Plug-on module as fieldbus interface

- Interchangeable plug-in modules for all leading fieldbus technologies
- Various formats with different installation possibilities
- Same driver interfaces for all modules
- Direct access to the process data in the Dual-port-memory
- Fast “Time to market”
- No development risk
- Proven fieldbus technology
- Cheaper than own development

Fieldbus integration for automation technology
Hilscher has been supplying communication modules (COM) for integrating fieldbus communication into the devices of automation technology for more than 10 years. These are complete fieldbus interfaces in a very small board with an easy to handle application interface. The simplest and most economical way of integrating proven communication technology into your devices.

Fieldbus communication in various formats
Based on past experience, Hilscher has now brought a new generation of COM modules onto the market.
These take into account the high degree of integration of special ASICs as well as new technologies such as the low-power consumption 3.3 V components. Special attention has been paid to the different installation possibilities and the high requirements of the mechanics and the interference resistance when installing the fieldbus plug onto the module.
COM – Communication Module

Plug and Play communication for automation

- Extremely compact size
- Variants with and without fieldbus connectors
- Variants with straight or angled connectors
- Compact Host plug with 1.27 mm matrix
- Metal blocks for solid mechanical installation
- Solid PE connection via one of the metal blocks
- Fastening the front cover of the metal blocks
- Centering pins for precise installation on the Host board
- Host-Interface for max. 32 KByte Dual-port-memory and max. 16 Bit data width
- Serial interface for diagnostic or as customer-specific Host-Interface
- CAN interface for special applications
- Reduced power consumption to 3.3 V technology
- Available in an extended temperature range

One driver for all modules
The integration of the COM Module in the Host environment is done with an universal driver. A comprehensive function library in C source code is available for this purpose. All functions are independent of the fieldbus system. The access to the process data image of the process variables is achieved via uniform data structures.

Integration on this basis can be extended from one fieldbus system to others with little effort.

Identical “easy to use” application interface
The exchange of data with the Host system occurs via a simple to handle Dual-port-memory interface that is the same on all modules. The process variables are provided with a process data image and commands are transferred via a Mailbox. The module accepts the data and carries out the data exchange via the fieldbus independently without loading the Host system. The storage of the process variables is identical for all modules. What is different are the parameters of the diagnostic and status structures as well as the fieldbus-specific commands. When this is properly taken into account, the modules of various fieldbus systems can be interchanged without causing any major changes to the applications.

COM-AS
For parallel installation underneath a front plate with vertically directed fieldbus plug/LEDs/schalt with minimal component height of 10 mm.
Module size (L x W x H) 40 x 70 x 26 mm

COM-BA / COM-BN
For right-angled installation behind a front plate with angled fieldbus plug/LEDs with a minimal front width of 40 mm.
Module size (L x W x H) 40 x 70 x 21.5 mm
As a variant COM-BN with signals for fieldbus/LEDs/schalt on Host board.

COM-CA / COM-CN
For right-angled installation behind a front plate with angled fieldbus plug/LEDs with a minimum module size.
Module size (L x W x H) 70 x 30 x 21.5 mm
As variant COM-CN with signals for fieldbus/LEDs/Switch on Host board.

Master configuration via SyCon
The configuration takes place directly via the Dual-port-memory or via the serial diagnostic interface. For the more complex Master modules the SyCon system configurator is additionally available, whereas slave modules are easiest configured directly from the application program. The configuration is stored on the module and is also not lost in the un-powered condition.
Technical Data

**AS-Interface**
- Master: 2 Channels each with 62 Slaves
- 248 Input Bits/186 Output Bits

**CANopen**
- Slave: Master
- Dimensions (L x W x H): 40 x 70 x 26 mm

**DeviceNet**
- Slave: Master
- Dimensions (L x W x H): 70 x 30 x 21.5 mm
- 40 x 70 x 26 mm
- 40 x 70 x 21.5 mm
- 70 x 30 x 21.5 mm

**Noise Immunity, Radiated Noise**
- EN 55082-2
- EN 55011 Cl. B

**Fieldbus Overview**

**Product Overview**

**Fieldbus**
- Communication Module
- Communication Module

**Fieldbus**
- Communication Module
- Communication Module

**SERCOS, passiv**

*The COM-CA-SCEB is a passive device and needs an own driver.*