NETWORK STRAP-ON TEMPERATURE TRANSMITTER

TNSO Series

The single point strap-on network temperature sensor incorporates a precision sensor bonded to a 38.1 mm x 38.1 mm (1.5” x 1.5”) aluminum plate and adhered to a 25.4 mm (1“) compressible foam. A 25.4 cm (10”) S/S pipe clamp is provided to secure the assembly to various sizes of pipes. All probes are constructed to provide excellent heat transfer, fast response and are potted to resist moisture penetration. The transmitter provides a BACnet® or Modbus signal for network connection. A compact ABS enclosure with a hinged and gasketed cover is provided for ease of installation.

PRODUCT HIGHLIGHTS

* Compact form factor enclosure with soft close cover
* IP 65 Enclosure
* Slotted mounting holes angled for ease of field installation
* Custom branding available

SPECIFICATIONS

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| **SPECIFICATIONS** |  |
| POWER SUPPLY | 24 Vac/dc ±10% (non-isolated half-wave rectified) |
| CONSUMPTION | **BACnet®:** 25 mA max @ 24 Vdc  **Modbus:** 10 mA max @ 24 Vdc |
| OUTPUT SIGNAL | MS/TP 2-wire RS-485 (BACnet® or Modbus) |
| OPERATING ENVIRONMENT | -40 to 50°C (-40 to 122°F), 5 to 95 %RH non-condensing |
| PROBE MATERIAL | Aluminum plate with compressible foam backing |
| PROBE DIMENSIONS | 38mm (1.5”) square |
| PIPE-STRAP | 25.4mm (10”) stainless steel |
| WIRE MATERIAL | PVC insulated, parallel bonded (22 AWG) |
| WIRING CONNECTIONS | Screw terminal block (14 to 22 AWG) |
| ENCLOSURE | **A:** ABS, UL94-V0, IP65 (NEMA 4X)  **E:** Same as A, with thread adapter (1/2” NPT to M16) and cable gland fitting |
| COUNTRY OF ORIGIN | Canada |
| TEMPERATURE | **Sensing Element:** NTC thermistor  **Accuracy:** ±0.2°C (±0.36°F) @ 0 to 70°C (32 to 158°F)  **Probe Sensing Range:** -40 to 100°C (-40 to 212°F) **Resolution:** 0.1°C/°F |
| BACnet® COMMUNICATIONS INTERFACE | **Hardware:** 2 wire RS-485  **Software:** Native BACnet® MS/TP protocol  **Baud Rate:** 9600, 19200, 38400, 57600, 76800, or 115200 (auto-detect)  **Network Address Range:** Locally set to 0-127  **Serial Configuration:** 8N1 |
| MODBUS COMMUNICATIONS INTERFACE | **Hardware:** 2 wire RS-485  **Software:** Native Modbus MS/TP protocol (RTU)  **Baud Rate:** 9600, 19200, 38400, 57600, 76800, or 115200 (auto-detect) **Network Address Range:** Locally set to 1-255 (switch selectable)  **Parity:** None  **Stop Bits:** 1  **Error Checking:** A001 (CRC-16 reverse) |
| INPUT VOLTAGE EFFECT | Negligible over specified operating range |
| PROTECTION CIRCUITRY | Reverse voltage protected and transient protected |