

OS537

Configurable Wall BACnet MS/TP & Wi-Fi Controller

Description

- Configurable Wall Controller
- ASHRAE G36 Compliant Applications
- AHU, FCU, RTU, HP, WSHP
- 15 I/O: 5 UI, 3 AO, 7 BO
- Sensors: Temp, RH% - *Standard*
- Motion and CO2: *Optional*
- WiFi6: WPA3/2.4 GHz **W MODELS**
- BACnet MS/TP: **B-BC BTL Certification (Pending)**
- BACnet WiFi6 IP w/ WEB services: **B-BC BTL Certification (Pending)**

 **OPEN STAT**



MODEL	TEMP, RH%	MOTION	CO2 NDIR	BACNET WIFI6	MSTP
OS537H	X				X
OS537HW	X			X	X
OS537MHW	X	X		X	X
OS537MHCW	X	X	X	X	X

Application: The OS537 controller streamlines the management of standard HVAC equipment such as FCU, RTU, HP, WSHP and AHU. The OS537 provides numerous configurations and flexibility to align with diverse project requirements

Technical Specifications

Power supply:

- 24 VAC/VDC $\pm 15\%$; Class 2

Current Consumption:

- 1.5 VA controller only
- 96 VA Max including BO's 2A each

Communication Protocols:

- BACnet MS/TP half-wave device
- Baud 9600, 19200, 38400, 76800 Bps (76800 default) RS485 transceiver is a 1/4 load device
- Mini USB2 MS/TP network access
- Optional WiFi6 2.4Ghz BACnet IP module with integrated WEB services that fully support REST API's
- BTL listed: B-BC, BACnet Building Controller

Hardware

- Microprocessor: STM32 (ARM Cortex™ M33) 32 bits
- CPU Speed: 250 MHz
- Memory: 2 Mbytes non-volatile Flash
- RAM: 640 KB SRAM
- Real-time clock (RTC): Built-in capacitor (one-week backup)

Configuration

- Configurable using the local buttons, writing to the BACnet configuration objects or utilizing the embedded WEB page services or Strato Software tools.

Inputs:

5 Universal Inputs (AI/BI)

- Thermistor 10K Ω (type 2 or 3)
- Dry contact
- Voltage 0 - 10 Vdc (Input impedance of 20 K Ω)
- Resolution: 12 Bits (4096 segments)

Outputs:

7 Binary Outputs

- MOSFET Solid State Relays, Isolated
- 10 to 30VAC, 2.0A max

3 Analog Outputs

- Voltage 0 - 10 VDC linear

Humidity & Temperature Sensors

Sensirion™ SHT40

- ± 1.8 RH @ 25-75% RH overall $\pm 1.3\%$
- ± 0.2 °C @ 0 °C to 60 °C
- ± 0.36 °F @ 32 °F to 140 °F

Radar Motion Detection Sensor:

- Operating Principle: Radar cross-section optimized for human being
- Detection distance and angle:
 - 20 feet (6M) @ 0°
 - 16 feet (5M) @ $\pm 45^\circ$
 - 3 feet (1M) @ $\pm 80^\circ$

Optional CO2 Sensor: Telaire™ T6713

- Self-calibrating, non-dispersive infrared (NDIR)
- Sensor Range: 400-2000 PPM
- Accuracy: ± 30 PPM @ 3% of reading
- Accuracy is valid after a minimum of 2 weeks of continuous operation.
- Response Time of 3 minutes

Mechanical:

- Dimensions: W 3.58" (91 mm) x H 4.92" (125 mm) x D 0.98" (25 mm)
- Stocking temperature: -30 °C to 50 °C / -22 °F to 122 °F
- Operating conditions: 0 °C to 50 °C / 32 °F to 122 °F 10% to 90% H.R. without condensation
- Mounting type: Standard 2" x 4" electrical junction box
- Enclosure: White color, PCABS material UL94VO

Warranty: 1 Year

Certifications:

- UL 916 Energy Management Equipment
- BTL listing (pending)
- FCC Class A digital device, pursuant to part 15 of the FCC Rules

