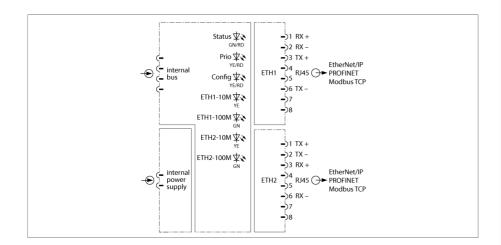


GEN-3G

Multiprotocol Gateway for Ethernet

excom® I/O System





The gateway is used to connect the excom® system to a higher-level Ethernet Fieldbus with the help of the Modbus TCP, Ethernet/IP $^{\mbox{\scriptsize IM}}$ and PROFINET protocols. The connection to the Fieldbus is created via a standard RJ45 male connector with at least CAT5e cable quality. A ring topology in accordance with DLR or MRP can be implemented using the built-in switch.

The gateway supports 10/100 Mbps, full/half duplex, autonegotiation and autocrossing. With autocrossing switched off, the above assignment must be followed.

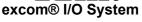
A GSDML and EDS file containing all configuration files and parameter sets is available for system configuration. When connected to suitable host systems, you can change the system configuration during operation.

The gateway provides the entire range of diagnostic functions, including port-related diagnostics, in accordance with the Ethernet protocols. 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.



- Gateway for Ethernet fieldbus communication
- Connection of the excom station to the **Ethernet fieldbus**
- Support for Ethernet protocols Modbus TCP, EtherNet/IP™ and PROFINET
- Integrated switch, 10/100 Mbps
- Two RJ45 connectors for fieldbus connection

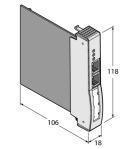




Multiprotocol Gateway for Ethernet GEN-3G



Dimensions



| 100004545 |
|--|
| via module rack, central power supply module |
| ≤ 1.5 W |
| ≤ 1.5 W |
| Complete galvanic isolation |
| |

 Connection technology Ethernet
 2 x RJ45, female

 Protocol detection
 automatic

Transmission rate 10/100 Mbps, full/half duplex, autonegotiation, au-

tocrossing

Web server PGM-DHCP, 192.168.1.254 (fallback)

Ex approval acc. to conformity certificate IECEx BVS 19.0060
Ex approval acc. to conformity certificate BVS 19 ATEX E 066

Indication

 $\begin{array}{lll} \text{Operational readiness} & 1 \times \text{green/red} \\ \text{Redundancy readiness} & 1 \times \text{yellow} \\ \text{Configuration} & 1 \times \text{yellow/red} \\ \text{Baud rate detection} & 2 \times \text{yellow}, 2 \times \text{green} \\ \end{array}$

EtherNet/IP™

Addressing acc. to EtherNet/IP™ specification

Device Level Ring (DLR) supported
Class 1 connections (CIP) 24
Input Assembly Instance 103
Output Assembly Instance 104
Configuration Assembly Instance 106

PROFINET

 Addressing
 DCP

 Conformance class
 B (RT)

 MinCycleTime
 1 ms

Diagnostics acc. to PROFINET alarm handling

Topology detection supported Automatic addressing supported Media Redundancy Protocol (MRP) supported

Modbus TCP

Addressing Static IP, BOOTP, DHCP

Supported function codes FC1, FC2, FC3, FC4, FC5, FC6, FC15, FC16, FC23

Number of TCP connections

Input Data Sizemax. 1024 registerInput register start address0 (0x0000 hex)Output Data Sizemax. 1024 registerOutput register start address2048 (0x0800 hex)

Housing material Plastic

Connection mode module, plugged on rack

 Protection class
 IP20

 Ambient temperature
 -20...+70 °C

 Storage temperature
 -40...+85 °C

Relative humidity \leq 93 % at 40 °C acc. to EN 60068-2-78: test cab

 Vibration test
 acc. to IEC 60068-2-6

 Shock test
 acc. to IEC 60068-2-27

 EMC
 acc. EN 61326-1 (2013)

 acc. to Namur NE21 (2012)

MTTF 58 years acc. to SN 29500 (Ed. 99) 40 °C

Dimensions 18 x 118 x 106 mm

Approvals ATEX IECEx