Product announcement: Kuhnke FIO	Control Technology

Kuhnke FIO Controller 111

Modular CODESYS PLC with integrated IOs

The Kuhnke FIO Controller 111 is a low cost PLC on ARM basis. It is programmed with CODESYS V3 and matches the FIO I/O modules, which can be attached directly to form a mechanically and electrically homogenous unit. Data with other systems can be exchanged via industrial Ethernet, CAN and RS485 as well as OPC UA (pub/sub). It can be easily integrated by the number of interfaces (Industrial Ethernet, CAN), supported fieldbuses and attachable communication modules into existing control concepts. A built-in µSD-card slot allows local storage of process data and the exchange of application programs. By means of the integrated configurable IOs including fast counters, analogue IOs, pulse-train-outputs (PTO) and encoder inputs a large number of additional functions, e.g. control of 2 synchronizes axis, can be realized in a cost optimized way.

Features
- Flexible with several communication interfaces
- Extendable with Kuhnke FIO modules
- Cost optimized with integrated IOs
- CODESYS V3 with EtherCAT®

Technical Data	Kuhnke FIO Controller 111
Processor	32-bit Arm® Cortex®
RAM / Remanenter Speicher	32 MB / Storage in Flash
Speicher	16 MB Flash, µSD-Card
Software	RTOS / CODESYS V3 Soft SPS
Interfaces	1 x RS485 or CAN (configurable; not galvanically isolated) 1 x USB-Device for programming
Network	1 x Ethernet 10/100 Mbit – RJ45, OPC UA (Pub/Sub)
Fieldbus interfaces	1 x CANopen® or Modbus RTU Master (via RS485) Modbus TCP Master (via Ethernet) EtherCAT® internal via E-Bus-Interface, external via Extender-Modul
Integrated I/Os	6 x DI 24 V 0,005 ms 8 x DO 4 x 24 V 0,5 A / 4 x 24 V 0,25 A 2 x DI / AI 24 V 1 ms / 0…10 V, 12 Bit 2 x AI 0…10 V, 0/4 …20 mA, 12 Bit 2 x AO 0…10 V, 0/4 …20 mA, 12 Bit Integrated functions (reduce the no. of available IOs): 2 x Up/Down-counter, 2 x event counter (200kHz), 2 x Encoder A-B-Z (100 kHz), 2 x Encoder supply, 4x PTO, 4 x PWM
Housing (W x H x D	Aluminum, plastic housing 25 x 120 x 90 mm
Mounting	35 mm DIN Rail
Power supply	24 V DC / (19.2 … 28.8)
Power consumption	approx. 3.5 W (@ 24 V DC)
Operating temperature	0 °C …+55 °C
Certifications	CE (Industrie), cULus (planed)