

AI Edge Controller

XNC Standard Series

Overview

The XNC Standard Series AI edge controllers are advanced IP programmable controllers which are part of Advenco LUBAN solutions. The controllers are designed for a wide variety of complex applications, such as cooling, heating, water supply and drainage, lighting, air handling unit and ventilation systems, etc. These devices feature RS485 ports for BACnet™ MS/TP, Modbus RTU, Ethernet ports for MQTT, BACnet™ IP and Modbus TCP devices. The controllers continue to perform time-based operations even when disconnected from the system network. The controllers can be mounted on a DIN rail in horizontally orientations.



Features

- Delivers high performance with ARM Cortex-M4 32-bit MCU.
- BTL tested BACnet communication on BACnet IP or MS/TP, conforms to BACnet™ Standard ANSI/ASHRAE 135 protocol version 1.20 (ISO 16484-5).
- BACnet Auto-Discovery enables seamless integration of new devices with no manual configuration.
- Adaptable to Open Harmony operating system for diverse market requirements.
- Engineering and commissioning with the XControl tool using graphical function charts.
- Support standard or custom complex applications downloading from XControl.
- Integration of Modbus data points via RTU and / or TCP.
- End-of-Line (EOL) switch enables the controller to act as termination device on the communication bus.
- Pluggable terminal blocks for easy installation and maintenance.
- Modern design LED to show the operational status of the controller.
- Standard DIN rail mounting.

Ordering Information

| Product Number | Point Capacity (Max) | Ethernet Port | RS485 ↓ Port | Onboard I/O |
|----------------|----------------------|---------------|--------------|-------------|
| BAC-3541-100 | 300 | 2 | 1 | 2UI 6DI 2DO |
| BAC-3541-460 | 300 | 2 | 1 | 4UIO 6DI |
| BAC-3441-020 | 300 | 2 | 2 | N/A |
| BAC-3531-081 | 100 | 2 | 1 | 8UI |
| BAC-3531-082 | 100 | 2 | 1 | 6DI 2DO |

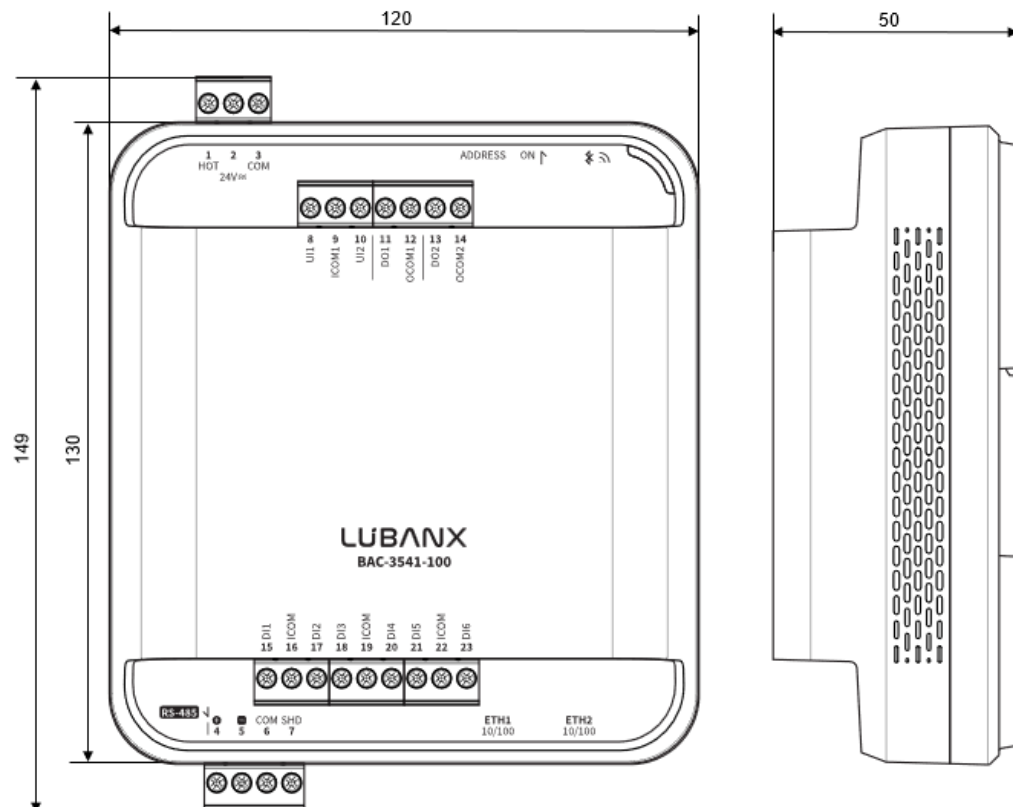
Remark: RS485 ↓ Port means the connected extension port of the controller

Product Specification

| | |
|--------------------------------|--|
| Processor | ARM Cortex-M4 32-bit |
| Memory | 2MB RAM and 10MB flash memory |
| Operating System | Open Harmony |
| Power Requirement | 24 VAC \pm 20%, 50/60Hz; 24 VDC (-10%~+20%) |
| Power Consumption | 12 VA (Typical) |
| Environment | Operating: -4°F to 122°F (-20 to +50 °C); 10 to 90% RH non-condensing Storage: -40°F to 176°F (-40 to +80 °C); 5 to 95% RH non-condensing |
| Communications Protocol | MQTT, BACnet IP, BACnet MS/TP, Modbus TCP, Modbus RTU |
| Terminations and Ports | I/O: Pluggable terminal blocks Power Supply & RS485: 2-wire or 3-wire pluggable terminal blocks Ethernet: RJ45 ports |
| Protection | IP20(IEC529) |
| Housing Material | ABS+PC |
| Certification | CE, RoHS, REACH, BTL |
| Mounting | 35mm DIN rail mounting (horizontal orientation) |
| Dimensions (W×H×D) | 120mm × 149mm × 50 mm |

| Input/Output | |
|-----------------------|--|
| UI | 0-10VDC, 4-20mA, Resistance, Dry contact |
| AO | 0-10VDC, 4-20mA |
| DO | TRIAC output 24 VAC (requires external power supply) |
| DI | Dry Contact, Pulse counting (Max.50Hz) |
| UIO | Input: 0-10VDC, 4-20mA, Resistance, Dry contact Output: 0-10VDC, 4-20mA |
| UI Resolution | 24 bit |
| AO Resolution | 16 bit |
| UIO Resolution | Input: 16 bit; Output: 13 bit |

Dimensions (mm)



Copy Right @Advenco Technology Co., Ltd.

All specifications herein are current as of the document revision and subject to change without notice.