

# Ixxat FRC-EP190 Plus CANonly

Item number: 1.13.0094.10107

The Ixxat FRC-EP190 Plus CANonly is a compact solution for automotive uses, focusing on CAN-based applications. Featuring 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 applications — easily configurable with the Ixxat Advanced Configuration Tool (ACT).



Configurable automotive platform (8 x CAN, 4 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.
- 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.

- Multi-connectivity with various interfaces

  Additional interfaces included: 2 x LIN, 1 x Ethernet (10/100 Base-T), 2 x Analog in, 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 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.



# Ixxat FRC-EP190 Plus CANonly



| 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 cable's shielding or the D-Sub connector's metal collar is directly connected to the housing for enhanced integrity. |
| 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  |
|  |  |



### Ixxat FRC-EP190 Plus CANonly



| Identification and Status                   |                 |
|---|-----------------|
| Product ID                                  | 1.13.0094.10107 |
| Country of Origin                           | Germany         |
| HS Code                                     | 8517620000      |
| Export Control Classification Number (ECCN) | EAR99           |

# 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

#### **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

#### LIN Features

LIN Transceiver TJA1020

# Certifications and Standards

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





# Use Case





