



The GDP-IS gateway serves to connect the *excom®* system to PROFIBUS-DP networks. Connection to the PROFIBUS-DP is established via fiber optics or copper cables. The use of fiber optics for data transfer requires the connection of a coupler pair between wired and optical PROFIBUS and also for level adjustment to the IS layer. When using copper cables it is required to install a segment coupler (RS485-IS coupler) to ensure explosion protection.

The gateway can be operated at a maximum transmission rate of 1500 kBaud. The bus is connected to a standard miniature SUB-D slot on the module rack.

A GSD file containing all configuration files and parameter sets is available for system configuration. When connected to suitable host systems, you can change the system configuration during operation.

The gateway provides the entire range of PROFIBUS diagnostic functions including port-related diagnostics. Additionally, manufacturer-specific error codes are generated. For example HART® communication errors, power supply errors, planning errors as well as information on simulators, internal communication and redundancy status.

Redundancy:

The use of two gateways and two bus lines ensures error-free communication, in case one gateway or one bus line may fail. If one gateway fails, the other takes over smoothly (module racks MT18... only), this is called line redundancy. System redundancy (two masters, each with their own segment coupler connected to a gateway) is also supported.

Recommended wiring components:

- PROFIBUS-DP cable, type 451B
- D9T-RS485IS male
- Segment coupler SC12Ex
- Fiber-optic coupler OC11Ex/...

- **Intrinsically safe gateway for PROFIBUS-DPV1**
- **Connection of *excom®* station to PROFIBUS**
- **Baud rate max. 1.5 Mbaud**
- **PROFIBUS interface acc. to PROFIBUS user organization (PNO) with RS485-IS layer**

Type	GDP-IS/FW2.2
Ident-No.	6884210
Supply voltage	via module rack, central power supply
Power consumption	≤ 1 W
Galvanic separation	All-round galvanic separation acc. to EN 60079-11
Transmission rate	9.6 kbps up to 1.5 Mbps
Addressing range	1 ... 125
Ex approval acc. to conformity certificate	PTB 09 ATEX 2013
Device designation	Ⓔ II 2 G Ex ib IIC T4
Max. values:	RS485-IS fieldbus connection
Max. output voltage U_o	≤ 3.6 V
Max. output current I_o	≤ 125 mA
Max. output power P_o	≤ 112.5 mW
Characteristic	linear
Max. input voltage U_i	≤ 4.2 V
Indication	
Operational readiness	1 x green / red
Int. communication (CAN)	1 x yellow / red
Ext. Communication (PDP)	1 x yellow / red
Redundancy readiness (PRIO)	1 x yellow / red
Error indication	1 x red
Housing material	Plastic
Connection mode	module, plugged on rack
Protection class	IP20
Ambient temperature	-20...+70 °C
Relative humidity	≤ 95 % at 55 °C acc. to EN 60068-2
Vibration test	according to IEC 60068-2-6
Shock test	according to IEC 60068-2-27
MTTF	126 years acc. to SN 29500 (Ed. 99) 40 °C
Dimensions	18x 118x 103 mm
Weight	75 g
Comments	<p>External RS485 fieldbus system: Protection type Ex ib IIC Highest value of each terminal pair: $U_i = 4.2$ V Highest value of the terminal pairs: $\Sigma I_i = 4.8$ A Cables type A resp. B acc. to EN 60079-25 with the following assignments: $L'/R' \leq 15$ μH/Ω $C' \leq 250$ nF/km \varnothing strand ≥ 0.2 mm massed inductances and capacitances in the external fieldbus system are not permitted</p>

Dimensions

