

Kuhnke FIO Controller

Control Technology

Kuhnke FIO Controller 116 PROFINET IRT Modular PLC Controller as PROFINET IO Device

The Kuhnke FIO Controller 116 PROFINET-IRT is a modular ARM-based PLC with integrated CODESYS V3 controller. An SD card slot and a USB interface enable local storage of process data and program transfer.

Via the lateral E-Bus connector, the FIO Controller 116 PROFINET-IRT is modularly expandable with EtherCAT I/O modules of the Kuhnke FIO Line. When using an extender module, control of external EtherCAT SubDevices are additionally supported.

The FIO Controller 116 PROFINET-IRT supports Industrial Ethernet, RS232 and CAN and operates as a Modbus TCP and Modbus RTU client as standard. The left-side expansion interface operates as a PROFINET IO Device, enabling data exchange with existing PROFINET IO controllers. Interface and bus modules provide additional communication paths and facilitate integration into existing control architectures.



Features

- Easy integration in PROFINET® systems
- To be extended with FIO modules
- CODESYS V3 with EtherCAT®
- Optional: CODESYS SoftMotion
- OPC UA interface



Technical Data	Kuhnke FIO Controller 116 IRT
Processor	i.MX6 SoloX Freescale 1 GHz
RAM / nonvolatile memory	256 MB / 128 kB storage in Flash
Drive	256 MB internal Flash memory, SD(HC)-card slot
Software	Application: CODESYS V3 Soft SPS optional with SoftMotion WebVisu and SoftMotion CNC + Robotics on request
Interfaces	1 x RS232, 1 x USB 2.0, 1 x CAN (galvanically isolated)
Network	1 x Ethernet 10/100 Mbit – RJ45, OPC UA (Server)
Field bus interface	CANopen® Manager Modbus TCP Client (via Ethernet) und Modbus RTU Client (via RS232) EtherCAT® E-Bus-Interface, extern via Extender module 2 x PROFINET® IO Device (256 Byte In/ 256 Byte Out via Ethernet switch)
Integrated I/Os	1 x DI 1ms
Housing (W x H x D)	Aluminium, plastic housing 42 x 120 x 90 mm
Mounting	35 mm DIN Rail
Supply voltage	24 V DC / (19.2 ... 28.8), Power consumption approx. 3.5 W (@ 24 V DC)
Operating temperature	0 °C...+55 °C
Cyber Security, CRA	In Progress
Approvals / Standards	PROFINET IRT, CE (Industry), cULus, IEC 61131-2, IEC 61000-6-4, IEC 61000-6-2

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