

EC-COM communication modules

Interface extension for the EC1000

The CANtrol EC control system with its EC1000 SPS controller is modular, flexible and compactly designed. With a module width of just 25 mm the EC1000 controller features a whole range of interfaces. The comprehensive basic configuration includes EtherCAT, Ethernet, USB, CAN bus and RS232. If additional interfaces are required communication modules for direct connection to the EC1000 are available under the system designation EC-COM.



- Best performance achieved through direct connection to the EC1000
- Integrated Ethernet switch
- CAN bus with CANopen master function
- Switchable serial interface

Brief description	The EC-COM communication module is connected to the left face of an EC1000 controller with the integrated plug connector. The power supply is provided by the EC1000, with provision for a maximum of one communication module on the EC1000. The additional EC-COM interfaces offer the same best performance as those on the EC1000. They are directly linked to the CPU and thus represent a modular extension to the EC1000 controller.
Ethernet switch ports	The Ethernet interface of the EC 1000 is already provided with a switch. The corresponding switch ports are transferred to one (EC-COM 01) or both (EC-COM 02) RJ45 plugs of the EC-COM module. The EC-COM saves on the need for an additional switch.
CAN / CANopen	With the EC-COM the EC1000 controller gets a second , opto-decoupled CAN interface which is compliant with the CAN high-speed standard (ISO11898) and can be used as CANopen master.
RS232 or RS485	Serial interfaces are, as always, important for automisation. The serial interface of the EC-COM can be operated either as RS232 or as RS485, making a changeover switch possible. For RS485 operation a terminator may additionally be connected.

EC-COM module data		
Designation	EC-COM 01	EC-COM 02
Article no.	204900300	204900500
Ethernet interfaces		
Number / type of interfaces	1 x 10/100 Mbit per RJ45 (switch port of the EC1000)	2 x 10/100 Mbit per RJ45 (2 switch ports of the EC1000)
Serial interface		
Number / type of interfaces	1 x serial interface (opto-decoupled) RS232 / RS485 switchable (RS485 with switchable terminator)	
CAN bus interface		
Number / type of interfaces	1 x CAN bus interface, opto-decoupled	
Dimensions and weights		
Dimensions (WxHxD [mm])	25 x120x 90 (CANtrol EC system housing)	
Weight	100 g	
Operating conditions		
Ambient temperature	0 °C to 55 °C (with installation instructions complied with)	
Relative humidity	Max. 85 %, non-condensing	
Transport, storage		
Ambient temperature	-20 °C to +70 °C	
Relative humidity	Max. 85 %, non-condensing	
Shock resistance		
Vibration	Sinusoidal (EN 60068-2-6) test: Fc 10 ... 150 Hz, 1 G (operation mode)	
Shock resistance	15 G (approx. 150 m/s ²), 10 ms duration, half sinal (EN 60068-2-27) test: Ea	
EMC, protection type		
Emitted interference	EN 61000-6-4, industrial	
Insensitivity to interference	EN 61000-6-2, industrial	
Protection class	III	
Protection type	IP20	
Energy supply		
Energy supply	Via EC1000 CPU	
Power consumption	Typically 0.2 A	