

Ixxat FRC-EP190 FlexRay Plus 4

Item number: 1.13.0094.10507

The Ixxat FRC-EP190 FlexRay Plus 4 is a powerful solution for automotive uses, merging multiple bus systems with FlexRay, LIN and eight CAN channels, thereof four CAN FD and two CAN low-speed capable. It's ideal for logging, gateway, and residual bus simulation tasks – easily configurable with the Ixxat Advanced Configuration Tool (ACT).



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

Features and benefits

- ✓ **Go-to solution for demanding network requirements**
The FRC-EP190 enables easy integration of multiple bus systems into a single, compact device. This is essential for e-mobility projects and complex industrial applications.
- ✓ **Multi-connectivity with various interfaces**
Additional interfaces included: 2 x LIN, 1 x Ethernet (10/100 Base-T), 4 x Digital in/out (A/E), 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 platform 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 and EtherCAT, facilitating high-speed data transfer and network integration for complex applications – especially suited for automotive engineering.
- ✓ **Improved data management for efficient engineering**
The FRC-EP190 series 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.



General	
Net Width (mm)	110
Net Height (mm)	180
Net Depth (mm)	50
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)	420 mA (12 V DC)
Input Voltage (V)	6 V to 36 V DC
Power Connector	3-pole
Isolation	The FRC-EP190 features four interface islands (X1, X2, X3, X4), each galvanically isolated from the others. Within each island, interfaces for CAN FD, CAN high-speed, digital I/O, and LIN are interconnected. The shielding of the cable and/or the metal collar of a D-Sub connector is directly connected to the housing.
Configuration	The Ixxat FRC-EP190 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-EP190 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), Ethernet cable (2 m), 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

Product ID	1.13.0094.10507
Country of Origin	Germany
HS Code	8517620000
Export Control Classification Number (ECCN)	EAR99
Supply Risk Factor ERP	Used in Volume 01

Physical Features

Connectors / Input / Output	3 x RJ45 connectors (1 x Ethernet, 2 x fieldbus), 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), 4 x D-Sub 9 male connectors, 1 x D-Sub HD15 male connector
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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	TI SN65HVD251
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LIN Features

LIN Transceiver	TJA1020
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Certifications and Standards

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



Use Case

