

# INFRARED COMMUNICATION SOLUTIONS

## Protocol Converter Gen 2 Specification

The protocol converter provides safety barrier protection for the nozzle receiver. It provides power and converts the nozzle receiver signal to either RS232, Profinet or Profibus output

| SPECIFICATION DESCRIPTION              | VALUE  | UNIT | REMARKS   |
|--|--|------|---|
| <b>Power input</b>                     |  |      |   |
| Voltage (typ)                          | 24   | V    |   |
| Voltage (min)                          | 22   | V    |   |
| Current (typ)                          | 130  | mA   | Profinet is highest   |
| Current (max)                          | 200  | mA   |   |
| Supply Input connector pin out         | +24VDC<br>GND<br>Facility GND<br>ISO GND #1<br>ISO GND #2          |      |   |
| <b>RS485 Signal input</b>              |  |      |   |
| Format                                 | RS485  |      |   |
| Sensitivity level                      | +/- 200  | mV   |   |
| Baud rate                              | 38.4   | kps  |   |
| Voltage (typ)                          | 6  | V    |   |
| Input connector type- RS485            | Terminal block   |      |   |
| Input connector pin out                | 1 PWR<br>4 GND<br>2 DATA +<br>3 DATA -                             |      | Nozzle receiver connection. PWR and GND are outputs to nozzle receiver. |
| <b>Signal output-RS232</b>             |  |      |   |
| Format                                 | RS232  |      |   |
| Voltage differential level             | ± 5  | V    |   |
| Output connector type- RS232           | DB9F   |      |   |
| RS232 Pin Out                          | 2 RS-232 TX<br>5 RS-232 Sig GND                                    |      |   |
| <b>USB UART Interface</b>              |  |      |   |
| Output connector type                  | USB 2.0 type B   |      |   |
| <b>Signal output-Profinet/Profibus</b> |  |      |   |
| Format                                 | Profibus,<br>PROFINET  |      |   |
| Voltage differential level             | 4-7  | V    | For Profibus only   |
| Profibus output connector type         | DB9F   |      |   |
| Profibus Pin out                       | 3 Profibus Data –<br>8 Profibus Data +<br>6 +5V power<br>5 +5V Gnd |      |   |

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|                                       |   |            |   |
|---------------------------------------|---|------------|---|
| <b>PROFINET output connector type</b> | <b>RJ45</b>   |            |   |
| <b>PROFINET Pin out</b>               | <b>1</b>  | <b>TD+</b> |   |
|                                       | <b>2</b>  | <b>TD-</b> |   |
|                                       | <b>7</b>  | <b>RD+</b> |   |
|                                       | <b>8</b>  | <b>RD-</b> |   |
| <b>Safety parameters</b>              |   |            |   |
|                                       | <b>(Uo) 7.6 V, (Io) 200 mA, (Po) 0.380 W, (Co) 10.4 μF, (Lo) 0.89 mH, (Um) DC 24 V,</b> |            |   |
| <b>Form factor</b>                    |   |            |   |
| <b>Length</b>                         | <b>21</b>   | <b>Cm</b>  | <b>Rectangular</b>  |
| <b>Width</b>                          | <b>19</b>   | <b>Cm</b>  |   |
| <b>height</b>                         | <b>5</b>  | <b>Cm</b>  |   |
| <b>Weight</b>                         | <b>1.1</b>  | <b>Kg</b>  |   |
| <b>Housing material</b>               | <b>Aluminum</b>   |            |   |
| <b>Certification Temperature</b>      | <b>-10 to 50</b>  | <b>°C</b>  |   |
| <b>Operation temperature</b>          | <b>-20 to 60</b>  | <b>°C</b>  |   |
| <b>Ingress protection</b>             | <b>IP20</b>   |            |   |
| <b>Mounting</b>                       | <b>DIN</b>  |            |   |
| <b>Certification</b>                  | <b>IECEX, ATEX, NEC, KTL, TIIS; [Ex ib Gb] IIC</b>                                      |            | Certification marking on certificates may show [Ex ib] IIC Gb. This is a clerical error. PC Gen2 is certified for [Ex ib Gb] IIC. |

| <b>ORDERING INFORMATION</b> |  |
|-----------------------------|--|
| <b>200526</b>               | <b>Protocol converter Gen 2 RS232-ATEX</b>     |
| <b>200527</b>               | <b>Protocol converter Gen 2 Profibus-ATEX</b>  |
| <b>200577</b>               | <b>Protocol converter Gen 2 Profinet-ATEX</b>  |
| <b>200632</b>               | <b>Protocol converter Gen 2 RS232 -NEC</b>     |
| <b>200633</b>               | <b>Protocol converter Gen 2 Profibus -NEC</b>  |
| <b>200634</b>               | <b>Protocol converter Gen 2 Profinet -NEC</b>  |
| <b>200658</b>               | <b>Protocol converter Gen 2 RS232 –KTL</b>     |
| <b>200659</b>               | <b>Protocol converter Gen 2 Profibus –KTL</b>  |
| <b>200660</b>               | <b>Protocol converter Gen 2 Profinet -KTL</b>  |
| <b>200688</b>               | <b>Protocol converter Gen 2 RS232 –TIIS</b>    |
| <b>200689</b>               | <b>Protocol converter Gen 2 Profibus –TIIS</b> |
| <b>200690</b>               | <b>Protocol converter Gen 2 Profinet -TIIS</b> |

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All specifications subject to change without notice.