

NEXTOXF

5th Altus' PLC Generation

New Modular PLC

altus



POSITIONING

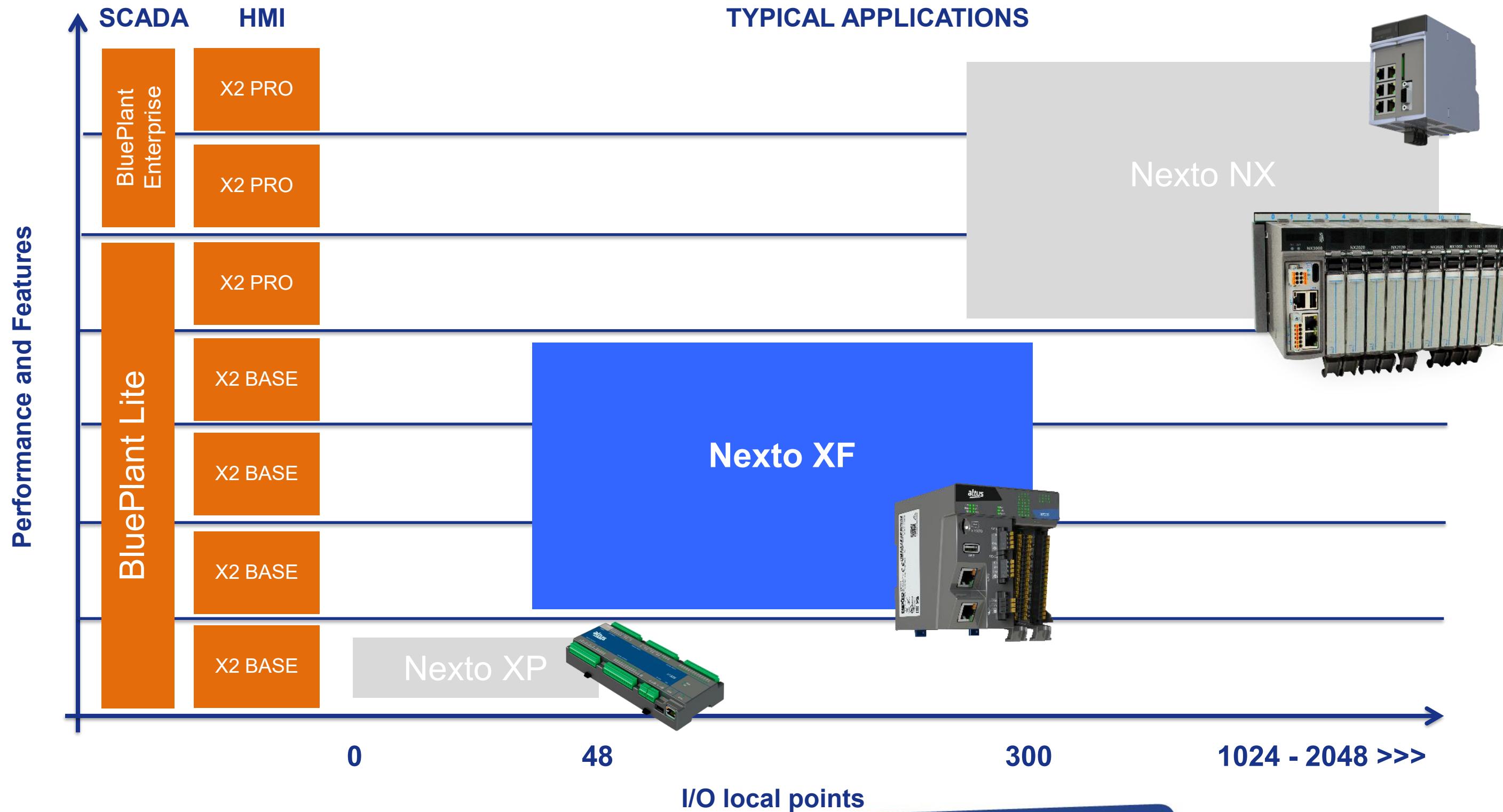
TARGET MARKETS AND HIGHLIGHTS

MARKETS

SOLUTIONS TO THE DEMANDS OF EVERY MARKET

OEM MACHINES | FOOD & BEVERAGE | TEXTILE | MARINE
BUILDING | WATER & WASTEWATER | INFRASTRUCTURE

CONTROLLERS



KEY SELLING POINTS

PRODUCT HIGHLIGHTS



INDUSTRY 4.0

Multiprotocol
MQTT / TLS
VPN / FTP
Docker
Cyber Security

PERFORMANCE

64-bit ARM 1GHz
Dual-Core
1,000 PID loops < 2 ms

OPEN

PROFINET
OPC DA/UA
MODBUS TCP
MODBUS RTU
CANOpen

SMART

USB (WiFi / 4G
support)
Cloud Connection
MSSQL

MASTER TOOL

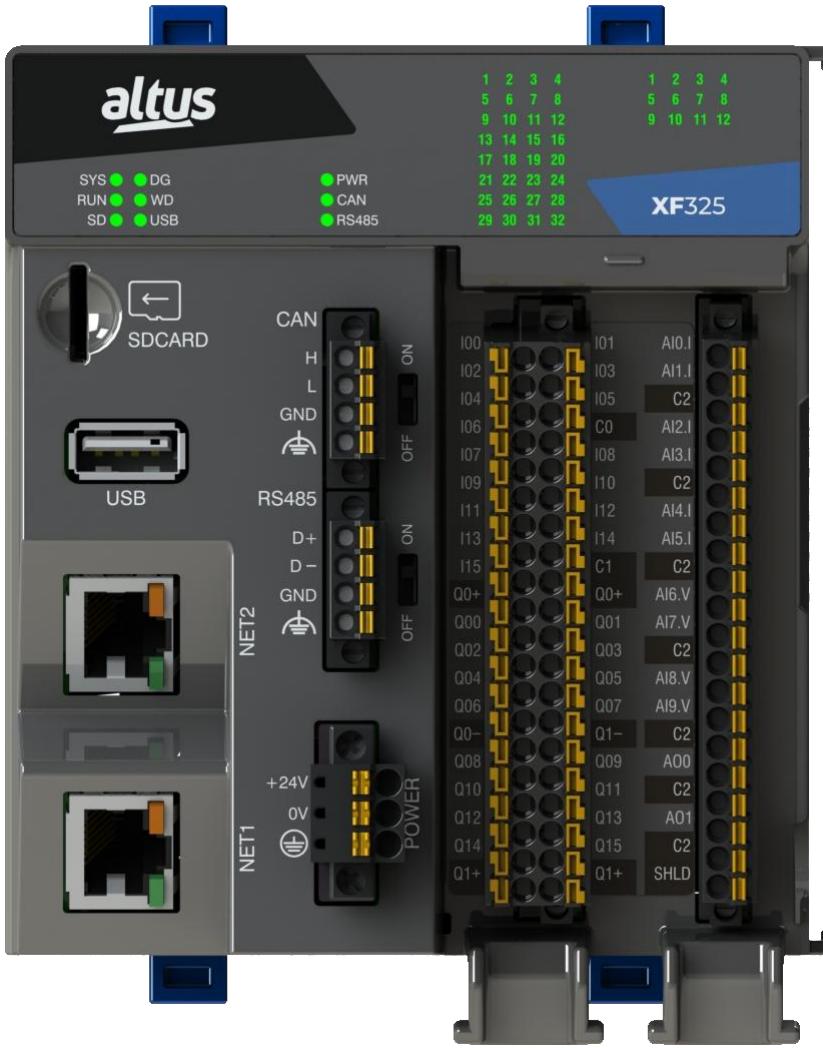
Easy to use
software, online
changes and off-
line simulation.
Based on

SCALABLE

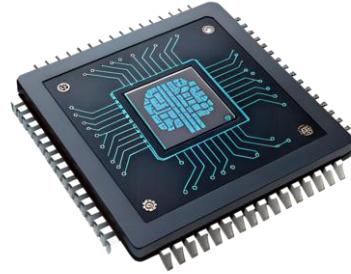
The Nexo
family covers
small to
medium
solutions with
the same I/O
solution

CODESYS

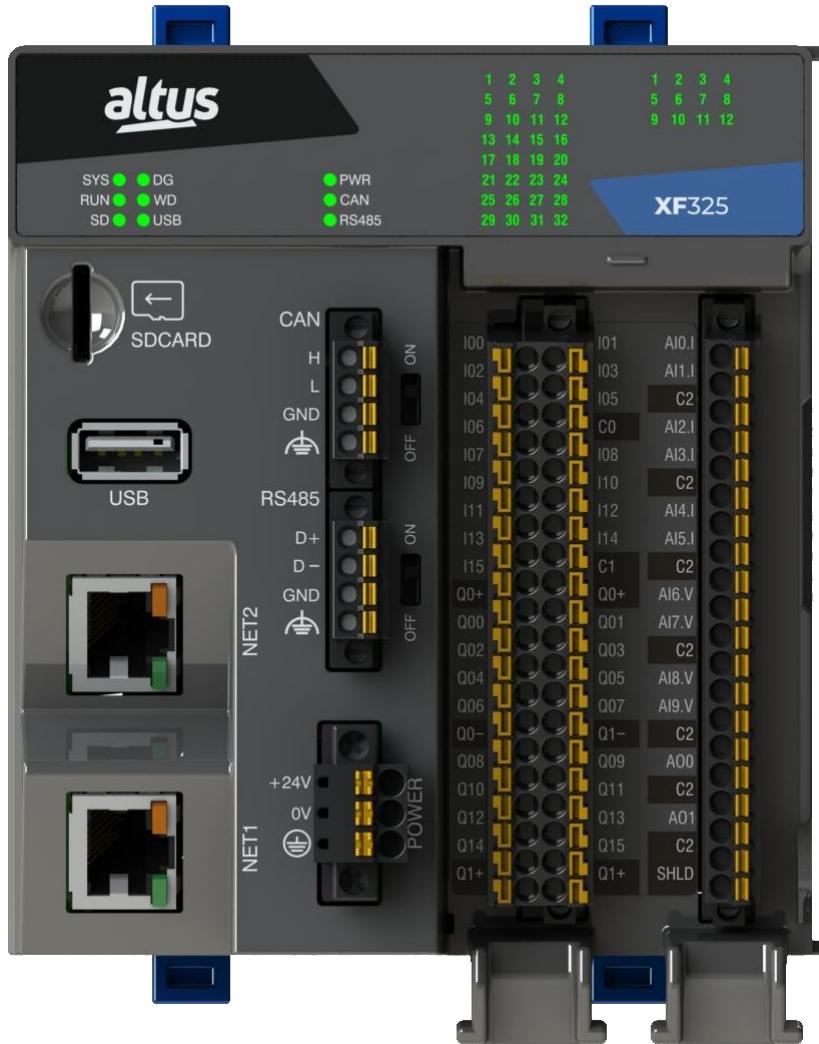
DESIGN HIGHLIGHTS



- DIN rail mount
- Compact design
- I/O expansion (up to 10 I/O modules)
- 24 Vdc power supply input
- Embedded I/O (up to 44 I/O points)
- LEDs for inputs/outputs state indication and diagnostics
- Internal webserver for maintenance and diagnostics
- Removable terminal blocks
- User-friendly communication ports location
- Memory card slot (microSD)
- 2x Ethernet ports

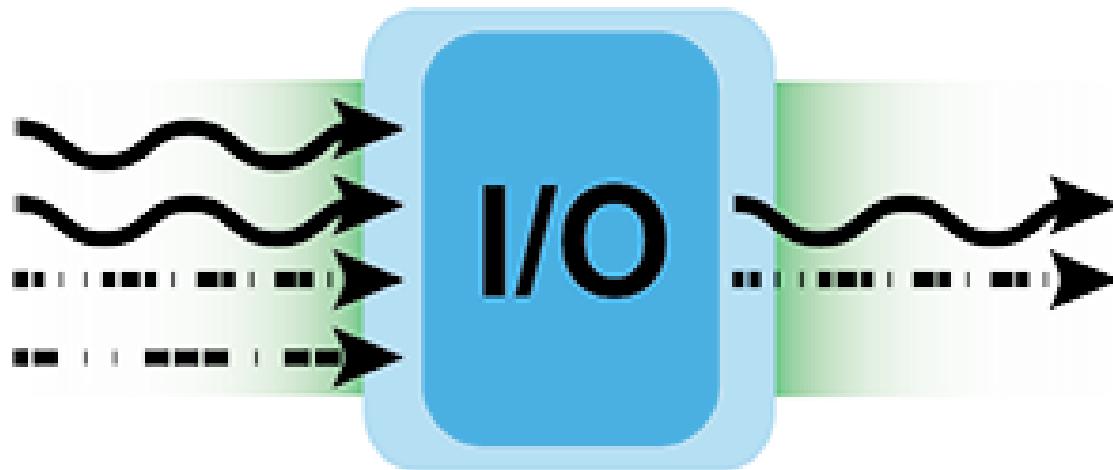


CPU HIGHLIGHTS



- 64-bit ARM-based Dual-Core processor (1 GHz)
- 512 MB RAM DDR4 and 8 Gb NVM (eMMC)
- 128 Kb retain/persistent memory
- Docker support
- Real-time clock (RTC) (no battery inside)
- CODESYS Webvisu (embedded webserver that allows the creation of supervision and monitoring pages)

CPU HIGHLIGHTS



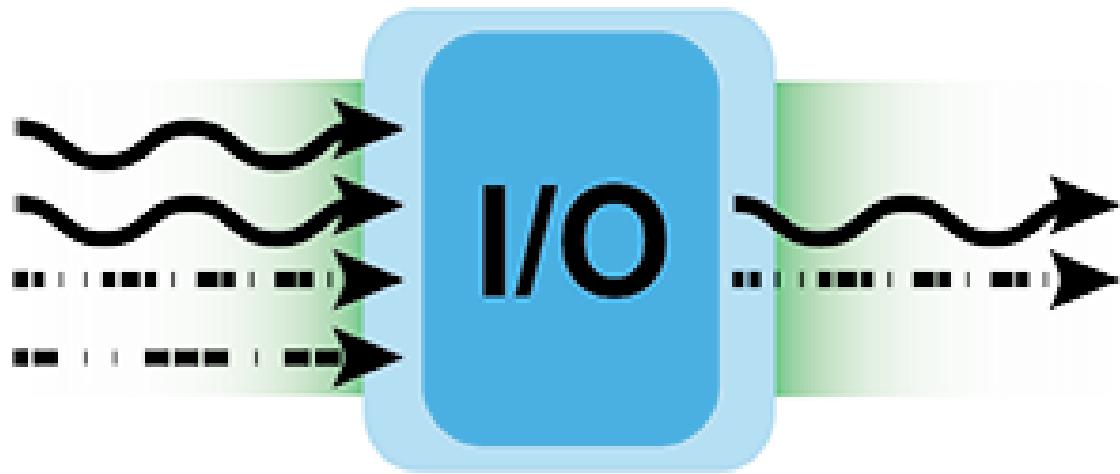
INTEGRATED DIGITAL INPUTS

- 16 digital inputs
- Two 24 Vdc input groups
- Optoisolated (sink)
- Up to 3x high-speed counters and/or external interruption (9 fast inputs)

INTEGRATED DIGITAL OUTPUTS

- 16 digital outputs
- Two 24 Vdc transistor output groups
- Optoisolated (source)
- Up to 4x PTO / Up to 8x PWM/VFO (8 fast outputs)
- 1.5 A per channel (6 A per group)

CPU HIGHLIGHTS



INTEGRATED ANALOG INPUTS

- 10 analog inputs
- 12-bit resolution
- Available inputs (fixed):
 - 4x voltage inputs: 0 to 10 Vdc
 - 6x current inputs: 0 to 20 mA, 4 to 20 mA

INTEGRATED ANALOG OUTPUTS

- 2 analog outputs
- 12-bit resolution
- Available outputs (software selectable):
 - Voltage input: 0 to 10 Vdc
 - Current input: 0 to 20 mA, 4 to 20 mA

CPU HIGHLIGHTS



2x ETHERNETs

- MODBUS TCP Client/Server
- OPC DA/OPC UA
- MQTT Publisher/Subscriber/SPB (TLS 1.2)
- PROFINET Controller
- EtherNet/IP Scanner
- EtherNet/IP Adapter
- EtherCAT Master
- SNTP/SNMP
- Webserver
- MRP/RSTP
- Programming and configuration

1x RS-485

- MODBUS RTU Master/Slave

1x CAN

- CANopen Master
- J1939 Manager
- CAN *low level* (proprietary protocols)

1x USB Host

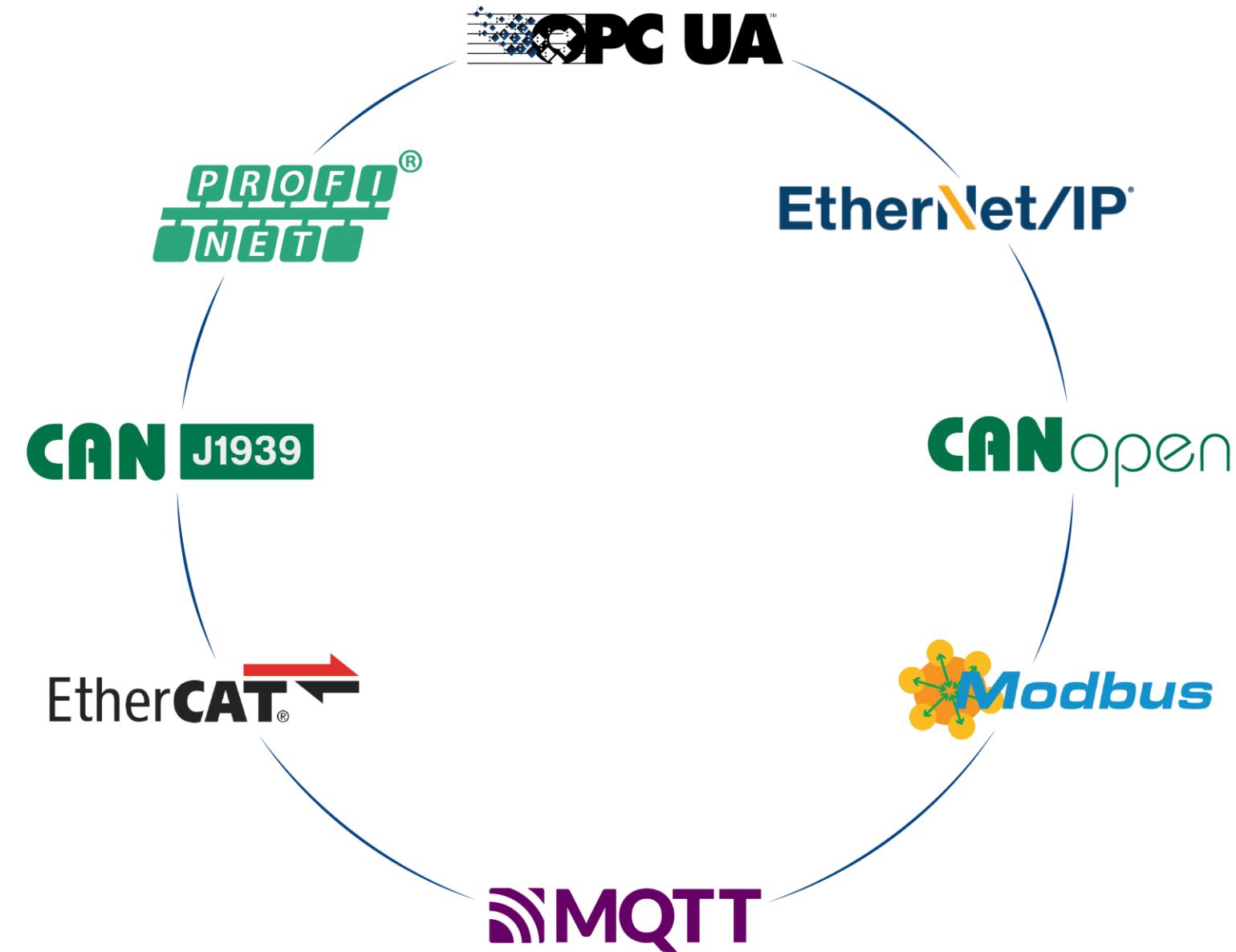
- Datalogger (external memory)
- RS-232, WiFi, 3G/4G adapters
- Ethernet converter

1x micro SD Card

- Datalogger (external memory)

CPU HIGHLIGHTS

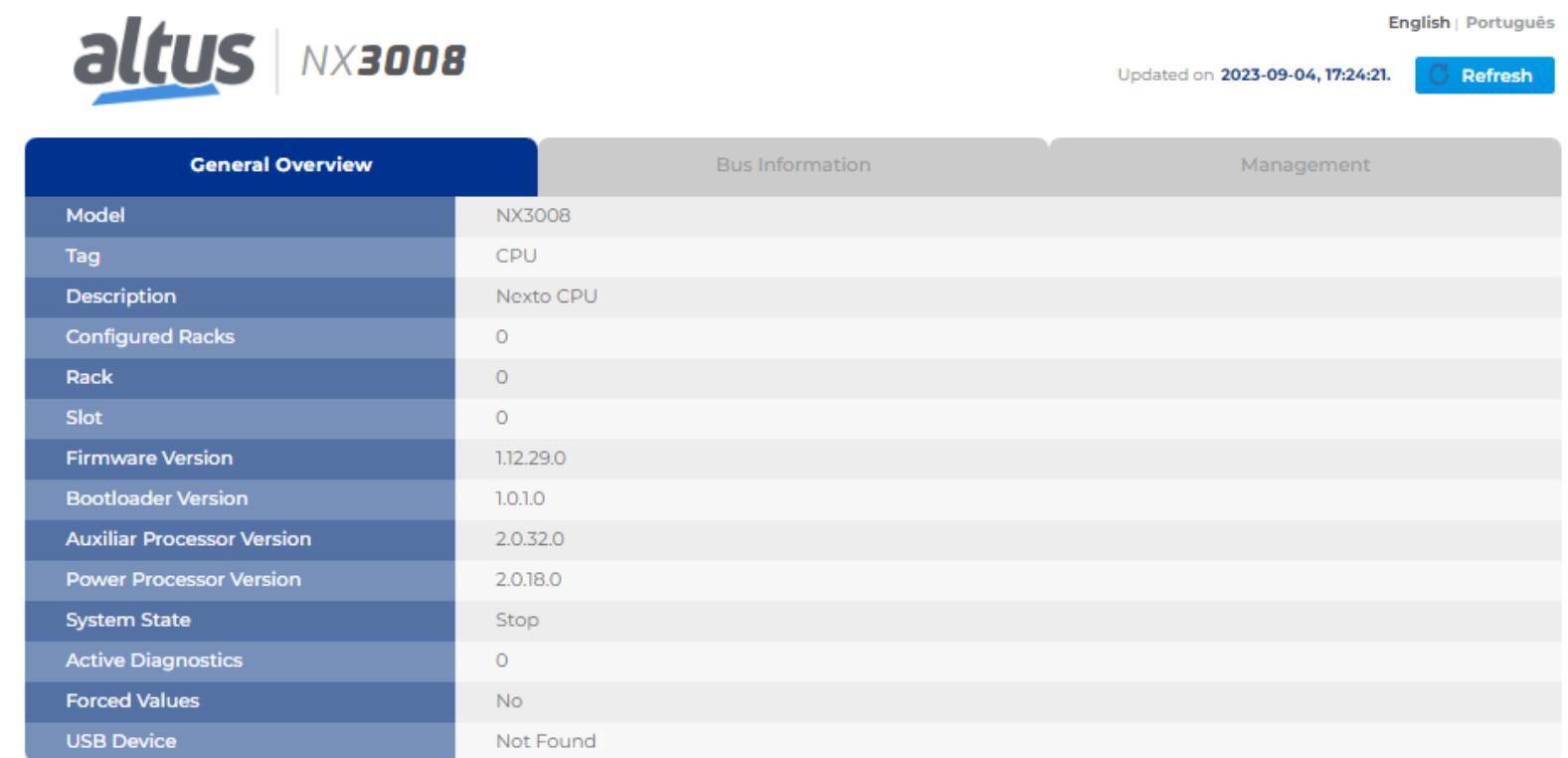
IoT-READY PLC PREPARED TO FACE THE CHALLENGES OF THE INDUSTRY 4.0



CPU HIGHLIGHTS

BUILT-IN DIAGNOSTICS AND MAINTENANCE WEBPAGES

- Device general overview
- Webpage with password protection
 - CPU firmware update
 - Configuration for VPN, Firewall, FTP server and USB devices
 - RTC settings and IP addresses
 - Network analysis and system logs



altus NX3008

Updated on 2023-09-04, 17:24:21. [Refresh](#)

General Overview		Bus Information	Management
Model	NX3008		
Tag	CPU		
Description	Nexto CPU		
Configured Racks	0		
Rack	0		
Slot	0		
Firmware Version	1.12.29.0		
Bootloader Version	1.0.1.0		
Auxiliar Processor Version	2.0.32.0		
Power Processor Version	2.0.18.0		
System State	Stop		
Active Diagnostics	0		
Forced Values	No		
USB Device	Not Found		

CPU HIGHLIGHTS

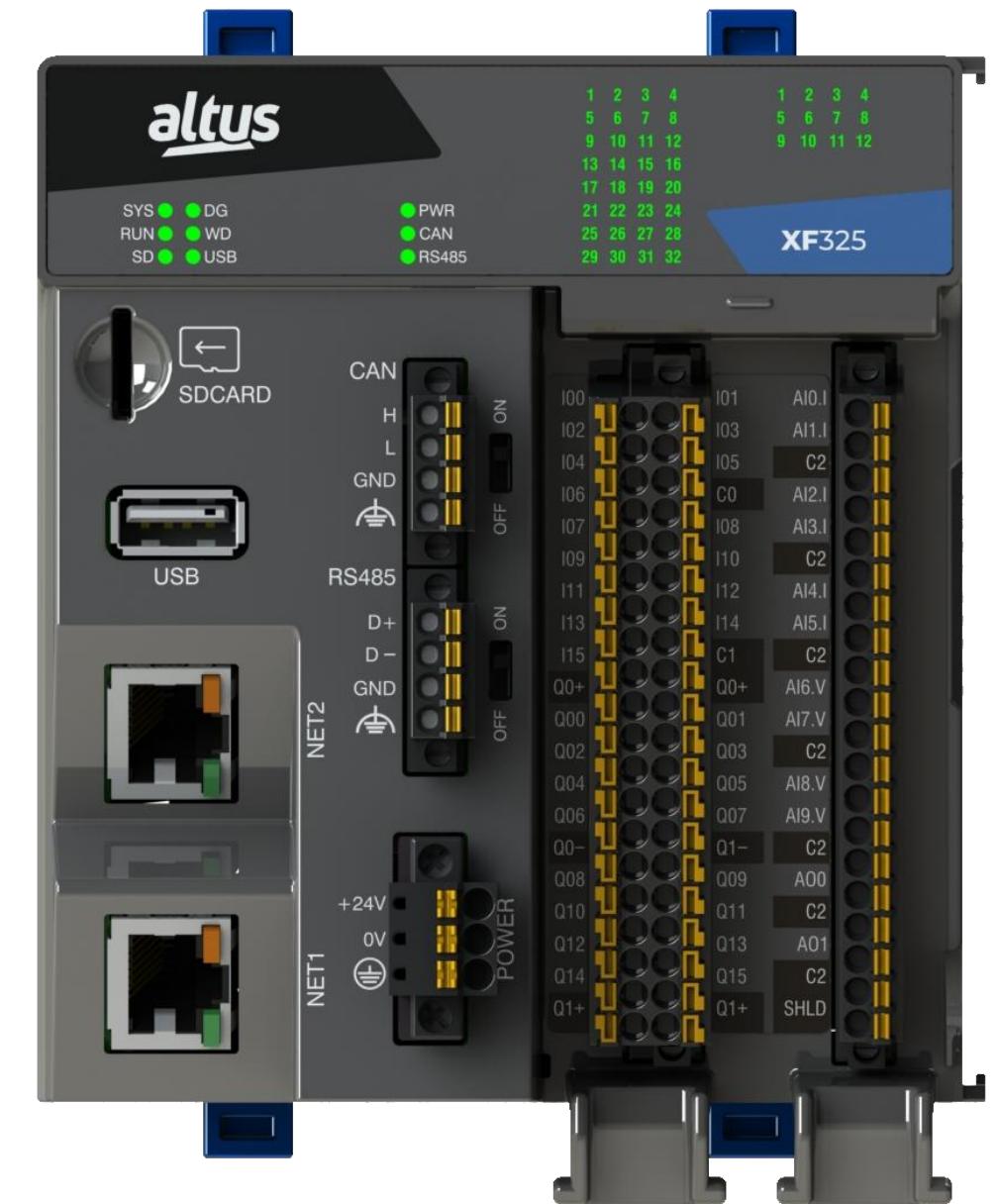
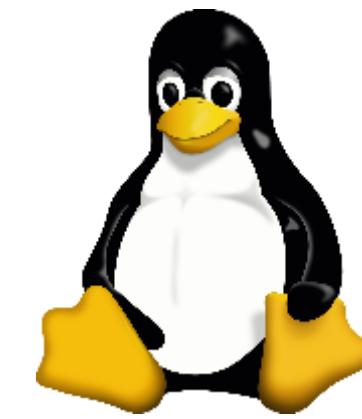
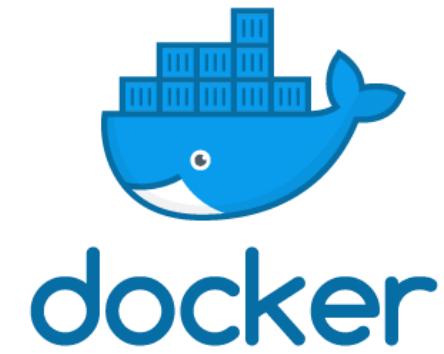
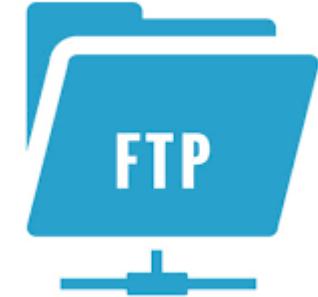
FLEXIBILITY IN THE DEVELOPMENT OF SMALL AND MEDIUM APPLICATIONS

- System that allows the creation of supervision and monitoring screens without the use of a SCADA software
- Embedded in the controller's memory, it's possible to access the screens through a Web browser directly from the computer, tablet or smartphone
- Control and supervision application on a single programming software
- Considerable cost reduction in the project



CPU HIGHLIGHTS

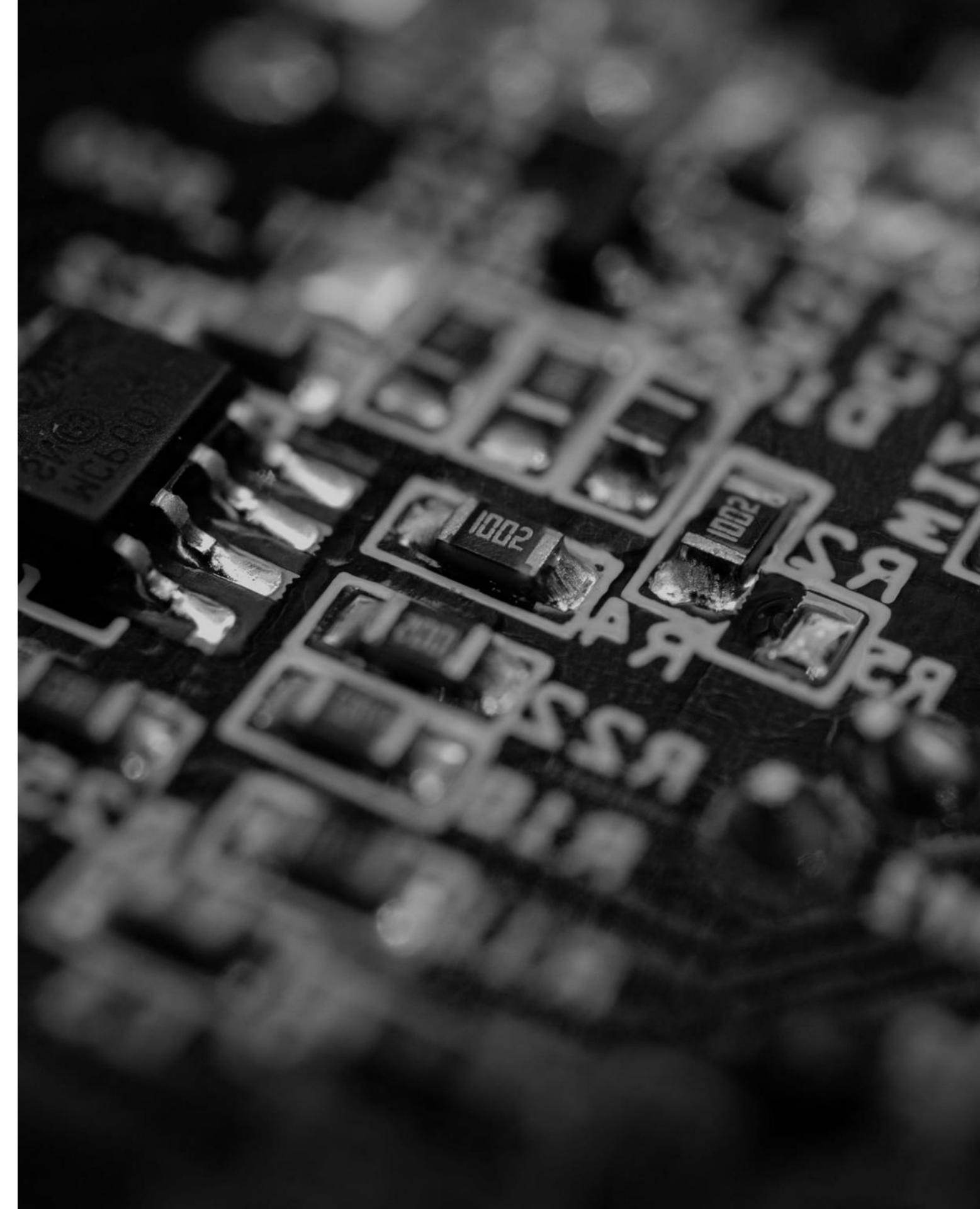
- Cyber Security
 - Through the resources available on the processor, on the Linux kernel application level and by CODESYS
 - Firewall
- VPN tunnel support (P2P)
- FTP for file transfer
- Docker support
 - User Linux space to install containers to develop own applications or use common ones available at Docker Hub.



PRODUCT HIGHLIGHTS

PROTECTION AGAINST HAZARDOUS SUBSTANCES IN INDUSTRIAL ENVIRONMENTS

- Many industrial environments have hazardous substances on the air for printed circuit boards such as chemical components, air and moisture.
- In the conformal coating process a thin layer of nonconductive material is applied to protect against corrosion, extreme temperatures, sea air, humidity, among others.



PRODUCT HIGHLIGHTS



CLASS I, DIVISION 2



PORTFOLIO

CPU MODELS AND I/O MODULES

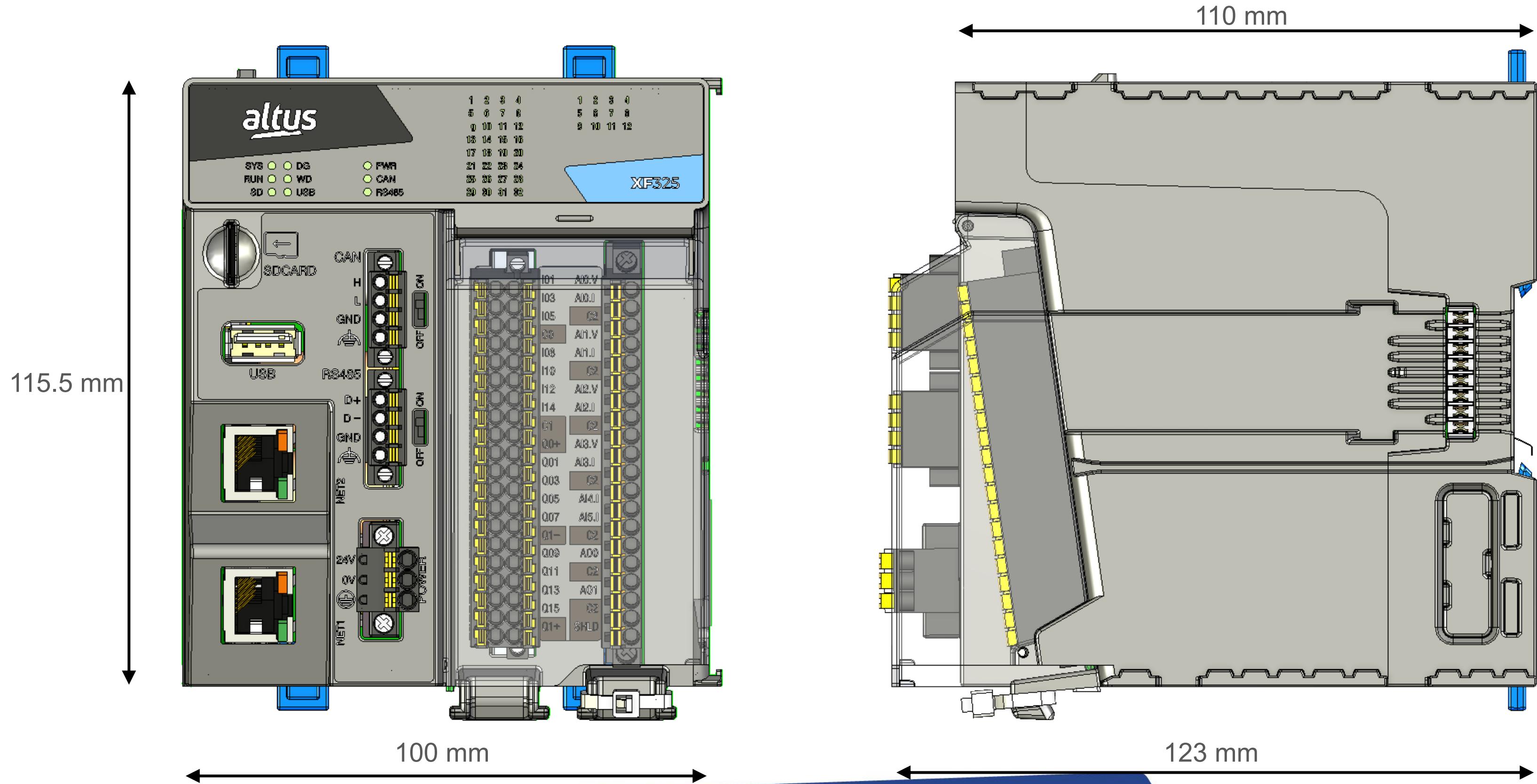
CPU HIGHLIGHTS

	XF300-B	XF300	XF315	XF325	XF325-W
Digital Inputs (DI)			16		
Digital Outputs (DO)			16		
Analog Inputs – V/I (AI)		-		10 (6 I + 4 V)	
Analog Outputs – V/I (AO)		-			2
Ethernet TCP/IP interface			2		
Complex Fieldbus (PROFINET Controller, EtherNet/IP Scanner, EtherCAT Master)	-			Yes	
RS-485 interface			1		
CAN interface			1		
USB Host			1		
SD Card, Firewall, VPN and FTP			Yes		
Webserver (Webvisu)			-		Yes
Docker	-			Yes	

PRODUCT DESIGN AND HARDWARE

PRODUCT HIGHLIGHTS

DESIGN IS NOT FINAL



SOFTWARE

MASTERTOOL X

PRODUCT HIGHLIGHTS



MASTERTOOL X

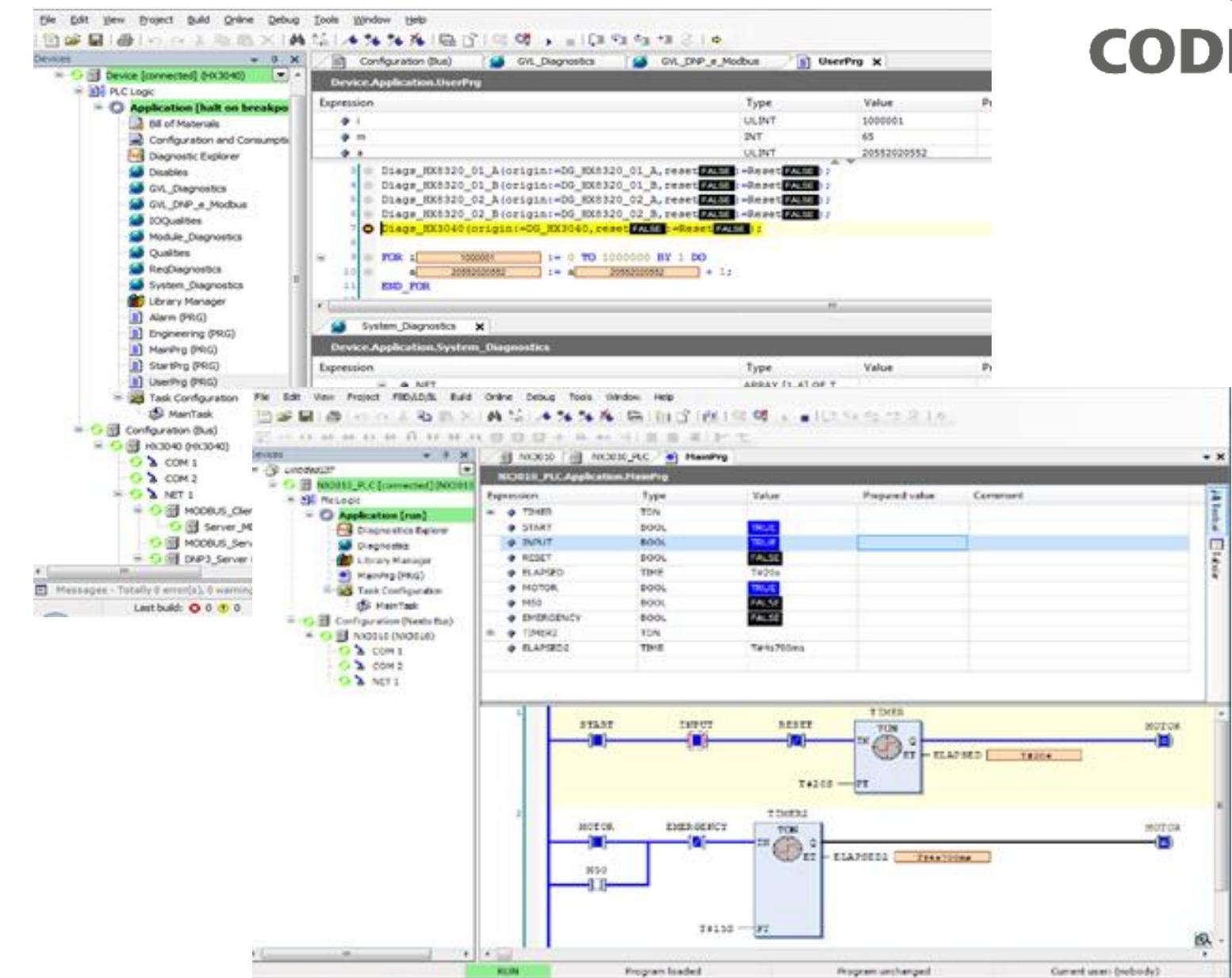
- One easy-to-use software environment for all your automation needs
- Friendly user interface and easy to use
- Single control platform with modern programming environment
- 6 programming languages
- Online programming
- Powered by



PRODUCT HIGHLIGHTS

ENGINEERING AND BACKUP FEATURES

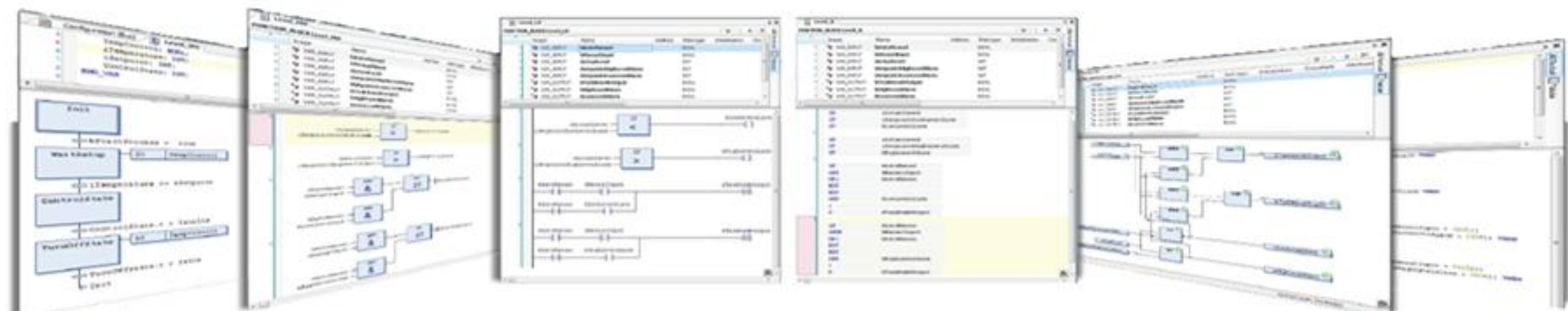
- Online debugging and monitoring
- Online changes
- Offline simulation
- Symbolic variables
- Easy hardware configuration
- System diagnostics
- Global variable lists
- Source code memory area



PRODUCT HIGHLIGHTS

IEC 61131-3 – PROGRAMMING LANGUAGES

- Structured Text (ST)
- Sequential Function Chart (SFC)
- Function Block Diagram (FBD)
- Ladder Diagram (LD)
- Continuous Function Chart (CFC)
- Support of different languages in the same project

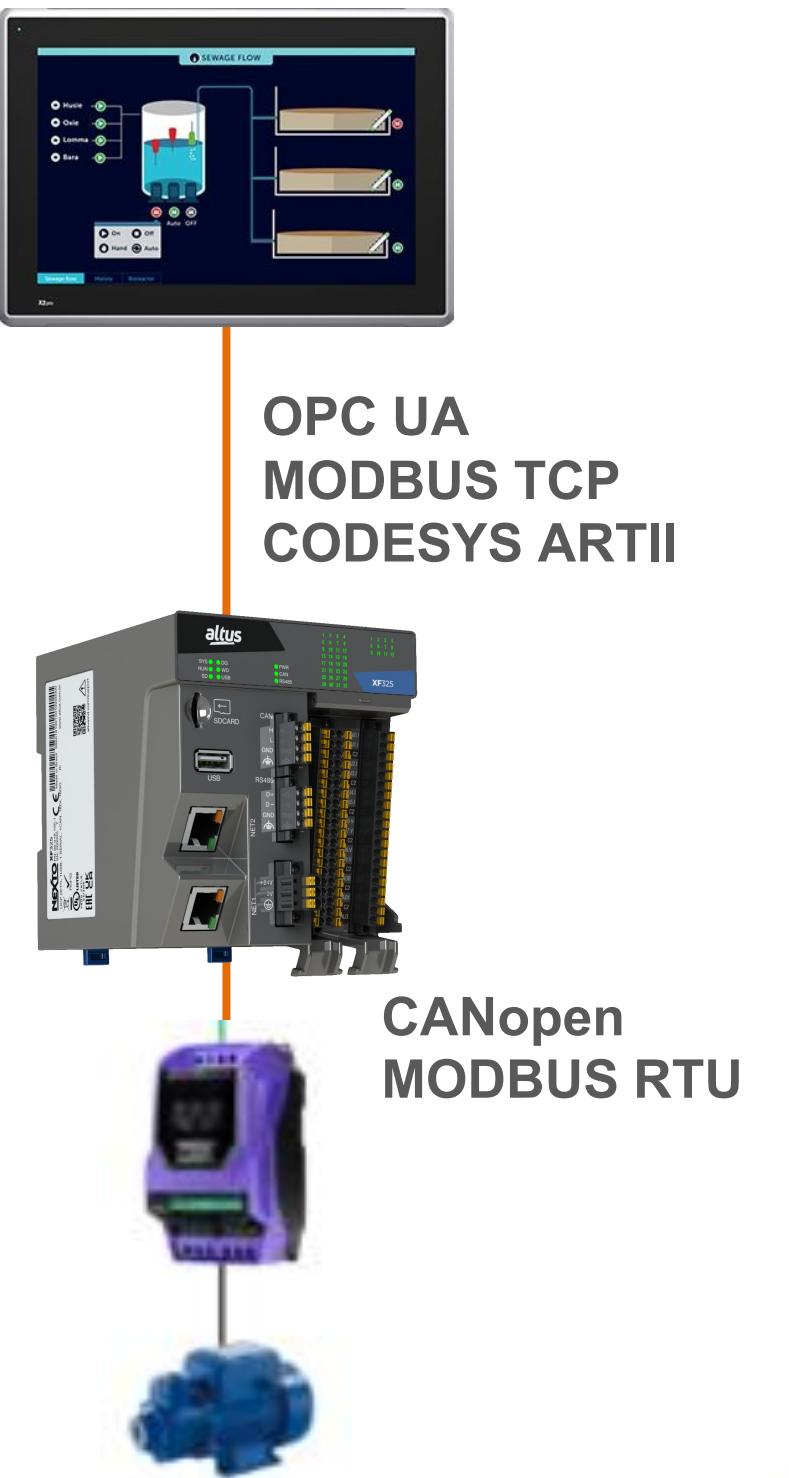


APPLICATIONS & MARKETS

PRODUCT HIGHLIGHTS

FACTORY MACHINES

- Labeling
- Filling
- Blowers
- Washers
- Injection Machines
- Packaging
- Presses
- Flow packs



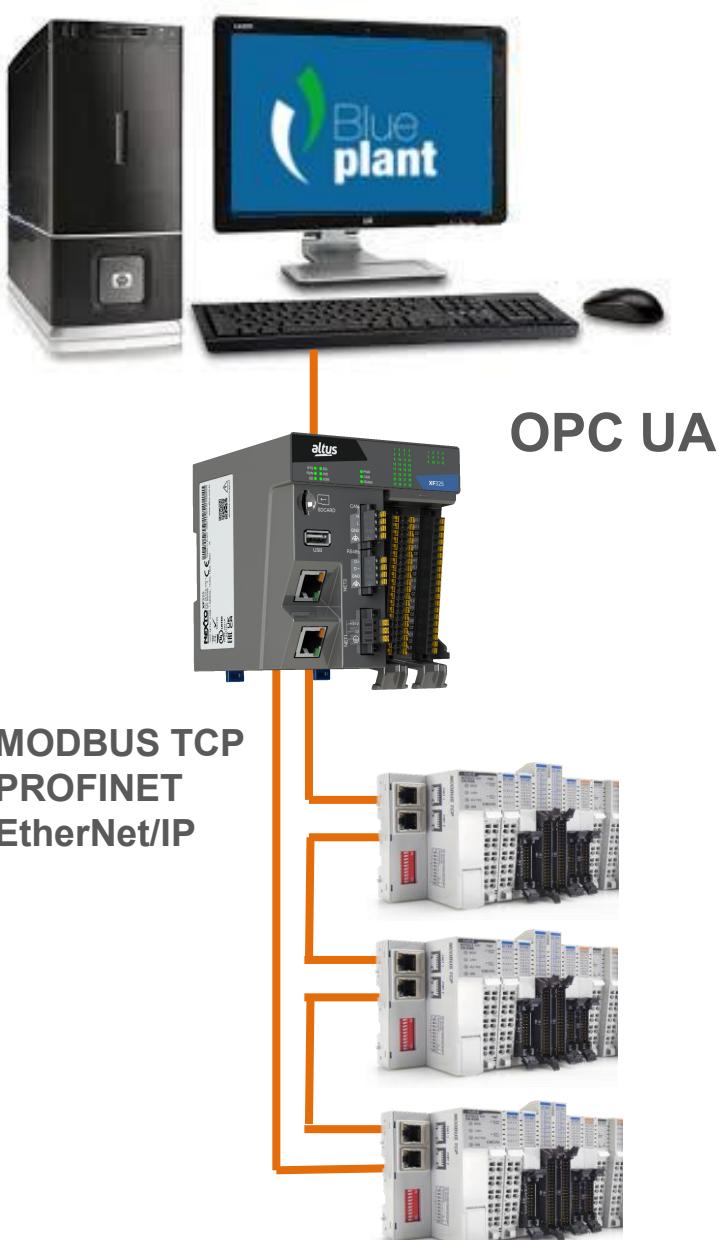
PRODUCT HIGHLIGHTS

BUILDING AUTOMATION

- Lights
- Climate
- Supervision
- Conveyors
- Access Control

WATER & WASTEWATER

- Remote control sites
- Pumping stations
- Reservoir level control





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