# XCP-Gateway pro



## Product description

The protocol converter **XCP-Gateway pro** is especially designed for the CSM EtherCAT® measurement module series and has been developed for measurement tasks with numerous measurement channels and high measurement data rates. **XCP-Gateway pro** allows the linking of CSM EtherCAT® measurement devices to the data protocol XCP-on-Ethernet, thus combining the advantages of data acquisition via EtherCAT® with the flexibility of the wide-spread standard XCP-on-Ethernet. In addition, temperature information from CSM HV Breakout Modules can be transferred via EtherCAT®.

**XCP-Gateway pro** features two CAN interfaces for connecting CSM CAN bus measurement modules, allowing the integration of their measurement data into the protocol XCP-on-Ethernet.

All measurement modules receive their power supply from the **XCP-Gateway pro**. The configuration of both EtherCAT® and CAN measurement modules is done in CSMconfig.

### Key features

- *EtherCAT® to XCP-on-Ethernet converter*
  - *EtherCAT®: time synchronization of all measurement signals better than 1 μs*
  - *XCP-on-Ethernet: accuracy of measurement signal time stamps is 1 μs*
- *Suited for 4.5 million data points per second (MS/s), e.g. four channels with 1 MHz*
- *Autonomous master for CSM EtherCAT® devices of the measurement module series*
- *2 CAN interfaces for connecting CSM CAN bus measurement modules*
- *Simple configuration of XCP-Gateway pro and connected measurement modules via CSMconfig*

## Shipping content

- XCP-Gateway pro
- Configuration software CSMconfig
- Documentation

## Accessories

- See datasheets "ECAT Accessories" and "CAN Accessories"

**CSM GmbH**
**Computer-Systeme-Messtechnik**

Innovative Measurement and Data Technology

# Technical data

| Type designation | XCP-Gateway pro |
|---|---|
| |  |
| **PC** | |
| Physical layer | Ethernet 100Base-TX, 100 MBit/s |
| Protocol | XCP on UDP/IP |
| **ECAT** | |
| Physical layer | Ethernet 100Base-TX, 100 MBit/s |
| Protocol | EtherCAT® |
| **CAN** | CAN 2.0B (active), High Speed (ISO 11898-2:2016), 125 kbit/s to 1 Mbit/s for connecting CAN-based CSM measurement modules |
| **Configuration** | via CSMconfig, settings are stored in the device |
| **Power supply** | |
| Minimum | 6 V DC (-10 %) |
| Maximum | 50 V DC (+10 %) |
| Power consumption | typ. 2 W |
| LED Ethernet | Link/Activity PC (green) / Link/Activity ECAT (green) |
| LED Status | 2 multi-colored LEDs for DEV and ECAT |
| LED CAN/PWR | interface activated (green) |
| **Housing** [1] | aluminium, silver anodized |
| Protection class | IP67 |
| Weight | approx. 400 g |
| Dimensions (w × h × d) | approx. 200 × 40 × 50 mm (Slide Case) |
| **Connectors** | |
| PC (Ethernet / power supply) | LEMO 1B, 8-pole, code L |
| ECAT (EtherCAT® / power supply) | LEMO 1B, 8-pole, code A |
| CAN/PWR | LEMO 0B, 5-pole, code G |
| Sync | LEMO 0B, 2-pole, code G (galvanically isolated) |
| **Operating and storage conditions** | |
| Operating temperature | -40 °C to +85 °C |
| Relative humidity | 5 % to 95 % |
| Pollution degree | 3 |
| Storage temperature | -55 °C to +90 °C |
| **Conformity** | CE |

CSM GmbH Germany is certified.



ISO 9001, ISO 14001
Certified Integrated Quality and Environmental Management System
www.tuv-sud.com/ms-cert

[1] Optionally available in other variants.

EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.