

Ixxat FRC-EP170

Item number: 1.13.0142.00002

The Ixxat FRC-EP170 is an advanced solution for automotive engineering that integrates multiple bus systems. It features four CAN channels, one of which is CAN low-speed capable, including FlexRay, LIN and Digital in/out functionalities. This makes it an ideal solution for logging, gateway, and residual bus simulation applications. Configuration is easily done with the Ixxat Advanced Configuration Tool (ACT).



Configurable automotive platform (1x FlexRay, 4x CAN)

Features and benefits

✓ Go-to solution for demanding network requirements

Enables easy integration of multiple bus systems into a single, compact device. This is essential for e-mobility projects and complex industrial applications.

✓ Extensive CAN connectivity

The FRC-EP170 features four CAN channels, thereof one CAN low-speed capable, catering extensive connectivity for a wide range of automotive applications.

✓ Improved data management for efficient engineering

Streamlines data management and protocol handling, optimized for automotive testing, logging and gateway operations. Ensuring easy integration and reliable performance.

✓ Overvoltage protection

Galvanic isolation safeguards against overvoltage and protects from potential electrical damage.

✓ Support for Linux and QNX

Using the free ECI driver package, the hardware can be easily integrated into Linux-based environments as well as into applications under the QNX real-time operating system. 32- and 64-bit ARM (Raspberry Pi) and Intel X86 platforms are supported.

✓ Compatibility with automotive standards

Supports industrial protocols, including FlexRay, facilitating high-speed data transfer and network integration for complex applications – especially suited for automotive engineering.

✓ Multi-connectivity with various interfaces

Additional interfaces included: 1 x FlexRay, 1 x LIN, 1 x Ethernet (10/100 Base-T), 4 x Digital in/out (A/D), USB 2.0 device and host and a SDHC slot. Further extension options are available.

✓ Embedded platform with own processing power

All applications run on the device, a PC is only needed for configuration or stimulation/visualization of data, as the actual intelligence is outsourced to the embedded platform.

✓ Quick and easy configuration through ACT support

The FRC-EP series is supported by the Ixxat ACT (Advanced Configuration Tool), a Windows-based tool to easily configure the device via drag and drop. Most use cases can be solved by using ACT Freeware.



General

Net Width (mm)	113
Net Height (mm)	142
Net Depth (mm)	40
Net Weight (g)	940
Packed Weight (g)	940
Operating Temperature °C Min	-40
Operating Temperature °C Max	80
Storage Temperature °C Min	-40
Storage Temperature °C Max	85
Relative Humidity	10 to 95 %, non-condensing
Current Consumption Type Value at Vcc Nom (mA)	320 mA (12 V DC)
Input Voltage (V)	6 V to 36 V DC
Power Connector	3-pole
Configuration	The Ixxat FRC-EP170 is a Linux platform that is able to work standalone without any connected PC. For the standalone function a configuration is needed, that can be created and downloaded to the device via the PC based Ixxat Automotive Configuration Tool (ACT) and an USB connection.
Content of Delivery	FRC-EP170 device, user manual, power supply cable (2 m, 3-pin Binder socket to 3 x 4 mm banana plugs), USB 2.0 cable (2 m, Type A to Mini Type B), runtime licences for Gateway and RBS, available as download: Advanced Configuration Tool (ACT)
Mounting	Panel mount
Housing Materials	Aluminium
Packaging Material	Cardboard

Identification and Status

Product ID	1.13.0142.00002
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Identification and Status

Country of Origin	Germany
HS Code	8517620000
Dual Usage	No
Export Control Classification Number (ECCN)	EAR99

Physical Features

Connectors / Input / Output	1 x RJ45 connector (Ethernet), 1 x USB type B port, 1 x USB type A port, 1 x SD card slot, 1 x 7-pin Binder female panel mount connector (remote/debug), 1 x 3-pin Binder male panel mount connector (power), 1 x D-Sub HD15 male connector, 1 x D-Sub HD15 female connector, 1 x RP-SMA female connector (WiFi/antenna)
Contains Battery	No

CAN Features

CAN Mode	CAN high-speed (ISO 11898-2), CAN low-speed (ISO 11898-3)
CAN Transceiver	TI SN65HVD251

CAN FD Features

CAN FD Transceiver	TCAN334GDCN
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LIN Features

LIN Transceiver	TJA1020
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Certifications and Standards

Protection Class IP	IP42
ETIM Classification	EC001604
CE	Yes
TELEC	No
WEEE Category	IT and telecommunications equipment



Use Case

