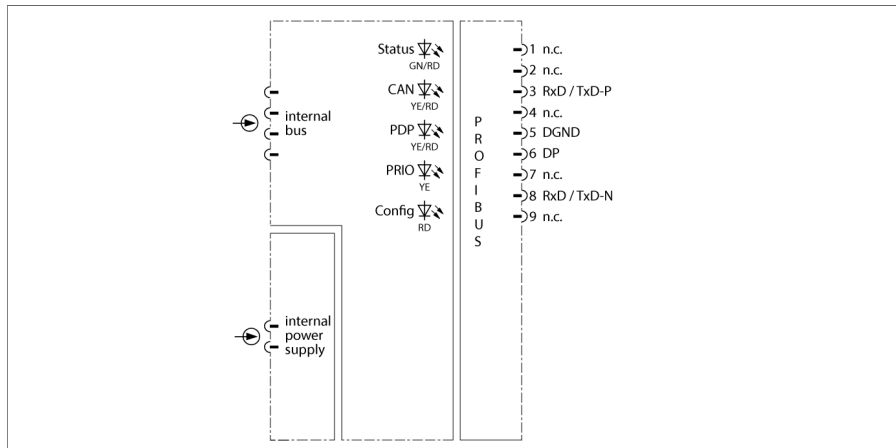


# excom I/O System

## PROFIBUS-DP Interface

### GDP-NI/FW2.3



The GDP-NI gateway serves to connect the *excom*® system to PROFIBUS-DP networks. Connection to the PROFIBUS-DP is established via optical fibers or copper cables. When using optical fibers for data transmission, an optocoupler pair must be installed between wired and optical PROFIBUS.

The gateway can be operated at a maximum transmission rate of 1500 kbps. 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. In addition, manufacturer-specific error codes are generated. They include HART communication errors, power supply errors, planning errors as well as information on simulators, internal communication, redundancy toggle, etc.

**Redundancy:** The use of two gateways and two bus cables ensures error-free communication, in case one gateway or one bus line may fail. If one gateway fails, the other takes over smoothly, this is called line redundancy. System redundancy (two masters, each connected to a gateway) is also supported.

Recommended wiring components:

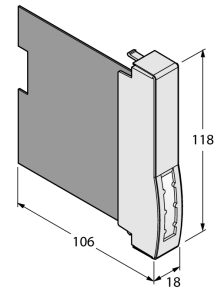
- PROFIBUS-DP cable, type 451
- D9T-RS485 connector

- Gateway for PROFIBUS-DPV1 communication
- Connection of the excom station to the PROFIBUS
- Baud rate max. 1.5 Mbps
- PROFIBUS interface acc. to PROFIBUS user organization (PNO)



## Dimensions

Type	GDP-NI/FW2.3
ID	6884276
Supply voltage	Via module rack, central power supply module
Power consumption	≤ 1 W
Galvanic isolation	Complete galvanic isolation
Transmission rate	9.6 kbps up to 1.5 Mbps
Addressing range	1 ... 99
Ex approval acc. to conformity certificate	IECEX PTB 19.0043X
Ex approval acc. to conformity certificate	PTB 13 ATEX 2013 X
Device designation	Ex II (2) G [Ex ib] IIC
Displays/Operating elements	
Operational readiness	1 × green/red
Int. communication (CAN)	1 × yellow/red
Ext. Communication (PDP)	1 × yellow/red
Redundancy readiness	1 × 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	≤ 93 % at 40 °C acc. to IEC 60068-2-78
Vibration test	Acc. to IEC 60068-2-6
Shock test	Acc. to IEC 60068-2-27
EMC	Acc. to EN 61326-1 Acc. to Namur NE21
MTTF	144 years acc. to SN 29500 (Ed. 99) 40 °C
Dimensions	18 x 118 x 106 mm
Approvals	ATEX cFMus cFM IECEX CCC KOSHA UKCA CE



**Accessories**

Type code	Ident no.		Dimension drawing
GDP-NI ZONE2 MARK- ING SET (2PCS)	100041987	Marking set to be used in Zone 2 to indicate that the GDP- NI and the Profibus connection must not be connected or dis- connected when energized.	