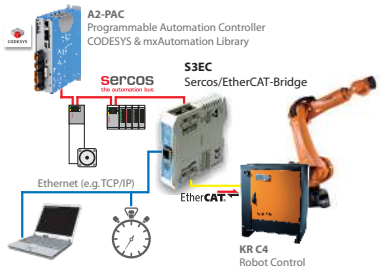
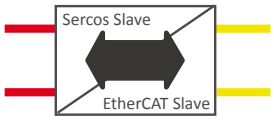
Cannon Automata



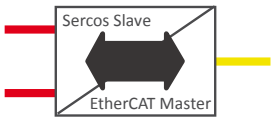
A2-PAC control with CODESYS and mxAutomation library communicating in real-time with a KUKA KR C4 robot control. (Source: KUKA Roboter GmbH)

S3EC



EtherCAT
sercos
the automation bus

S3ECm



S3EC

Sercos®/EtherCAT®-Bridge

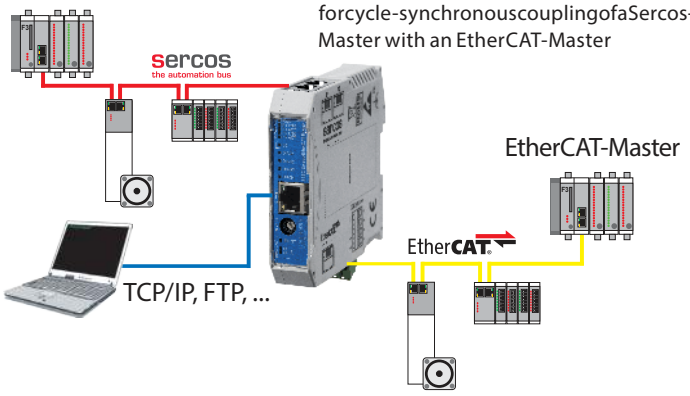
- Coupling of Sercos- and EtherCAT real-time Ethernet networks
- adjustable length of real-time data: 32 - 1024 Byte
- Standard Ethernet communication over Sercos UCC, EtherCAT EoE and additional Ethernet port

The Sercos/EtherCAT-Bridge connects Sercos and EtherCAT real-time Ethernet networks and enables the bidirectional data exchange between the two busses.

The S3EC variant acts on both busses as I/O device. The width of the real-time data is configurable in the range of 32 to 1024 bytes. The exchange of real-time data between the two busses is executed cycle-synchronous within one communication cycle. In addition to the I/O data also information about communication state and diagnostic data of Sercos or EtherCAT bus is transferred to the respective other side. This allows the two masters to react very fast on changes of the communication state or on error events.

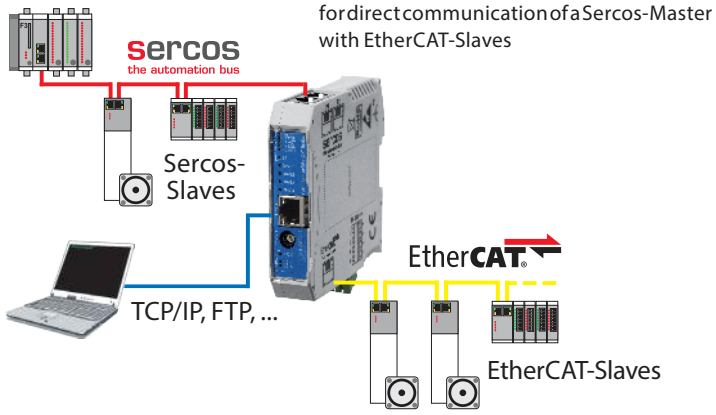
The S3ECm variant of the device enables direct communication of control systems with integrated Sercos master with EtherCAT slaves. The EtherCAT master is located on the S3ECm.
On the Sercos bus, the S3ECm module acts as an IO device. The engineering tool uses the device description file to integrate it into the bus topology. Number and characteristics of the connected EtherCAT slaves are described in a configuration file. The upload of this ENI file to the S3ECm module can either be done directly from the Sercos master via UCC or over the additional available standard Ethernet port. In both cases TFTP protocol is used.
The bidirectional transmission of real-time data between Sercos master and EtherCAT slaves is consistent and synchronized. The shortest cycle time of the module at the Sercos bus is 250 µs. The startup of the EtherCAT bus to the real-time operation mode is carried out automatically after power-on or commanded by the control application.

Sercos-Master



S3EC - Sercos-Slave & EtherCAT-Slave for cycle-synchronous coupling of a Sercos-Master with an EtherCAT-Master

Sercos-Master



S3ECm - Sercos-Slave & EtherCAT-Master for direct communication of a Sercos-Master with EtherCAT-Slaves

Technical Information		S3EC Sercos/EtherCAT-Bridge	S3ECm Sercos/EtherCAT-Bridge
Article code		70069800	70070300
Sercos		• Sercos-Slave (FSP-IO) • SCP_VarCFG, SCP_NRTPC, SCP_SYNC, GDP etc. • 4 real-time data connections • rotary switch to adjust length of real-time data (32-1024 Byte) • 2 x RJ45, 5 diagnosis LEDs	• Sercos-Slave (FSP-IO) • SCP_VarCFG, SCP_NRTPC, SCP_SYNC, GDP etc. • 4 real-time data connections • rotary switch to adjust length of real-time data (32-1024 Byte) • 2 x RJ45, 5 diagnosis LEDs
EtherCAT		• EtherCAT-Slave (DS-401 IO-Profil) • CoE, EoE • rotary switch to adjust length of real-time data (32-1024 Byte) • 2 x RJ45, 5 diagnosis LEDs	• EtherCAT-Master • CoE, EoE • configuration over ENI-File • 1 x RJ45, 3 diagnosis LEDs
Standard Ethernet port		• 10/100 MBit/s • 1 x RJ45 • IEEE 1588 Master/Slave (optional)	
Dimension	H x D x W	99 mm x 114,5 mm x 22,5 mm	
Power supply		24VDC (19 - 30VDC)	
Weight		120 g	
Housing		plastic	
Mounting		DIN-rail mounting	
Operating temperature		0°C - +55°C	
Protection class		IP20	
Certifications		CE	

PRODUCTS

Technological components for industrial automation.

- PAC - PROGRAMMABLE AUTOMATION CONTROLLER
- FIELDBUS & INDUSTRIAL ETHERNET
- I/O MODULES
- HMI - HUMAN MACHINE INTERFACE
- AUTOMATION SOFTWARE
- DRIVES

APPLICATIONS

Hardware and software solutions for specific user applications.

- REMOTE MONITORING & ASSISTANCE
- MACHINE CONTROL & PRODUCTION
- ENVIRONMENTAL MONITORING
- MOTION & ROBOTICS
- PREVENTIVE MAINTENANCE
- ENERGY EFFICIENCY

ENGINEERING

Services for engineering projects.

35 years of experience in the automotive, energy, oil & gas and water treatment sectors enable Cannon Automata to present itself as complete and perfect partner for the development of industrial engineering and process projects. Systems are characterized by their high performance, thanks to an approach that is fully oriented to achieve tailored solutions to specific needs.

For the best results in terms of quality and customer satisfaction, Cannon-Automata follows an operative scheme that is widely experienced and successful, from the study to the implementation, and with a constant technical support.

Cannon Automata

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