

CAN-EtherCAT/2-FD

EtherCAT® to CAN FD Gateway

EtherCAT to CAN FD Gateway as a stand-alone Module Solution

- Seamless connection between EtherCAT® and CAN FD
- Reducing the data load by filtering CAN messages internally at the gateway
- Balancing different timings between EtherCAT and CAN using RX and TX message queues
- Robust in use thanks to the galvanically isolated CAN port.

User-friendly Configuration

- Simple configuration via EtherCAT MainDevice and standard EtherCAT configuration tools (e.g. esd EtherCAT Workbench)
- EtherCAT SubDevice functionality according to ETG.5001 (CAN Interface - Module Profile No. 5000)

EtherCAT Network Extension

- Connecting Ethernet devices to EtherCAT via Ethernet-over-EtherCAT (EoE) support
- Fast boot time (<1 s) and low power consumption (<2 W) thanks to the optimized selection of components



Linking EtherCAT and CAN FD

The CAN-EtherCAT/2-FD gateway supports CAN FD implementations according to ISO 11898-1 and provides seamless connectivity between CAN FD modules and a real-time EtherCAT network. This capability enables the integration of CAN FD devices (including CAN CC) into an EtherCAT-based automation system and ensures real-time communication and interoperability across different networks.

Compliant with the EtherCAT Standard

The gateway operates with EtherCAT SubDevice functionality that is fully compliant with the ETG.5001 (CAN Interface - Module Profile No. 5000), ensuring standardized and efficient integration into EtherCAT networks. The firmware of the device can be updated via FoE.

Ethernet-over-EtherCAT (EoE) Support

Additionally, the module can be configured as an Ethernet switch port using the Ethernet-over-EtherCAT (EoE) protocol. This enables the extension of the EtherCAT network to include standard Ethernet devices, enhancing the network's flexibility and capability.

CAN FD Port

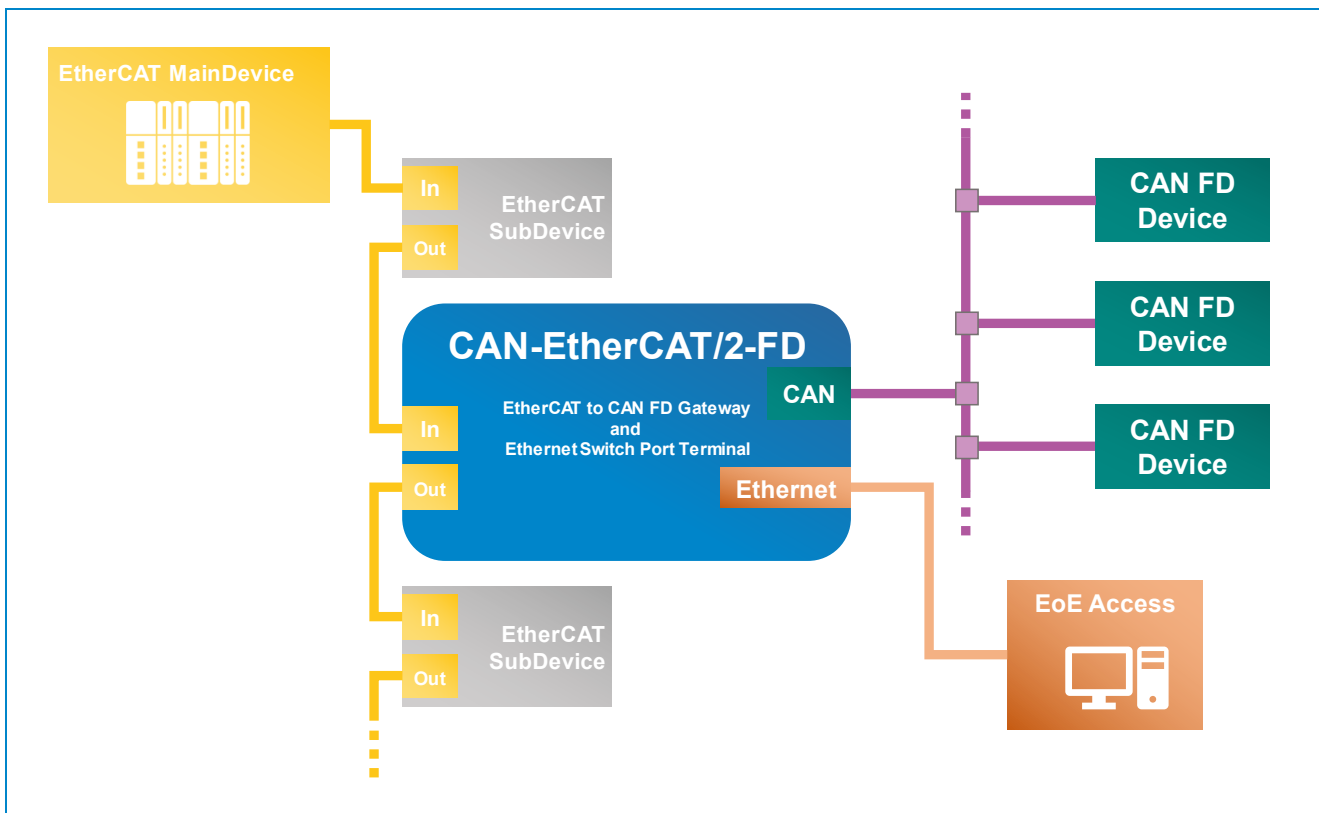
The CAN FD (ISO 11898-2) compatible port allows a data-transfer rate of 10 kBit/s up to 8 Mbit/s

The CAN FD port is connectable either via a pluggable 5-pin PCB terminal block with push-in spring connection or via InRailBus.

Related Products

This Product is also available as CAN CC only version. See CAN-EtherCAT/2 (C.2932.02)

Application Example:

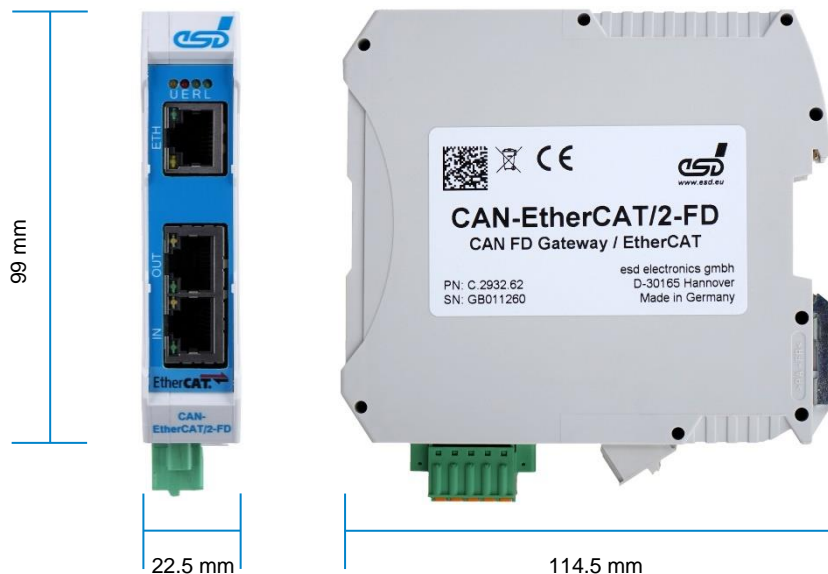


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Housing Details:



Technical Specifications:

Ports:	
CAN port	esdACC, 10 kbit/s - 8 Mbit/s, physical layer according to ISO 11898-2, galvanically isolated
EtherCAT SubDevice interface	Dual port RJ45 socket, 100BASE-TX, IEEE 802.3, galvanically isolated
Ethernet port	RJ45 socket, 100BASE-TX, IEEE 802.3, galvanically isolated
General:	
Power supply voltage	16 VDC ... 32 VDC, nominal: 24 VDC
Power consumption	Typical: 1.6 W, maximum: 2.16 W
Current consumption	$I_{TYPICAL_24V} = 67 \text{ mA}$, $I_{MAX_24V} = 90 \text{ mA}$
Ambient temperature	-20 °C ... +70 °C
Relative humidity	Max. 90 % (non-condensing)
Dimensions	22.5 mm x 99 mm x 114.5 mm (without mating connectors)
Housing	Plastic housing (Phoenix MEMAX) for hat rail mounting NS 35/7,5 DIN EN 60715
Protection Class	IP20
Connectors	EtherCAT 2x RJ45 socket Ethernet RJ45 socket CAN: 5-pin PCB header Power: 4-pin PCB header InRailBus: CAN and 24 V power supply optionally connectable via InRailBus card edge connector Use mounting rail connector 5-pos. TBUS connector (accessories).
Weight	Approx. 125g

Order Information:		
Hardware		Order No.
CAN-EtherCAT/2-FD	EtherCAT to CAN FD Gateway for DIN rail mounting, CAN FD port according to ISO-11898-2, up to 8 MBit/s, galvanically isolated Pluggable PCB connectors for CAN (FK-MCP 1,5/5-STF-3) and 24 V (FKCT 2,5/4-ST) are included in delivery	C.2932.62
Accessories		
CAN-Cable-S, 0,3m (plug)	CAN-cable 0.3 m, 1x DSUB9 connector with pin contacts	C.1323.03
CAN-Cable-B, 0,3m (socket)	CAN-cable 0.3 m, 1x DSUB9 connector with socket contacts	C.1323.04
CAN-CBX-TBUS	InRailBus connector	C.3000.01
CAN-CBX-TBUS-Connector-Socket	Connector for power supply and CAN to the InRailBus (socket contacts)	C.3000.02
CAN-CBX-TBUS-Connector-Plug	Connector for power supply and CAN to the InRailBus (pin contacts)	C.3000.03
Software Support		
esd EtherCAT Workbench License		P.4510.01
Related Products		
		Order No.
CAN-EtherCAT/2	EtherCAT to CAN Gateway for DIN rail mounting CAN port according to ISO-11898-2, up to 1 MBit/s, galvanically isolated	C.2932.02