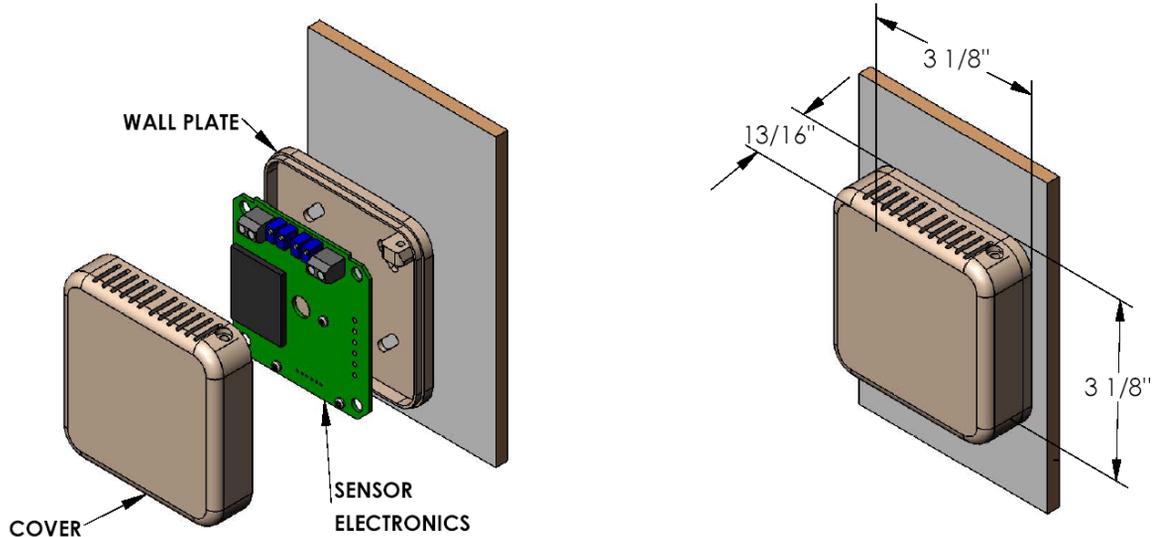


HTX01-C01

Interior Wall mount RH transmitter



Overview

The Intempco **HTX** series humidity / temperature transmitters are designed for use in HVAC energy management. The HTX01-C01 is an interior wall mount RH transmitter. The small off-white plastic enclosure is esthetic and takes up very little space. They are designed for mounting directly to walls or any flat surface.

Model

Model

1

HTX01-C01

-

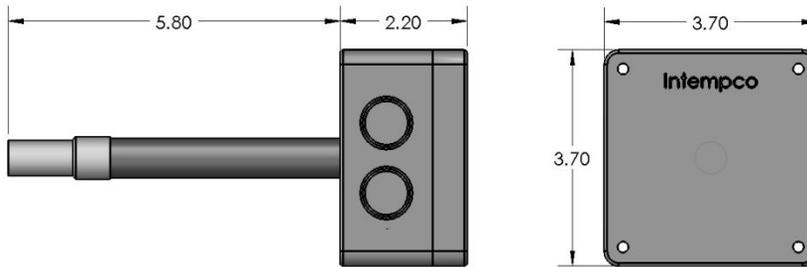
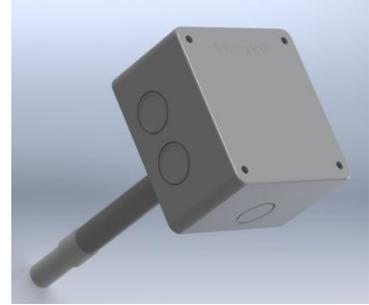
Standard features:

- Low Cost
- Rugged design using Solid State Sensors
- High Accuracy ($\pm 3\%$ over 5% to 90% RH)
- 2 Wire, Loop powered Operation (4-20 mA Output)
- On-Board Zero And Span Adjustments
- Temperature Compensated Humidity Measurement
- Factory Calibrated
- Temperature outputs available

BOX1 CODE	Temperature Output
NO	No Temperature Output
P2	100 ohms @ 0°C - DIN EN 60751 Class B, 2-Wire
P3	100 ohms @ 0°C - DIN EN 60751 Class B, 3-Wire
T2	1000 ohms @ 0°C - DIN EN 60751 Class B, 2-Wire
T3	1000 ohms @ 0°C - DIN EN 60751 Class B, 3-Wire
05	4-20mA 0/50 deg C
55	4-20mA -50/50 deg C
48	4-20mA -40/80 deg C
YC	4-20mA specify range C
YF	4-20mA specify range F
SP	Custom, Specify

HTX02-C01

Interior/Exterior DUCT mount RH transmitter



Overview

The Intempco HTX series humidity / temperature transmitters are designed for use in HVAC energy management. The HTX02-C01 is a high performance low cost Interior/Exterior DUCT mount RH transmitter. The enclosure is Polycarbonate NEMA4X and the probe is PVC with an HDPE porous filter. They are designed for mounting directly into ventilation DUCTs.

Model	1
HTX02-C01	--

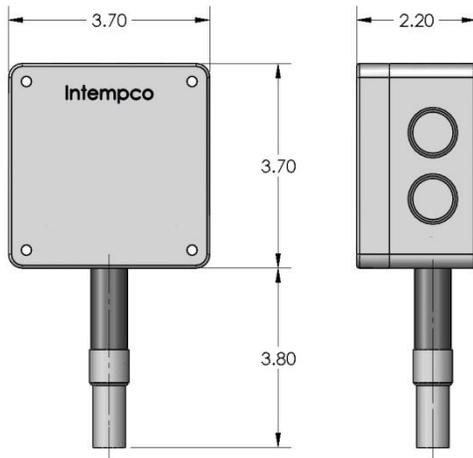
Standard features:

- Low Cost
- Rugged design using Solid State Sensors
- High Accuracy ($\pm 3\%$ over 5% to 90% RH)
- 2 Wire, Loop powered Operation (4-20 mA Output)
- On-Board Zero And Span Adjustments
- Temperature Compensated Humidity Measurement
- Factory Calibrated
- Temperature outputs available

BOX1 CODE	Temperature Output
NO	No Temperature Output
P2	100 ohms @ 0°C - DIN EN 60751 Class B, 2-Wire
P3	100 ohms @ 0°C - DIN EN 60751 Class B, 3-Wire
T2	1000 ohms @ 0°C - DIN EN 60751 Class B, 2-Wire
T3	1000 ohms @ 0°C - DIN EN 60751 Class B, 3-Wire
05	4-20mA 0/50 deg C
55	4-20mA -50/50 deg C
48	4-20mA -40/80 deg C
YC	4-20mA specify range C
YF	4-20mA specify range F
SP	Custom, Specify

HTX03-C01

Interior/Exterior WALL mount RH transmitter



Overview

The Intempco **HTX** series humidity / temperature transmitters are designed for use in HVAC energy management. The HTX03-C01 is a high performance low cost Interior/Exterior RH transmitter. The enclosure is Polycarbonate NEMA4X and the probe is PVC with a HDPE porous filter. They are designed for mounting directly on walls or support brackets inside or outside. Outside mounting requires protection from the elements.

Model 1

HTX03-C01 -

Standard features:

BOX1 CODE	Temperature Output
NO	No Temperature Output
P2	100 ohms @ 0°C - DIN EN 60751 Class B, 2-Wire
P3	100 ohms @ 0°C - DIN EN 60751 Class B, 3-Wire
T2	1000 ohms @ 0°C - DIN EN 60751 Class B, 2-Wire
T3	1000 ohms @ 0°C - DIN EN 60751 Class B, 3-Wire
05	4-20mA 0/50 deg C
55	4-20mA -50/50 deg C
48	4-20mA -40/80 deg C
YC	4-20mA specify range C
YF	4-20mA specify range F
SP	Custom, Specify

- Low Cost
- Rugged design using Solid State Sensors
- High Accuracy ($\pm 3\%$ over 5% to 90% RH)
- 2 Wire, Loop powered Operation (4-20 mA Output)
- On-Board Zero And Span Adjustments
- Temperature Compensated Humidity Measurement
- Factory Calibrated
- Temperature outputs available

**Intempco Humidity Transmitter Series
HTX01-C01 HTX02-C01 HTX03-C01**



Technical Specifications

Nominal conditions: Temperature = 25 °C, RH = 50%, Supply = 24VDC

RH Section:

Sensing Element : Thermoset polymer thin film capacitive RH sensor

Calibrated Range : 5% to 95% RH

System Accuracy : ±3%, (5% to 95% RH range)

Supply Voltage : 12-30 VDC, polarity protected

Power Requirement : 40mA max @ 24 VDC

Supply Voltage Effect : ±0.002 RH/volt (negligible) from 12-30 VDC

Output : 4–20mA, loop powered 2-wire, 0 to 100% RH

Repeatability : ±0.5% RH

Linearity : ±1% RH

Hysteresis : ±1% RH of operating humidity span

Sensor Stability : ±1% RH typical at 50% RH in 1 year

Temperature Effect : (±0.0021%RH / °C)x %RH (from -20°C to +60°C)

Effect @ 0% RH = < 0.005%RH/ °C (Negligible)

Effect @ 100 %RH = 0.21%RH/ °C

Temperature Compensation: -20°C to +60°C (-4°F to +140°F)

Operating Environment : -40°C to +85°C (-40°F to +185°F) non-condensing (0% to 95% RH)

Storage Environment : - 40°C to +85°C (-40°F to +185°F) non-condensing

Zero and Span Adjust. : Rotary Potentiometers

Maximum Loop Resistance : $R_{max.} = [V_{supply} - 12V_{dc}] / 20mA$

Polarity Protection : Diode reverse polarity protected

Sensor Break Indication : Downscale (<3.5 mA)

Optional Temperature Section:

RTD output:

Technology: Platinum temperature sensor in thin-film technology

Type: See model number for RTD description

4-20mA Output:

Output: 4-20mA loop powered, linear to temperature

Linearization : ±0.01% FS

Power Supply : 12-30Vdc, polarity protected

Supply Effect : 0.02%/V

Zero Drift : ±0.02% FS/ oC

Span Drift : ±0.02% FS/ oC

Long Term Drift : ±0.05% FS/ year

Accuracy : 0.1% FS (includes effects of linearity, hysteresis and repeatability)

Span / Zero Adjustment : 20 turn potentiometer, ±10% for zero and span

Maximum Loop Resistance : $R_{max.} = [V_{supply} - 12V_{dc}] / 20mA$

Open Circuit Detection : Over-scale limit : 27.0 mA, Under-scale limit : 2.2mA

Warmup : 30 seconds

Ambient Operating Temperature : -40°C.....85°C (-40 °F....185°F)

Storage Temperature : -40°C.....85°C (-40 °F....185°F)

**Intempco Humidity Transmitter Series
HTX01-C01 HTX02-C01 HTX03-C01
Mechanical Specifications**



Description	HTX01-C01	HTX02-C01	HTX03-C01
Mounting	Interior Wall mount	Interior/Exterior DUCT mount	Interior/Exterior WALL mount
Enclosure	2 part , ABS wall mount base and removable cover. Off-white color Flame retardant plastic material UL rated 94-V0	2 part , Polystyrene wall mount box with removable cover. Light Gray -40°C to 70°C (-40°F to 158°F)	2 part , Polystyrene wall mount box with removable cover. Light Gray -40°C to 70°C (-40°F to 158°F)
Sensor Protection	Housing cover with air passage access slots	HDPE dust cover 60 micron	HDPE dust cover 60 micron
Sensor Probe Housing	N/A	PVC	PVC
Environmental Protection	IP20	Electronic IP64, sensor with dust filter IP50	Electronic IP64, sensor with dust filter IP50
Electrical Connections	Via on board terminal blocks, accepts 18-24 awg size	Via on board terminal blocks, accepts 18-24 awg size	Via on board terminal blocks, accepts 18-24 awg size
Connection Access	Access from behind the base plate	Round Knockout Sidewalls PG 16 [23.0mm (0.91 in)] and PG 11 [19.0mm (0.75 in)]	Round Knockout Sidewalls PG 16 [23.0mm (0.91 in)] and PG 11 [19.0mm (0.75 in)]

Specifications are subject to change without notice. The information contained herein is believed to be accurate and reliable at the time of release. However, due to ongoing product improvements and revisions, Intempco cannot accept responsibility for its use or for inadvertent errors, inaccuracies, subsequent changes or omissions of printed material.