



Description

- ▶ The BACplus-MSTP is a fully programmable digital controller that can control up to 200 mixed physical I/O's using various expansion boards of the MEXP-xx family
- ▶ It supports BACnet MS/TP & Modbus RTU
- ▶ It has 8 AI/BI's, 4 AO's & 8 BO's c/w local HOA switches for the outputs
- ▶ It is BTL certified as a B-BC (BACnet Building Controller)
- ▶ It supports up to 3 Tzone room sensor when used with the Strato Zoning System and up to 8 Tzone room sensor when used with the Strato Enterprise Solution
- ▶ To order use part number: BP848

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 \pm 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.

Inputs:

- 8 x AI/BI's universal inputs
- Thermistor 10K Ω (type 2 or 3)
- Dry contact, 500 ms minimum (On-Off)
- Voltage 0 - 10 Vdc (Input impedance of 100 K Ω)
- Current 0 - 20 mA (internal resistance of 162 Ω)
- Resolution: 12 Bits (4096 segments)

Outputs:

- 8 x BO's Solid State
- 10 to 30Vac/Vdc, 1A max.,
- « sink » and with overcurrent protection
- Thermal protection with automatic reset
- Solid State BO's can be used as pulse outputs.
- 4 x AO's
- Voltage 0 - 10 Vdc linear
- 2 AO's can be 0 - 20mA.

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 CortexTM 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:

Maximum 200 items

RS485 BACnet MS/TP communication

speed:
9600, 19200, 38400, 76800 Bps

Controller addressing:

Addressing via DIP switch

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

Tzone wall interface:

Up to 1 or up to 8 Tzone per BACplus-MSTP controller based on solution used
« daisy chain » wiring on local RS-485 port

Programming:

Fully programmable using the Strato Workstation Client software

Communication protocols:

BACnet MS/TP, Modbus RTU

Dimensions:

88.3 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:

-25 °C to 45 °C / -13 °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

