

Applications



Continuous Furnace

- Integrated PID Controllers with Auto-tuning
- Programming on IEC & 61131-3 standard
- MODBUS TCP, MODBUS RTU, OPC UA, MQTT



Salt Spray Chamber

- Temperature Control Humidity Control
- Spray Control, Test Cycle Management
- Alarm and Notification



Boiler Automation

- Temperature, pressure, and water level, using sensors and actuators.
- Automating processes, improving efficiency, and reducing human error.

Flexibility And Scalability INPUT / OUTPUT MODULES

NX-ERA Xpress input and output points can be expanded via CAN interface, easily configurable by MasterTool IEC XE, using the models below:

CANopen



- CAN-DI 16 - 16 digital inputs (24 VDC)
 - CAN DO 16T - 16 digital outputs (transistor)
 - CAN DO 16 - 16 digital outputs (relay)
- CAN DI 8 DO 6 - 8 digital inputs (24 VDC) and 6 digital outputs (relay)
 - CAN AI 4 - 4 analog inputs V/I (12-bit)
 - CAN AO4 - 4 analog outputs V/I (12-bit)

MODELS

VARIANTS	XP300	XP315	XP325	XP340	XP350
Digital Inputs (DI)	16	16	16	16	16
Digital Outputs (DO)	16	16	16	16	16
HSC (100KHz) / PTO (200KHz)	4/2	4/2	4/2	4/2	4/2
Analog Inputs - V/I (AI)	-	5	5	5	5
Analog Inputs - RTD (AI)	-	2	2	2	2
Analog Outputs (AO)	-	-	4	4	-
Ethernet & RS-485 serial interface	Yes	Yes	Yes	Yes	Yes
CAN Interface & USB host	Yes	Yes	Yes	Yes	Yes
User Web Pages (WEB Visu)	-	-	-	Yes	-
Motion Control (EtherCAT)	-	-	-	-	Yes
FTP, Firewall, VPN	Yes	Yes	Yes	Yes	Yes
IEC60870-5-104 Protocol	-	-	-	Yes	-

Certification

Remote I/O Expansion EXPANSION MODULES DETAILS

Port	Module type	Description
CAN	CAN-DI-16	16 Digital Inputs , 24VDC
CAN	CAN-DO-16T	16 Digital Outputs , 24VDC, Transistor
CAN	CAN-DO-16	16 Digital Inputs , Relay, 2 common
CAN	CAN-DI-8-DO-6	8 Digital Inputs , 6 Digital outputs, 24VDC
CAN	CAN-AI-4	4 Channel Analog Input, (12bit- 0-10v/0-20mA)
CAN	CAN-AO-4	4 Channel Analog Output (0-10v/0-20mA).
RS-485	MOD-DI-8	8 Digital Inputs , 24VDC (MODBUS RTU)
RS-485	MOD-DO-16R	16 Digital Outputs , Relay , 2 common (MODBUS RTU)
RS-485	MOD-AI-4	4 Channel Analog Input, (12bit- 0-10v/0-20mA) (MODBUS RTU)
RS-485	MOD-AO-4	4 Channel Analog Output (0-10v/0-20mA) (MODBUS RTU)

MESSUNG SYSTEMS PVT. LTD.
501-503, Lunkad Sky Vista, Viman Nagar, Pune - 411014, India.

T: +91 95617 03619 | E: info@messung.com
W: www.messungautomation.co.in

AUTOMATION & CONTROLS
WORKPLACE TECHNOLOGY

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THE GENIUS IN A SMALL FRAME

Powerful, Feature-rich
PLC in a Compact Design

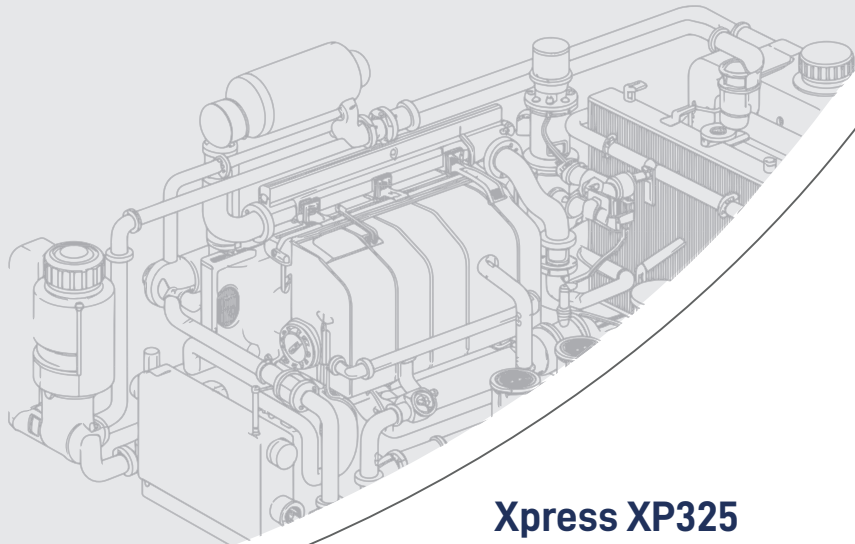


XPRESS PLC | **NEXUS OF INDUSTRIAL AUTOMATION**

www.messungautomation.co.in

The Commanding Force in Compact Automation

Messung's NX-ERA Xpress is a compact, cost-effective, and feature-rich PLC that leads from the front. Built for small to mid-sized machines, it delivers powerful performance in a sleek, space-saving design. It ensures seamless communication, system-wide control, and encrypted remote operations, whether you're on-site or off-grid. No matter your industrial front, this PLC adapts, leads, and protects without missing a signal.



Xpress XP300

- Basic XP300 offers:
- 16 Digital input, 16 Digital output, 4HSC (100KHz), 2PTO(200Khz)
 - 10/100 Mbps Ethernet interface with protocols like OPC UA, EtherNet/IP, PROFINET, EtherCAT, MODBUS and MQTT
 - RS-485 Port: Modbus RTU (Master/Slave)
 - CAN Interface: CAN Open Master, CAN low level, I/O expansion
 - USB Host Port: 3G/4G/WiFi/ETH port, Data storage, RS-232 converter
 - LEDs for inputs/outputs state indication and diagnostics
 - Real-time clock (RTC)
 - Total Memory: 64MB
 - Supporting FTP, VPN, Firewall.

Xpress XP315

- In addition to Basic XP300, XP315 offers:
- **Built-in 5 Analog input** and 2 RTD inputs.
 - 12 bit Resolution.
 - Can be configured for Voltage or Current type.
 - RTD inputs enables to directly measure temperature.
 - Auto-tune PID block on Codesys Technology Platform.

Xpress XP325

In addition to Basic XP300, XP 325 offers:

- **Built-in 5 Analog input** and 2 RTD inputs.
- 12 bit Resolution.
- Can be configured for Voltage or Current type.
- RTD inputs enables to directly measure temperature.
- **4 Analog outputs** as Built-in-12 bit resolution.
- **Auto tune PID block** to control on Codesys Technology Platform.

Xpress XP340

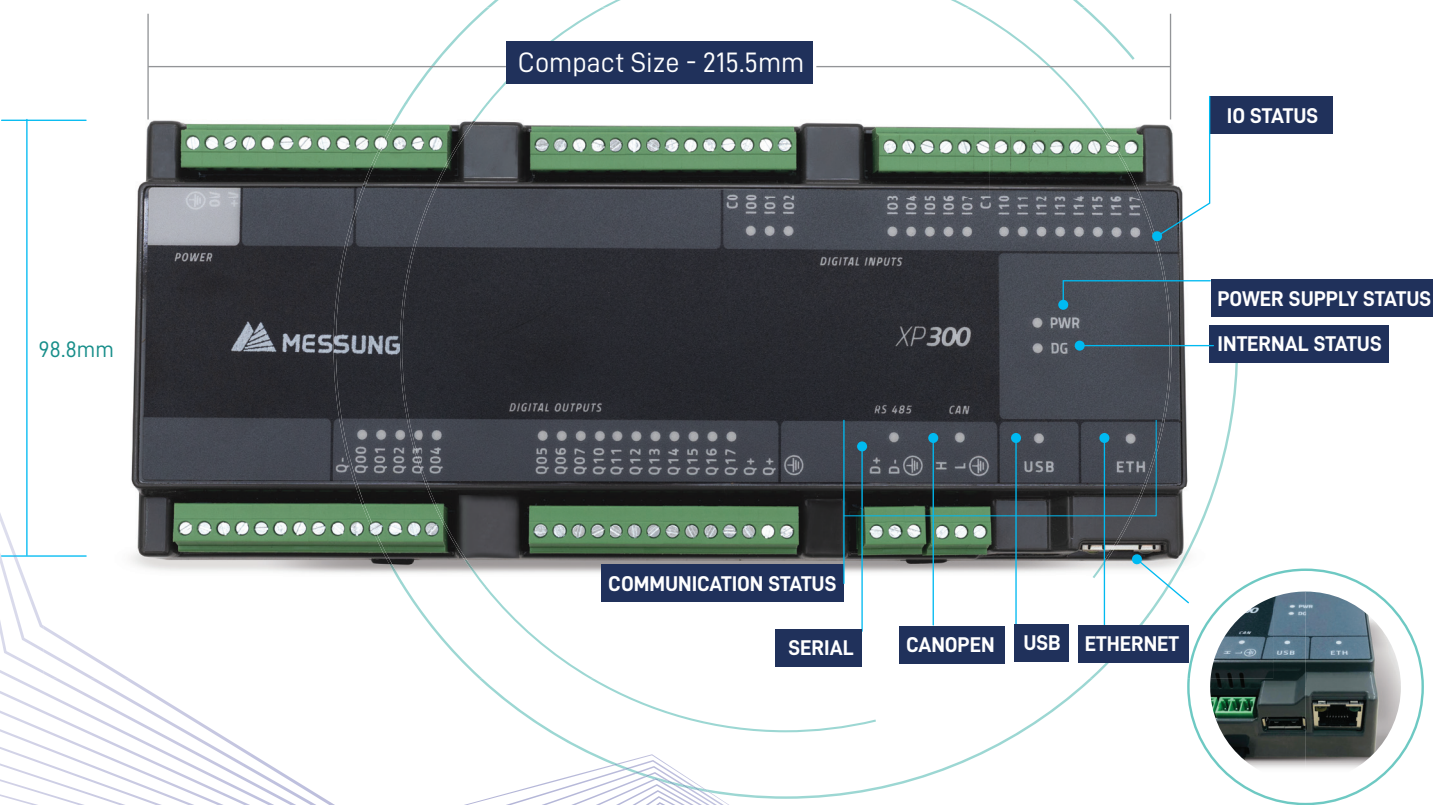
In addition to Basic XP300, XP340 offers

- **Built-in 5 Analog input** and 2 RTD inputs.
- **Built-in 4 Analog outputs.**
- RTD inputs enables to directly measure temperature.
- Auto-tune PID blocks on Codesys Technology Platform.
- **User Web Pages can be designed in CPU memory.**
- **Substation Comm. Protocol** IEC 60870-5-104 Programme Memory enhanced to 8MB, Variable Memory to 6MB.

Xpress XP350

In addition to Basic XP300, XP350 offers.

- **Built-in 5 Analog input** and 2 RTD inputs.
- RTD inputs enables to directly measure temperature.
- Auto-tune PID blocks on Codesys Technology Platform.
- Supporting FTP, VPN, Firewall.
- Programme Memory enhanced to 8MB, Variable Memory to 6MB.
- **Motion Control with Codesys Soft-Motion library on EtherCAT**
- **PLCopen Motion Control Part 1 function block support**



Communications & Connectivity

IoT-enabled PLC with versatile connectivity and Industry 4.0 protocols.



ETHERNET

- MODBUS TCP Client/Server
- OPC DA/OPC UA
- MQTT (TLS 1.2)
- PROFINET Controller
- EtherNet/IP
- EtherCAT Master
- SNTP
- IEC 60870-5-104 (XP340)
- Webserver(XP340)
- Programming and configuration

SERIAL

- MODBUS RTU Master/Slave

CAN

- CANopen Master
- CAN low level (proprietary protocols dev.)
- I/O Expansion
- CAN J1939

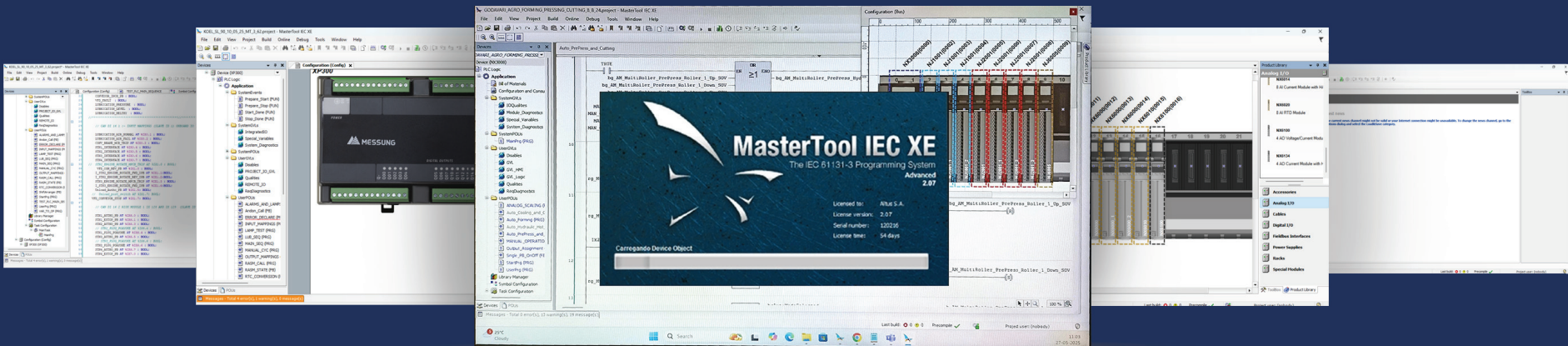
USB

- Datalogger (external memory)
- Ethernet converter
- RS-232 adapter
- WiFi adapter
- 3G/4G modem
- Programming and configuration

Wide Range Communication



Programming Software



SOFTWARE PRODUCT HIGHLIGHTS

ENGINEERING AND BACKUP FEATURES

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

IEC 61131-3 – PROGRAMMING LANGUAGES

- Structured Text (ST)
- Sequential Function Chart (SFC)
- Function Diagram (FBD)
- Ladder Diagram (LD)
- Instruction List (IL)
- Continuous Function Chart (CFC)
- Support of Different languages the same project