

# BP848

## BACplus-MSTP

Configurable BACnet MS/TP  
Controller



### Description

- Configurable with factory pre-loaded applications For RTU, Heat Pump, AHU, FCU and Unit Ventilator
- 8 AI/BI, 4 AO's & 8 BO's with local HAO switches for outputs
- Supports one zone room sensors
- BACnet MS/TP **BTL** certified as a B-ASC



### Application

The BP848 controller is designed to facilitate the control of standard RTU, Heat Pump, AHU, FCU and Unit Ventilator HVAC equipment. The BP848 offers multiple configuration profiles which can be used to meet project requirements. Features a very flexible (Not Fixed) I/O set.

### Technical specifications

#### Power supply:

- 24 VAC/VDC  $\pm 15\%$ ; Class 2
- 2 Amp Field Replaceable fuse

#### Current Consumption:

- 6 VA controller only

#### Communication Protocols:

- BACnet MS/TP half-wave device
- BTL listed: B-ASC, BACnet Application Specific Controller
- Baud 9600, 19200, 38400, 76800 Bps (76800 default)
- Addressing: Dipswitch
- TZ Comm Bus
- Mini USB2 MS/TP network access (Strato Automation USB-485 cable adapter)
- **All Strato Controllers are 1/4 unit load devices.**

#### Hardware

- Microprocessor: STM32 (ARM Cortex™ M3) 32 bits
- CPU Speed: 72MHz
- Memory: 768 KB non-volatile Flash
- (Application Program)
- RAM: 96 KB RAM
- Real-time clock (RTC): Built-in capacitor (one-week backup)

#### Inputs:

##### 8 Universal Inputs (AI/BI)

- Thermistor 10K $\Omega$  (type 2 or 3)
- Dry contact, 500 ms minimum (On-Off)
- Voltage 0 - 10 Vdc (Input impedance of 100 K  $\Omega$ )
- Current 0-2 mA (internal resistance of 162  $\Omega$ )
- Resolution: 12 Bits (4096 segments)

#### Outputs:

##### 8 Binary Outputs

- Mosfet SSR Relays, External Isolated power
- 10 to 30VAC/VDC, 0.35A max
- Built in thermal protection (auto-reset)
- Supports PWM

##### 4 Analog Outputs

- Voltage 0 - 10 VDC linear
- 2 AO's can be 4-20mA

#### TZone Wall Interface:

- TZone room sensors

#### Onboard 24VDC Output:

- 100mA output max
- 24 VDC Output for 4-20mA transmitters only
- Not for general use

#### Mechanical:

- Dimensions: 3.5" x 7.5" x 1.6"  
88.9 mm X 190.5mm X 41.27 mm
- Stacking temperature:  
-30 °C to 50 °C / -22 °F to 122 °F
- Operating conditions:  
-25 °C to 50 °C / -13 °F to 113 °F  
10% to 90% H.R. without condensation
- Weight: 315 g / 0.7 lb
- Enclosure: White color, ABS material  
UL94V0

#### Programming:

- Configurable writing to the BACnet objects or utilizing Strato Software tools.

#### Warranty: 1 Year

#### Certifications:

- UL 916 Energy Management Equipment
- BTL listed: B-ASC, BACnet Application Specific Controller

