A2 Programmable Automation Controller
fast • versatile • compact

Box-PC with real-time Ethernet master and innovativ panel interface

- Intel® Atom™ to Core™-i CPUs
- EtherCAT® or Sercos® master interface, CAN
- XD panel interface spans up to 100 meter distance between panel and A2-PAC with a single Cat.6 cable

The A2-PAC device family combines the advantages of a PC-based controller with the typical characteristics of a PLC and a motion controller.

Powerful Intel® Atom™ Multi-Core and Core™-i CPUs allow the realization of the most demanding control and visualization applications.

**Ready for Industry 4.0** - various communication interfaces, supported by standardized protocols and functional libraries, enable easy integration into SmartFactory structures.

The A2-PAC base units have a wide range of communication interfaces and a Mini-PCIexpress slot for easy integration of additional functions like WLAN, 3G modem and further field busses.
The XD panel interface enables remote operation of the L1/C1 panels connected to A2-PAC base units. Video, touch-screen, USB, IO and power supply are transmitted over a single, up to 100 meter long standard Cat.6 cable.

The DVA panel interface is available for distances of up to 5 meters.

Both interfaces are independent of operating system and software.

The A2-PAC base units are programmed with CODESYS in the common IEC 61131-3 languages. This proven engineering tool is also used to create visualizations.

The integrated OPC-UA server allows ERP, MES and SCADA systems the access to application data and serves as an interface for M2M communication.

Qt is available for the realization of graphical user interfaces. This graphics library can be used in combination with CODESYS PLC programs or applications programmed in C/C++.
## Technical Information

### A2 - Programmable Automation Controller

| **CPU** | Intel® Atom™ to Core™-i CPUs |
| **RAM** | DDR3 (1 GB or greater), 512 kB NVRAM (MRAM), 8 MB SRAM for optional Onboard-CPU |
| **Ports** | <br> Serial: 1 x RS232, 1 x RS422/RS485 (über Schalter einstellbar)<br> USB: 2 x USB over Type A connector, 1 x USB over DVA panel interface<br> Ethernet: 1 x 10/100/1000 MBit/s Ethernet<br> Kbd/Mouse: over USB<br> Video: 1 x HDMI, 1 x XD panel interface, 1 x DVA panel interface<br> Mini-PCIe: Expansion slot (LAN, WLAN, Bluetooth, further field busses, external SATA interface, 3G modem, etc.) |
| **Storage** | mSATA (2 GB or greater), SD-Card slot |
| **Field busses** | 1 x RT-Ethernet with 2 x RJ45 for Sercos or EtherCAT (each master or slave), 1 x CAN |
| **Onboard I/Os** | 4 x DI (24V DC), 4 x DO (0,5 A) |
| **Dimension** | H x D x W 175 x 120 x 55 mm |
| **Power supply** | 24VDC |
| **Cooling** | passive |
| **Housing** | metal |
| **Mounting** | wallmount |
| **Operating temperature** | 0°C ÷ +55°C |
| **Protection class** | IP20 |
| **Operating systems** | Windows® CE, Windows® Embedded, Linux (others on demand) |
| **Software** | CODESYS IEC-61131 and CODESYS target-/web-visualization (others on demand) |
| **Certifications** | CE, RoHS |

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**PRODUCTS**

Technological components for industrial automation.

- **PAC - PROGRAMMABLE AUTOMATION CONTROLLER**
- **FIELDBUS & INDUSTRIAL ETHERNET**
- **I/O MODULES**
- **HMI - HUMAN MACHINE INTERFACE**
- **AUTOMATION SOFTWARE**
- **DRIVES**

**APPLICATIONS**

Hardware and software solutions for specific user applications.

- **REMOTE MONITORING & ASSISTANCE**
- **MACHINE CONTROL & PRODUCTION**
- **ENVIRONMENTAL MONITORING**
- **MOTION & ROBOTICS**
- **PREVENTIVE MAINTENANCE**
- **ENERGY EFFICIENCY**

**ENGINEERING**

Services for engineering projects.

35 years of experience in the automotive, energy, oil & gas and water treatment sectors enable Cannon Automata to present itself as complete and perfect partner for the development of industrial engineering and process projects. Systems are characterized by their high performance, thanks to an approach that is fully oriented to achieve tailored solutions to specific needs.

For the best results in terms of quality and customer satisfaction, Cannon Automata follows an operative scheme that is widely experienced and successful, from the study to the implementation, and with a constant technical support.