TW2 PROTOCOL SERIES
Wall Mount Temperature Sensors

TW2TPXx   TW2LPXx   TW2XPXx

The TW2 Protocol Series of temperature sensors for living space is a versatile sensor platform for use with BAS controllers designed to accept BACnet or Modbus outputs. TW2 Protocol Series sensors are available with three user interface options: touchscreen, LCD with three buttons and blank.

BACnet & Modbus

Embedded BACnet and Modbus communication protocols…easy systems integration

Network configuration

Eliminates the cost of home run wiring and analog inputs required by traditional sensors

Multiple baud rates

Configurable baud rates… ensures network compatibility

Displays have setpoint

Selectable temperature or fan speed setpoint…easy to use

APPLICATIONS

- Controlling HVAC systems for improved comfort & energy savings
- Museums, schools, printing shops, hospitals, data centers, & other locations that require temperature control
- Facilitating compliance with ASHRAE standards for environmental control and indoor air quality

SPECIFICATIONS

OPERATING ENVIRONMENT

Input Power	Class 2; 20 to 30 Vdc, 24 Vac, 50 to 60 Hz
Protocol Output	BACnet or Modbus via RS-485, selectable
Operating Temperature Range	0 to 50 °C (32 to 122 °F)
Operating Humidity Range	0 to 95% RH non-condensing
Housing material	High-impact ABS plastic
Terminal Block Torque	0.5 to 0.6 N-m (0.37 to 0.44 in-lbf)

TEMPERATURE TRANSMITTER

Sensor Type	Solid state, integrated circuit
Accuracy	±0.2 °C (±0.4 °F) typical
Resolution	0.1 °C (0.1 °F)
Range	0 to 50 °C (32 to 122 °F)

DISPLAY MODELS

Touchscreen	61 mm (2.4 in), color, backlit, capacitive, 240x300 px Setpoint: Temperature or fan speed selectable Timeout override: Display timeout Lockout override: Touchscreen/button lockout
LCD	52mm (2.05 in), segmented with 3 buttons Setpoint: Temperature or fan speed selectable Timeout override: Display timeout Lockout override: Touchscreen/button lockout

SETPOINTS

Temperature Setpoint	Scale: 10 to 35 °C (50 to 95 °F) / 0 to 50 °C (32 to 122 °F)
Fan Speed Setpoint	Off, Low, Medium, High

OVERRIDE

Override Button	Display models feature momentary override button

WIRING TERMINALS

Terminal Blocks	Screw terminals, 18-24 AWG
Screw Terminal Torque	0.2 N-m (2.0 in-lbF) max.

WARRANTY

Limited Warranty	5 years

COMPLIANCE INFORMATION

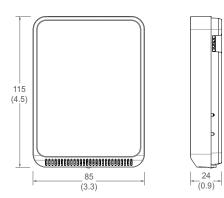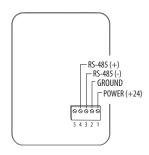|	

Agency Approvals	UL 916, European conformance CE:
	    EN61000-6-2
	    EN61000-6-3
	    EN61000 Series - industrial immunity
	    EN 61326-1
	FCC Part 15 Class B, REACH, RoHS, RCM (Australia), ICES-003 (Canada)

DIMENSIONAL DRAWING

115
(4.5)

85
(3.3)

24
(0.9)

USER INTERFACE TYPES

Touchscreen

LCD with Buttons

Blank

WIRING DIAGRAM

RS-485 (+)
RS-485 (-)
GROUND
POWER (+24)

5 4 3 2 1

ORDERING INFORMATION

MODEL	USER INTERFACE	SETPOINT	OVERRIDE	TEMPERATURE SENSOR
TW2TPXA	Touchscreen	X	X	Temperature Transmitter
TW2LPXA	LCD / 3 Buttons	X	X	Temperature Transmitter
TW2XPXA	Blank			Temperature Transmitter