



DATA SHEET

sysWORXX CTR-700



Make machine data readable

With the sysWORXX CTR-700, we offer you a flexible control solution that is ideally suited as a starting point for your own developments.

As a freely programmable Linux compact controller for automation and digitization, it allows you to create versatile applications in all common high-level programming languages such as C/C++, Rust, C# (Mono), Java and Python.

The CTR-700 is also programmable as PLC in IEC 61131-3 with the programming environment OpenPCS. For easy entry, even for non-informaticians, the low-code environment Node-RED is immediately usable. The CTR module is ready for use with all common cloud providers through standard protocols such as MQTT, REST and OPC UA.

On the hardware side, the CTR-700 has a convenient set of communication interfaces as well as versatile digital and analog inputs and outputs. With our sysWORXX CTR-700, you can test and expand your IoT concept without large upfront investments, thanks to fast and flexible integration.

Our highlight: The sysWORXX CTR-700 can be customized both visually (white label) and technically exclusively to your requirements.

Features & Details

GENERAL	
Size (height, width, depth)	60x162x91mm
Temperature range	0°...55°C
Humidity	10...95% non condensing (VDE 0110)
Protection class	IP 20
Mounting type	Top-hat rail
Supply voltage	24VDC
CORE	
CPU	Dual 1GHz Cortex™-A7 NXP iMX7
Real-time Co-Prozessor	200 MHz Cortex™-M4
RAM	1024 MiB
eMMC	8 GiB
RTC	on-board, with buffer capacitor
Temperature sensors	CPU and IO board
CONNECTIVITY	
ETH	2 (100 Mbps, each with its own MAC address)
CAN	2 (CAN 2.0B)
SIO	3 (software configurable: RS-232, RS-485)
USB Host	1 (USB 2.0)
SD Card	1 (Micro-SD)
Linux Console	Serial (via USB)
SOFTWARE	
Basic installation	Linux (Debian), I/O driver, Node-RED incl. sysWORXX nodes for on-board IOs
Additional licenses	IEC 61131-3 Runtime: OpenPCS (incl. CAN, CANopen, Modbus TCP/RTU, MQTT)
Optional	Third party software: Download via Debian OS repositories qBee Agent for Device Management via Cloud
I/O INTERFACES	
Digital inputs	16 (24VDC, galvanically isolated)
A/B Encoder	1 (as alternative function for DI14/DI15)
Highspeed Counter	1 (Up/Down, as alternative function for DI14/DI15)
Digital outputs	16 (24VDC/0.5 A, galvanically isolated)
PWM	2 (as alternative function for DO14/DO15)
Relay	2 (230VAC/1A, change-over contact)
Analog inputs	4 (12Bit, software configurable: 0...10VDC, 0...20mA)
USER INTERFACES	
Switch	Run/Stop switch, Reset button, DIP switch
Status LEDs	Power CPU, Power Periphery, Run, Error, status of inputs and outputs
Maintenance access	SSH/SFTP via Ethernet, Linux console via serial/USB