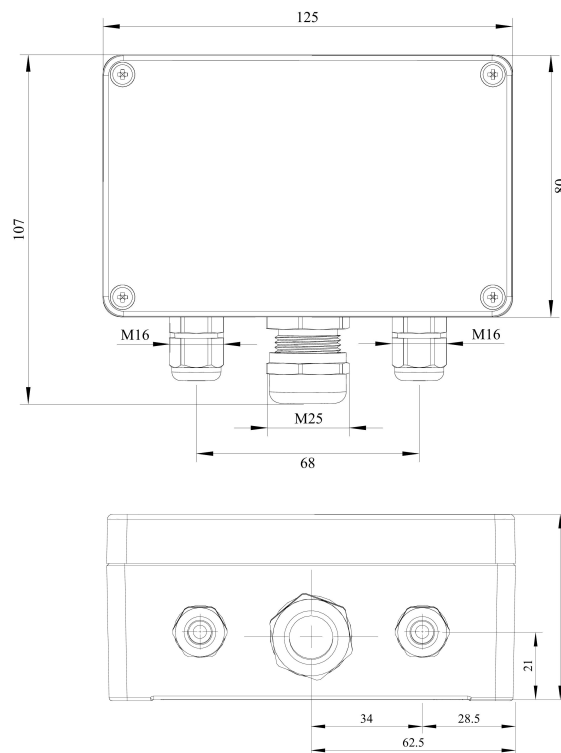
#### Relay option (ordering code R)

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

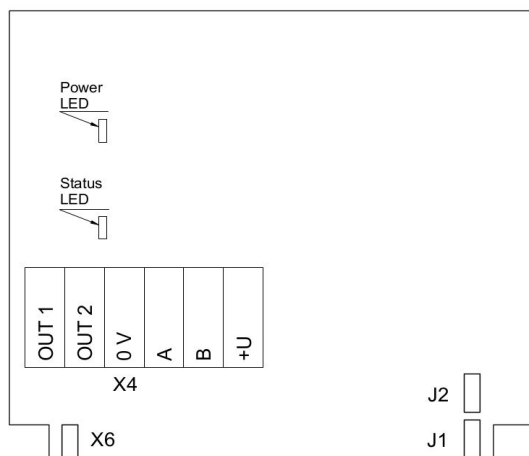
#### Other options

|                     |   |
|---------------------|---|
| Remote sensor probe | protection IP65, shielded cable<br>default cable length 3.0 m |
|---------------------|---|

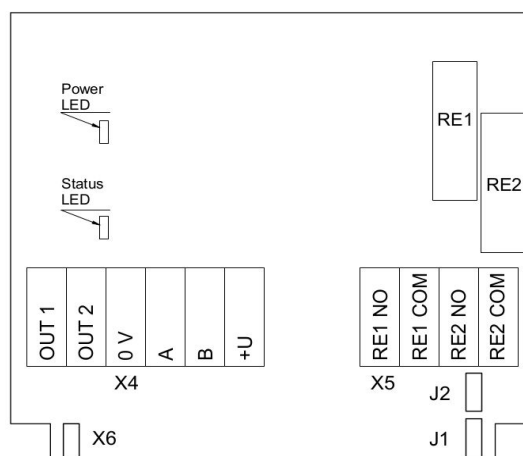
### Dimensions



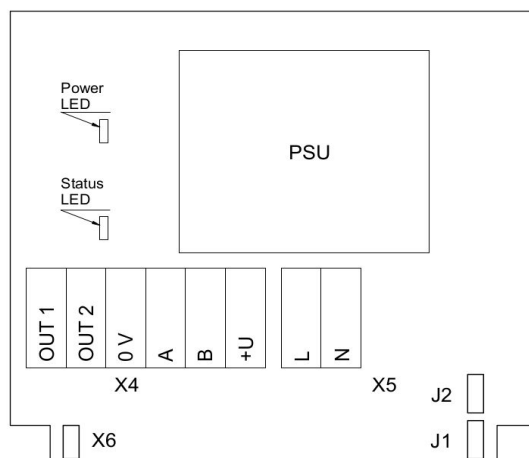
## Connection diagrams



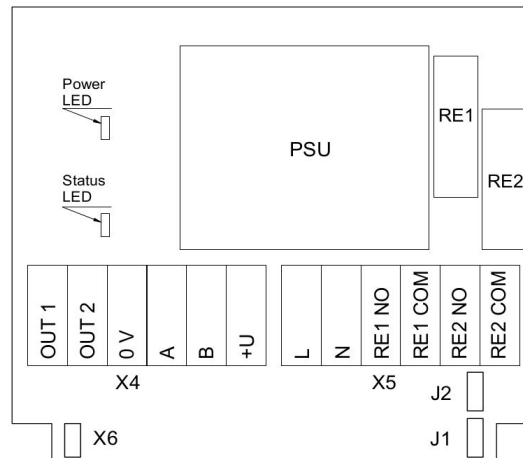
Version without PSU and relays



Version without PSU and with relays



Version with PSU and without relays



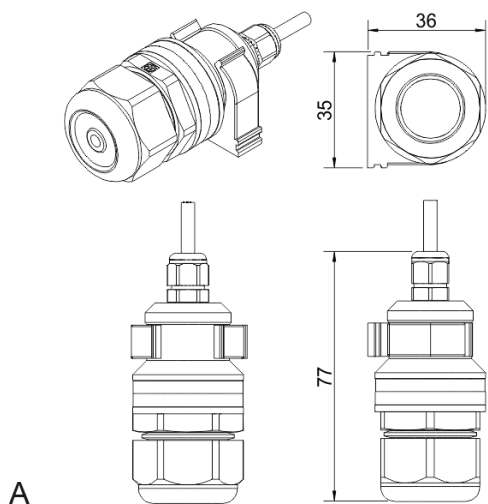
Version with PSU and relays

### Jumpers

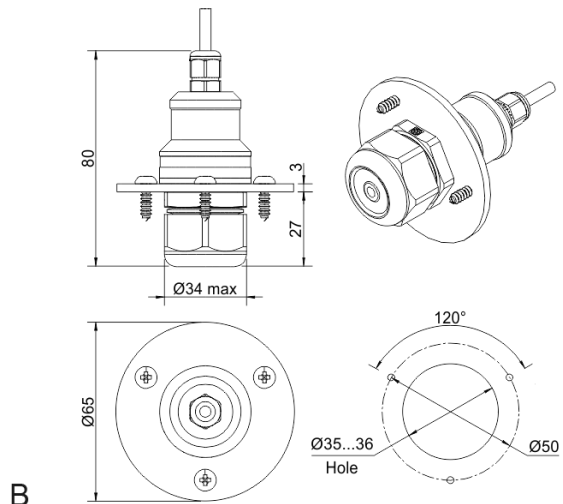
|                                |  |
|--------------------------------|--|
| <b>J1</b>                      | OUT1 type (open: 4-20 mA; closed 0-10 V)   |
| <b>J2</b>                      | OUT2 type (open: 4-20 mA; closed 0-10 V)   |
| <b>X6</b>                      | Reset Modbus network parameters to default |
| <b>X4 terminals</b>            |  |
| <b>OUT1</b>                    | 4-20 mA / 0-10 V output                    |
| <b>OUT2</b>                    | 4-20 mA / 0-10 V output                    |
| <b>0V</b>                      | 0 V / 24 VAC Neutral (optional)            |
| <b>A</b>                       | RS485 A / Data +                           |
| <b>B</b>                       | RS485 B / Data -                           |
| <b>+U</b>                      | +24 VDC / 24 VAC Phase (optional)          |
| <b>X5 terminals (optional)</b> |  |
| <b>L</b>                       | 90...265 VAC Phase                         |
| <b>N</b>                       | 90...265 VAC Neutral                       |
| <b>RE1 NO</b>                  | Relay 1, normally open terminal            |
| <b>RE1 COM</b>                 | Relay 1, common terminal                   |
| <b>RE2 NO</b>                  | Relay 2, normally open terminal            |
| <b>RE2 COM</b>                 | 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)

