



## Description

- ▶ The BACplus-IP is a fully programmable digital controller that can control up to 500 mixed physical I/O's using various expansion boards of the MEXP-xx family
- ▶ It supports BACnet IP, BACnet MS/TP, Modbus RTU and is a full BACnet router.
- ▶ Includes a color local touch screen display for visualizations, settings and overrides
- ▶ Includes local WEB page services for easy settings
- ▶ It is BTL certified as a B-BC (BACnet Building Controller)
- ▶ To order use part number: BPIP

## Application

This controller is designed to facilitate control and management of equipment typically used in the HVAC industry. It allows powerful yet flexible solutions that can be tailored and sized according to any project needs.

## Technical specifications

### Power supply:

24 Vac/Vdc ± 15%  
2.0A replaceable fuse  
D.E.L. power light indicator

### Current consumption:

6 VA BACplus-IP only  
Up to 48 VA Max with all MEXP boards with the 2A fuse.

### Real-time clock (RTC):

Built in with one-week capacitor backup once charged

### Sound Buzzer:

Built in, can be used by the application program

### Trend logs:

Automatic for all declared BACnet objects  
Limited only by the storage capacity of the server when connected to a Strato Edge Server

### Microprocessor:

STM32 (ARM Cortex™ M4)  
32 bits, 180MHz

### Memory:

Flash: 2 MB non-volatile for the application program  
RAM: 256 KB  
SRAM external: 2 MB

### Number of BACnet objects:

Default 200 items (up to 500 items with an update license key)

### RS485 BACnet MS/TP

**communication speed:**  
9600, 19200, 38400, 76800 Bps

### Expansion (I/O Boards)

**communication speed:**  
Local bus at 460800 Bps

### External connections:

Mini USB2 connector allows local access to the MS/TP network  
Requires a Strato Automation USB-485 cable adapter  
One Ethernet port

### Accessibility:

Via the local touch screen interface  
Via the local web browser page

### Programming:

Fully programmable using the Strato Workstation Client software

### Communication protocols:

BACnet IP, BACnet MS/TP, Modbus RTU

The controller is a full BACnet router between BACnet IP and BACnet MS/TP

### Dimensions:

89 mm x 191 mm x 42 mm  
3,5" x 7,5" x 1,6"

### Max. wire size:

14 awg

### Stocking temperature:

-30 °C to 50 °C / -22 °F to 122 °F

### Operating conditions:

0 °C to 45 °C / 32 °F to 113 °F

10% to 90% H.R. without condensation

### Weight:

315 g / 0.7 lb

### Mounting type:

Quick mount on DIN rail or with a retractable screw clip system.

### Warranty:

1 year

### Enclosure:

White color, ABS material UL94VO

### Certifications:

UL 916 Energy Management Equipment  
BTL listed: B-BC, BACnet Building Controller

### Extra functions licensing

(can be purchased anytime)

- OSP-MSTP: Adds BACnet MSTP & BACnet routing to a controller
- OSP-Modbus: Adds Modbus RTU & Modbus to BACnet routing
- OSP-Weather: Adds various weather source services to a controller
- OSP-OBJ-500: Increases the maximum number of BACnet objects from 200 to 500
- OSP-Combo-1: Includes both OSP-MSTP & OSP-OBJ-500

