Ixxat®
BY HMS NETWORKS

Ixxat FRC-EP170 Plus

Item number: 1.13.0142.00302

Ixxat FRC-EP170 Plus is an advanced solution for automotive uses, integrating multiple bus systems with FlexRay, LIN and six CAN channels, thereof two CAN FD and one CAN low-speed capable. It is ideal for logging, gateway, and residual bus simulation applications – easily configurable with the Ixxat Advanced Configuration Tool (ACT).

Configurable automotive platform (1 x FlexRay, 6 x CAN, 2 x CAN FD)

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 Plus features six CAN channels, two of which are CAN FD and 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.

✓ **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.

✓ **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 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.

✓ **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.

Ixxat FRC-EP170 Plus

General

Net Width (mm)	113
Net Height (mm)	142
Net Depth (mm)	40
Net Weight (g)	915
Packed Weight (g)	915
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	Aluminum
Packaging Material	Cardboard

Identification and Status

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Ixxat FRC-EP170 Plus

Identification and Status

Country of Origin	Germany
HS Code	8517620000
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)

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

LIN Features

LIN Transceiver	TJA1020

Certifications and Standards

Protection Class IP	IP42
ETIM Classification	EC001604
WEEE Category	IT and telecommunications equipment