Kuhnke FIO Controller	Control Technology

Kuhnke FIO Controller 116 PROFINET IRT

Mini IPC Controller as PROFINET IO Device

The Kuhnke FIO Controller 116 PROFINET-IRT is a mini-IPC basing on ARM with integrated CODESYS PLC. It is able to exchange data with other systems via industrial Ethernet and RS232. In addition, a built-in SD-card slot and a USB-interface allow local storage of process data. As far as mechanic properties and form factor are concerned, the controller matches the FIO I/O modules, which can be attached directly to form a mechanically and electrically homogenous unit.

It can be easily integrated by the number of interfaces (Industrial Ethernet, RS232, CAN), supported fieldbuses and attachable communication modules into existing control concepts. Furthermore, the Controller can exchange data with existing PROFINET IO Controllers via the left side appendix as a PROFINET IO Device. The Controller 116 always supports Modbus TCP and RTU master functionality. By using an additional extender module, the control of remote EtherCAT slaves is possible, too. Offering the OPC UA interface the Controller is the perfect device for industry 4.0 communication.
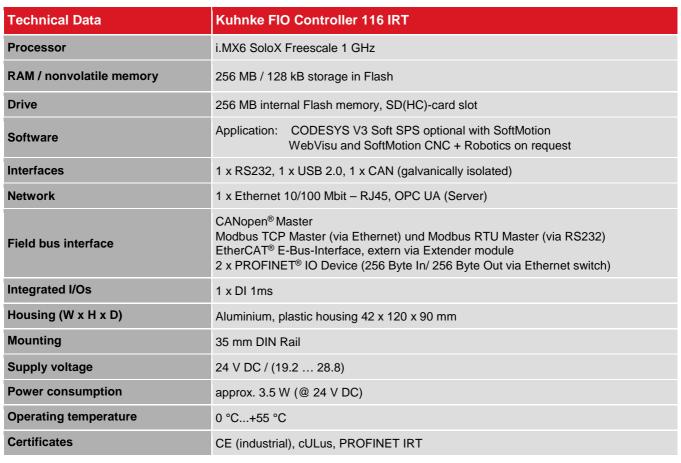
Features

- 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® Master Modbus TCP Master (via Ethernet) und Modbus RTU Master (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
Certificates	CE (industrial), cULus, PROFINET IRT