CU Control Unit 5X



Universal, robust industrial PC with scalable performance

- **>** Based on Intel Atom® Dual or Quad Core™ processor
- > Expansion connector for the realization of individual modules
- Industrial grade, 10 year availability
- > Fanless compact design for DIN rail, mounting in portrait or landscape format
- ▶ Optionally CODESYS SoftPLC with EtherCAT, PROFINET, Modbus, CANOpen fieldbus protocols



CU Control Unit 5X - Smart, Fanless, Compact

This powerful control unit series combines an industrial grade design with multiple mounting options and the possibility for individual extensions. This series is based on the long-term available Intel Atom® Dual or Quad Core™ processor and offers high performance in a small space. The Control Unit 5X family is ideal for individual control and gateway application for example in a control cabinet. The Control Unit 5X devices offer numerous interfaces and fieldbus protocols that allow connection to a wide variety of

devices. The control units can be delivered with CODESYS Soft-PLC development tools for fast and efficient implementation of sophisticated automation and visualization solutions.

The control units have been designed as long available devices (> 10 years) and can also be customized and optimized to your individual requirements.

Technical Information

| | | CU CONTROL UNIT 5X | CU CONTROL UNIT 5X MINI |
|----------------|--|--|--|
| PROCESSOR | CPU | Intel Atom® E3800 2-4 Cores™ | Intel Atom® E3800 2-4 Cores™ |
| T NOCESSON | Ci O | 2 Core™ 1.33 GHz /4 Core™ 1.91 GHz | 2 Core™ 1.33 GHz /4 Core™ 1.91 GHz |
| MEMORY/STORAGE | DRAM DDR3L EMMC SRAM/FRAM SD-CARD | 2/4 GByte, SO-DIMM slot 16/32 GByte -/128 kByte microSD-slot (up to SDXC-format) | 2/4 GByte, SO-DIMM slot 16/32 GByte -/128 kByte microSD-slot (up to SDXC-format) |
| INTERFACES | USB ETHERNET HDMI CAN SERIAL PORTS | 2x USB 2.0 (Host) 2x Ethernet (10/100/1000) independent 1x HDMI Type C 1x CAN (isol.) 1x RS232, 1x RS485 (isol.), Profibus | 2x USB 2.0 (Host) 2x Ethernet (10/100/1000) independent 1x HDMI Type C |
| OTHERS | CONTROL WATCHDOG RTC BIOS | Power button, programmable status LED External Watchdog, programmable Battery buffered RTC UEFI BIOS | Power button, programmable status LED External Watchdog, programmable Battery buffered RTC UEFI BIOS |
| MECHANICAL | CONSTRUCTION COOLING DIMENSION (HXWXD) WEIGHT MOUNTING | IP20, stainless steel Fanless 185.6 x 92 x 38.2 mm (without connectors and rail clamp) 0.66 kg For mounting on 35 mm mounting rail acc. To EN 60715 | IP20, stainless steel Fanless 108 x 91 x 36.2 mm (without connectors and rail clamp) 0.39 kg For mounting on 35 mm mounting rail acc. To EN 60715 |
| ENVIRONMENT | POWER POWER CONSUMPTION EMC SHOCK (EN 60068-2-27) VIBRATION (EN 60068-2-6) OPERATING TEMPERATURE STORAGE TEMPERATURE HUMIDITY ALTITUDE | 24 VDC ±20 % Typ. 3.6 W to 30 W (depending on processor load and interface activity) EN 61000-6-2 (immunity) EN 61000-6-4 (emission) n.a. n.a. 0 °C +55 °C -20 °C +70 °C 10 %-90 % @ 39 °C, non-condensing Up to 9.800 ft (3000 m) | 24 VDC ±20 % Typ. 3.6 W to 24 W (depending on processor load and interface activity) EN 61000-6-2 (immunity) EN 61000-6-4 (emission) n.a. n.a. 0 °C +55 °C -20 °C +70 °C 10 %-90 % @ 39°C, non-condensing Up to 9.800 ft (3000 m) |
| SOFTWARE | OPERATING SYSTEM SOFTPLC (OPTION) PROTOCOLS (OPTION) | Linux Debian Microsoft Windows 10 IoT Enterprise CODESYS V3, Target Visu, Web Visu EtherCAT, Modbus TCP/RTU, Profinet, Profibus, Ethernet IP, CANopen, OPC UA, IIoT Libraries (MQTT, HTTPS; Azure, AWS, Google) | Linux Debian Microsoft Windows 10 IoT Enterprise CODESYS V3, Target Visu, Web Visu EtherCAT, Modbus TCP, Profinet, Ethernet IP, OPC UA, IIoT Libraries (MQTT, HTTPS; Azure, AWS, Google) |
| APPROVALS | CERTIFICATIONS | CE, UL 61010-1 & UL 61010-2-201 | CE, UL 61010-1 & UL 61010-2-201 |
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About Kontron

Kontron is a global leader in IoT/Embedded Computing Technology (ECT) and offers individual solutions in the areas of Internet of Things (IoT) and Industry 4.0 through a combined portfolio of hardware, software and services. With its standard and customized products based on highly reliable state-of-the-art technologies, Kontronprovides secure and innovative applications for a wide variety of industries. As a result, customers benefit from accerated time-to-market, lower total cost of ownership, extended product lifecycles and the best fully integrated applications.

For more information, please visit: www.kontron.com

About Kontron Electronics

Kontron Electronics AG acts as a provider of automation solutions. The enterprise is at home in a variety of sectors, such as industrial machinery and device manufacturing, medical technology and building automation. Our portfolio includes proprietary and client-specific products, development and design services for complex electronics components, modules and systems, as well as production and assembly services for entire devices. The company is part of the technology corporation Kontron AG.

For more Information please visit: www.kontron-electronics.com

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