Kuhnke CIO Controller — Control Technology

Kuhnke CIO Controller

Embedded compact controller

The Kuhnke CIO Controller is a µController-based hardware for control tasks in machine and apparatus engineering. The integrated interfaces are designed for devices with power supply and complex control tasks. The programming is in C/C ++, the "Kuhnke I/O API" allows simple use of existing interfaces and integrated I/Os.
The µSD card allows the local storage of process data and the exchange of control programs. The compact control for the DIN rail works as CAN master and can be networked with other bus users. The embedded hardware can be expanded with a 7" or 5" display with touch functionality. The GUI / HMI is generated, e.g. with the embedded wizard.

Features

- Compact controller with CAN master functionality
- Special functions:
  Relay, phase monitor, phase failure monitoring, analog I/Os
  Real time clock

Technical Data	Kuhnke CIO Controller
Display size / Resolution	TFT with touch functionality, remote mounting, 7" / 800 × 480 (WVGA); 5" / 480 x 272
Integrated I/Os	8 x DI: input delay: 3 ms 8 x DO relays (7 x NO, 1 x CO) 4 AI U, 0…+10 V, 12 bit; 4 AI I, 0/4..20 mA / 12 bit 1 x AO-U 0…10 V, 12 bit, max. 1 mA; 1 x AO-I 0…20 mA, 12 bit 2 AI (Pt1000/Pt100)
Special functions	Phase sequence control, power failure (100 VAC…600 VAC) Indirect phase current measurement (0 … 100 mA for current transformer) Real time clock, (RTC), µSD-Slot
Interfaces	1 x Ethernet 10/100Mbit; 1 x RS-485; 1 x RS-232; 1 x CAN galvanically isolated
Processor	STM32F7 (ARM® Cortex®-M7 core), 216MHz, 2024 kB internal Flash, 512 kB RAM
Software	high-level language programming (C/C++), I/O API, CODESYS Runtime HMI via embedded Wizard
RAM / Non-volatile memory	RAM: 32 MB, 4 kB remanent memory
Drives	Flash: 64 MB, 1x µSD-Card-slot
Housing technology	Switch cabinet module for the DIN rail, aluminium tray with stainless cover Optional Display: IP 65, aluminium front panel with insert film
Dimensions (W x H x D)	206 mm x 105 mm x 57 mm (Without plugs)