

comX

Flexible Communication Module for Automation

- → All major industrial protocols
- Master and Slave
- → One hardware for all Real-Time Ethernet protocols
- → Ready to use, due to preloaded firmware
- → Firmware update via integrated Webserver



The module for all communication tasks

The comX communication module is designed for integration in automation devices e.g. robot controllers, PLCs or drives to add a network interface. All communication tasks are executed autonomously in the module - independent of the processor of the target device.

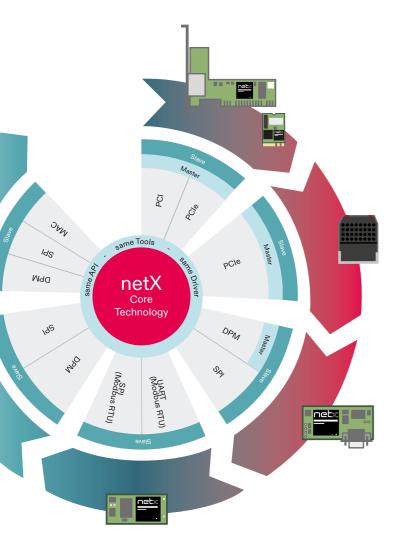
Process data exchange is done via a Dual-Port-Memory, either as 8-/16-bit bus interface or as 50 MHz SPI interface. comX supports all major Real-Time Ethernet protocols as Master or Slave and covers all network specific demands in a single module. For support of a line topology the module is equipped with two Ethernet ports. A change of the communication protocol is done by simply loading a different firmware and adding a software license upgrades to a master.

Besides Real-Time Ethernet communication there is an integrated Webserver as well as an additional transparent Ethernet channel available, to realize own IT solutions in the host processor of the automation device.



comX

Communication Module for Real-Time Ethernet and Fieldbus



Same Function - Same API - Same Tools

The Hilscher Platform Strategy provides the whole range of communication solutions to the user - from standardized PC card up to the integration of the multi-protocol chip netX. All solutions - whether Master or Slave - have the same interface to the application and use the same tools.

After single integration of the application interface the change to a different hardware format or a different physical host interface is a purely hardware optimization process without fundamental changes of the software structure.

Real-Time Ethernet & Fieldbus protocols

As specialist for industrial communication Hilscher offers the largest selection of protocols used in the factory automation. Besides traditional Fieldbus all major Real-Time Ethernet protocols are available - and that's as Master or Slave.

For selected Real-Time Ethernet protocols the firmware update can be done via an integrated Webserver. Furthermore the data excange via Ethernet or TCP/IP is supported.





COMX 52CN-DPS



COMX 100CA-RE









COMX 51CN-RE



COMX 100CN-RE

Multi Network Design

All comX modules have the same dimensions and are pin-compatible to each other. Thus you can cover the whole range of network protocols with exactely one baseboard design. Thanks to common interfaces you can react quickly and most flexible to new market requirements - with a maximum of time- and costsavings.

- You can choose between the following types: → with integrated network connector with network interface to the baseboard \rightarrow \rightarrow with integrated switch for slave address

The host connection is done either via a parallel 8-/16-bit bus or a fast SPI interface with up to 50 MHz.

Universal Module or Slave only

The Hilscher comX modules are available as universal modules or as slave only modules. The universal module can be used both as Master and as Slave. The Slave modules are specifically designed for demanding field devices. They provide integrated rotary switches for the slave address and a fast SPI interface to the host. For EtherCAT slave a special hardware version for the Semiconductor Manufacturing Equipment market is available. According to ETG.5003-1 (Common Device Profile) the explicite device ID can be set by rotary switches.

Easiest integration

For a quick and easy integration Hilscher offers a wide range of device drivers. Besides a C-Toolkit free of charge, drivers for all relevant operating systems are available - in most cases as source code.









Product Information

Technical Data

| Technical Data | | | | | | |
|--|--|--|--|--|--|--|
| Emission EN 61000-6-4 | | | | | | |
| Noise Immunity EN 61000-6-2 (1999) | | | | | | |
| Connector Samtec SFM-125-02-S-D-A | | | | | | |
| LED Indicators SYS, COM 0, COM 1, Link, Rx/Tx | | | | | | |
| Dual-Port-Memory 8-/16 bit | | | | | | |
| SPI 50 MHz (COMX 52, COMX 51) | | | | | | |
| Variant CA angled network connector | | | | | | |
| Variant CN Connector to the baseboard | | | | | | |
| | | | | | | |

Product Overview

COMXEB

1530.000 | COMX Evaluationboard - For evaluation of all comX types; incl. Software package

| Product | Slave only | Universal Module | CANOpen | CC-Link = | DeviceNet | | CC-Línk IE Basic 🙂 | Ether CAT: | Ether/vet/IP | ETHERNET (1 POWERLINK (1 | snqpol | <u>profi</u> Net | Sercos the automation bus | 1) NARRY | SPI | DPM |
|------------------------------------|--------------|---------------------|--------------|--------------|--------------|--------------|--------------------|--------------|--------------|-----------------------------|--------------|---------------------|------------------------------|-----------------|--------------|--------------|
| comX 52 COMX 52CA ²⁾ | \checkmark | \times | \checkmark | \checkmark | \checkmark | \checkmark | \times | \times | X | \times | × | \times | \times | \times | \checkmark | \checkmark |
| comX 52 COMX 52CN ²⁾ | \checkmark | \times | \checkmark | \times | \checkmark | \checkmark | \times | \times | \times | \times | \times | \times | \times | \times | \checkmark | \checkmark |
| comX 51 COMX 51CA ³⁾ | \checkmark | \times | \times | \times | \times | \times | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | \times | \checkmark | \checkmark |
| comX 51 COMX 51CN | \checkmark | \times | \times | \times | \times | \times | \checkmark | ~ | \checkmark | \checkmark | \checkmark | ~ | \checkmark | \times | \checkmark | \checkmark |
| comX 100 COMX 100CA | \times | \checkmark | \checkmark | \times | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | \times | \checkmark |
| comX 100 COMX 100CN | \times | \checkmark | \checkmark | \times | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | \times | \checkmark |

1) Slave only 2) Function compatible replacement for comX 10 3) Special EtherCAT Slave with Rotary Switches acc. to ETG.5003-1

