



## GTx116e-P TECHNICAL SPECIFICATIONS

### General

#### Probe and Sensor Node Configurations (max.)

**Type A Transmitter:** 2 probes x 8 sensor nodes/probe

**Type B Transmitter:** 4 probes x 4 sensor nodes/probe

#### Installed Airflow Accuracy

**Ducts/Plenums:** ±3% of reading

**Non-ducted OA Intakes:** better than or equal to ±5% of reading

#### Sensor Node Averaging Method

**Airflow:** Independent, arithmetic average

**Temperature:** Independent, velocity weighted average

#### Listings & Compliance

**UL:** 60730-1; CAN/CSA-E60730-1

**CE:** Yes

**UKCA:** Yes

**BACnet International:** BTL Listed (GTC116e and GTM116e transmitters)

**FCC:** This device complies with Part 15 of the FCC rules

**RoHS:** This device is RoHS2 compliant

#### Environmental Limits

##### Temperature:

**Probes:** -20 to 160 °F [-28.9 to 71.1 °C]

**Transmitter:** -20 to 120 °F [-28.9 to 48.9 °C]

##### Humidity: (non-condensing)

**Probes:** 0 to 100%

**Transmitter:** 5 to 95%

### Individual Sensing Nodes

#### Sensing Node Sensors

**Self-heated sensor:** Precision, hermetically sealed, bead-in-glass thermistor probe

**Temperature sensor:** Precision, hermetically sealed, bead-in-glass thermistor probe

#### Sensing Node Housing

**Material:** Glass-filled Polypropylene (Kynar® with /SS option)

**Sensor Potting Materials:** Waterproof marine epoxy

#### Sensing Node Internal Wiring

**Type:** Kynar® coated copper

#### Airflow Measurement

**Accuracy:** ±2% of reading to NIST-traceable airflow standards (includes transmitter uncertainty)

**Calibrated Range:** 0 to 5,000 fpm [25.4 m/s]

**Calibration Points:** 16

#### Temperature Measurement

**Type:** Velocity-weighted average

**Accuracy:** ±0.15°F [0.08 °C] to NIST-traceable temperature standards (includes transmitter uncertainty)

**Calibrated Range:** -20 to 160 °F [-28.9 to 71.1 °C]

### Optional Relative Humidity Sensor (/H Option)

**Type:** Ruggedized capacitive polymer RH sensor

**Accuracy @ 77 °F [25 °C]**

**20 to 80 %RH:** ±2% RH

**0 to 20 and 80 to 100 %RH:** ±3.5% RH

**Temperature Coefficient:** 0.07%/°F [0.13%/°C]

**Long Term Drift:** 0.5% RH/year

**Calculated Measurements:** Velocity weighted relative humidity, velocity-weighted enthalpy and dew point using measured RH, velocity-weighted temperature and on-board barometric pressure sensor.

### Sensor Probe Assembly

#### Tube

**Material:** Gold anodized 6063 aluminum (316 stainless steel with /SS option)

#### Mounting Brackets

**Material:** 304 stainless steel

#### Mounting Options & Size Limits

**Insertion:** 6 to 191 in. [152.4 to 4851 mm]

**Stand-off:** 6 to 190 in. [152.4 to 4826 mm]

**Internal:** 10 to 194 in. [254.0 to 4928 mm]

Note: The /H option is only available on probes >18 in. [457.2 mm]

#### Probe to Transmitter Cables

**Type:** FEP jacket, plenum rated CMP/FT6/CL2P, UL/cUL listed, -67 to 302 °F [-55 to 150 °C], UV tolerant

**Standard Lengths:** 10, 15, 20, 25, 30, 40 and 50 ft. [3.1, 4.6, 6.1, 7.6, 9.1, 12.2, and 15.2 m]

**Connecting Plug:** 13/16" [20.63 mm] nominal diameter with gold-plated connector pins

### Transmitter

**Power Requirement:** 24 VAC (22.8 to 26.4 under load) @20V-A max.

**Connector Receptacle Pins and PCB Connections:** Gold-plated receptacle pins, PCB interconnects, PCB edge fingers, and test points

**User Interface:** 2 line x16-character backlit LCD display and 4 button interface

#### B.A.S. Connectivity Options

**All Transmitters:** Three field selectable (0-5/0-10 VDC or 4-20mA), scalable and isolated analog output signals (AO1=airflow, AO2=temperature or alarm, AO3=%RH, enthalpy or dew point when /H option is provided).

**GTA116e Transmitter:** No additional connectivity to B.A.S.

**GTC116e Transmitter:** One additional field selectable (BACnet MS/TP or Modbus RTU) and isolated RS-485 network connection - Individual sensor node airflow rates and temperatures are available via the network

**GTM116e Transmitter:** One additional isolated Ethernet (simultaneously supported BACnet Ethernet or BACnet IP, Modbus TCP and TCP/IP) network connection - Individual sensor node airflow rates and temperatures are available via the network

**GTF116e Transmitter:** One additional isolated Lonworks Free Topology network connection

**GTU116e Transmitter:** One additional USB connection for thumb drive data-logging of sensor node airflow rates and temperatures

#### Airflow Alarm

**Type:** Low and/or high user defined setpoint alarm

**Tolerance:** User defined % of setpoint

**Delay:** User defined

**Zero Disable:** Alarm can be disabled when the airflow rate falls below the low limit cutoff value (unoccupied periods)

**Reset Method:** Manual or automatic

**Visual Indication:** Yes, LCD display

**Analog Signal Indication:** Yes, on AO2 assignment

#### System Status Alarm

**Type:** Sensor diagnostic system trouble indication

**Visual Indication:** Yes, LCD display

**Analog Signal Indication:** Yes, on AO2 assignment

**EB-Link Bluetooth® low energy Interface for Android® and iPhone®:** Display real-time airflow, velocity-weighted temperature, humidity, enthalpy, dew point, individual sensor node airflow/temperature data, settings and diagnostics.