

HTX62C/D-EX Series

Humidity(Dewpoint) & Temperature Transmitters With Display, Communication

FEATURES

- The Built-in FND Display (Inside of case)
- Digital Calibration Function
- Maximum & Minimum Value Display
- Error Display

APPLICATIONS

- HVAC System
 - Clean room / Humidifier / Dehumidifier
 - AHU (Air Handling Unit)
 - Building Automation
 - Botanical Garden & Farm / R&D Center
 - Museum / Exhibition Hall / Laboratory
- Industry (Production / Storage)
 - Semi-Conductor / Electric Railway
 - Train / Rotary Machine Room
 - Pharmacy / Food / Factory Automation
- Environmental Detection System
 - Climate / Road
 - Mobile Communication Base Station

EXPLOSION-PROOF TECHNICAL DATA

Certificates:

Empty enclosure: PTB 01 ATEX 1061U
Terminal enclosure: PTB 00 ATEX 1002

Material:

Glassfibre-reinforced duroplastic polyester,
graphite added

Colour:

Similar to RAL 9011, black

Ingress protection:

IP 66, EN 60529

Impact resistance:

>7 Joule, EN 50014

Flammability:

Self-extinguishing, UL 94/V0

Surface resistance:

<10⁹ Ohm, EN 50014 / IEC 60079-0

Water absorption:

Max. 0.7 %, ASTM D570

Toxicity:

Halogenfree

Weather resistance:

UV-stabilized

Temperature range of application acc. EN:

-20° to + 40°C
(corresponds T6 = 85°C max. surface temperature)
-20° to + 55°C
(corresponds T5 = 100°C max. surface temperature)
temperatures to -55°C with special marking
on request

HUMITRON® HTX62C-EX Series is
sensor for environment measurement which
provide high accuracy and stability using the
microprocessor.

Explosion protection:

Ⓔ II 2 G / 2 D

EEx e II T6 (increased safety)

Temperature class T5 on request

- Support RS485, MOD-BUS PROTOCOL
 - Modbus RTU/ASCII
- Support Exclusive Software
 - State Display, Logging Function etc

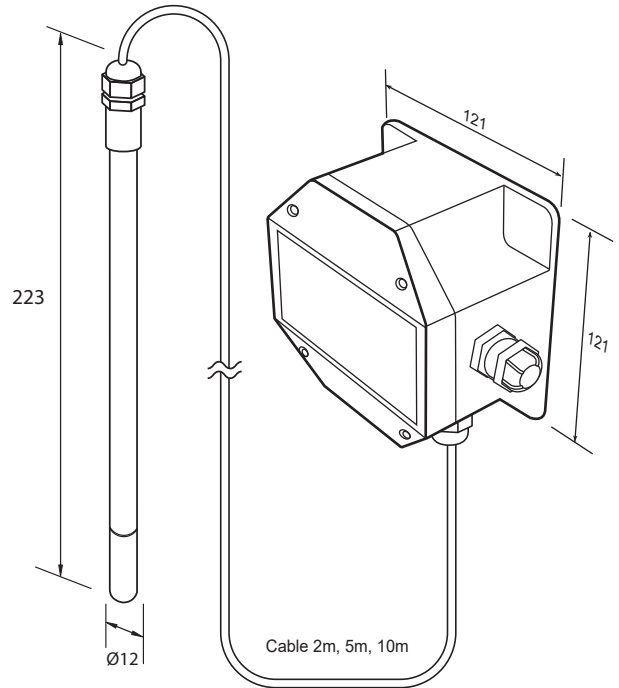
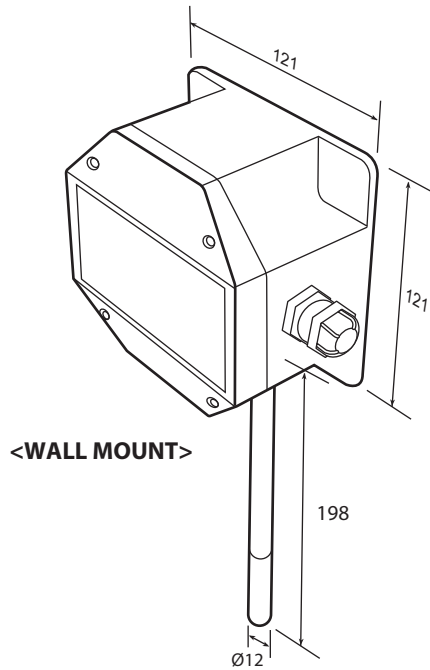
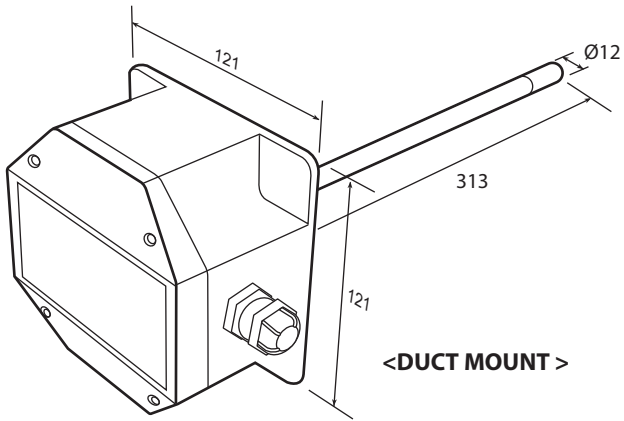


SPECIFICATIONS

Item	Model	HTX62C(W/D/R)-EX	HTX62D(W/D/R)-EX
Humidity	Working Range	0...100%RH (Non-Condensation)	-40...60°C (Dewpoint)
	Accuracy	± 1.8%RH	-
	Repeatability	± 0.1%RH	-
	Response	Max. 10Sec. : 1/e (63%) at 25°C, 1m/s air	
	Output	4...20mA	
Temperature	Working Range	-20...80 °C	
	Accuracy	25 °C @ ± 0.3 °C	
	Repeatability	± 0.1 °C	
	Response	5...30Sec., 1/e (63%)	
	Output	4...20mA (-20...80°C : Output Range Settable)	
Self Diagnostic		Sensor Fault Detect, Communication Fault Detect	
Power Supply		DC24V, Max 0.2A	
Dimension(W×H×Dmm)		Case : 120x120x75.5 / Duct : 270mm x 12 / Wall : 125mm x 15	
BPS Speed, Protocol		Modbus RTU/ASCII, 2400, 4800, 9600, 19200, 38400 BPS	
Cablegrand		PG9 (Bright Black, Anti-Drag, 3...6.5mm)	
Wiring Method		4-Pin X 2ea Terminal Block, 14...22AWG	
Storage Condition		-25...60°C, Non-condensation	
Operating Condition		-20...55°C 0...95%RH	
Housing		Polyester Ex, Water-Proof(IP66)	
Weight		Duct : 757g / Wall : 764g	

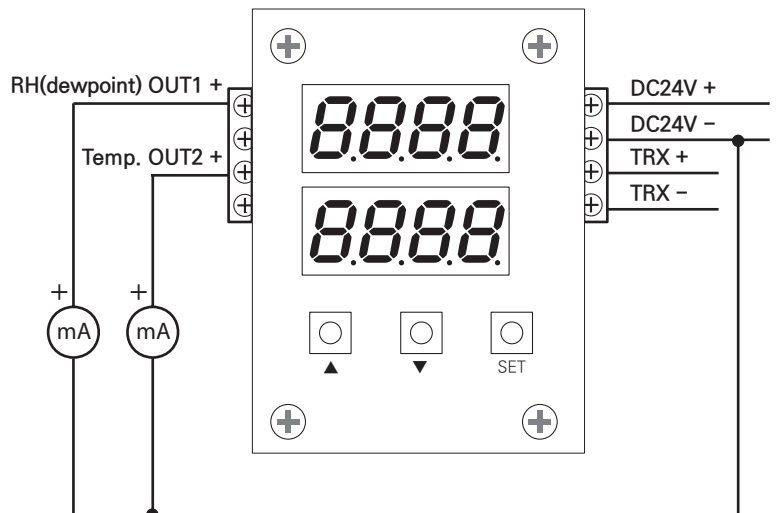
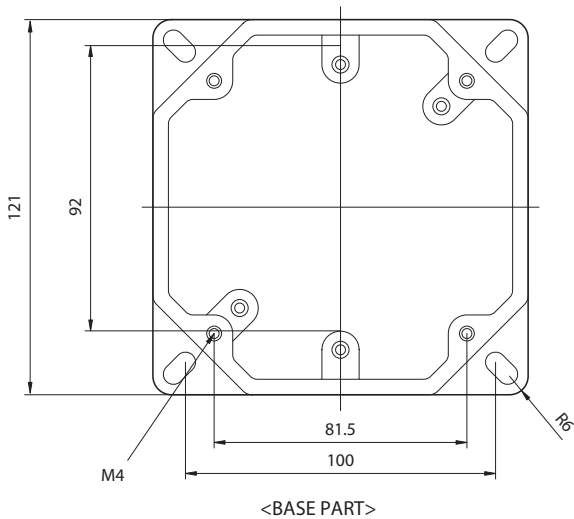


Full Dimensions of each types



Housing / Mounting Dimension

Connection Diagram



Ordering Guide

Basic No.	Series	Mount	Housing	Option	Description
HTX					HUMITRON HTX Series Transmitters
	62C				RH : $\pm 2.0\%$, Temp : $\pm 0.3^\circ\text{C}$
	62D				Dewpoint & Temperature
		W			Wall Mount Type
		D			Duct Mount Type
		R			Remote Probe Type (2m, 5m, 10m)
			EX		Explosion protection
				10	4...20mA Output Function
				01	RS-485 MODBUS Communication Function
				11	4...20mA Output & Communication Function

Parameter List

Item	Name Of Parameter	Name Of Parameter	Setting Range (Description)	Initial Value	User Setting Value
1	<i>r.oFS</i>	Measure humidity(dewpoint) offset value	-10.0 ... +10.0 % -10.0 ... +10.0 Td	0.0 % 0.0 Td	
2	<i>r.SCH</i>	Max. humidity(dewpoint) of Transmission output Scale (at 20mA)	0 ... 100 % -40 ... 120 Td	100 % 80 Td	
3	<i>r.SCL</i>	Min. humidity(dewpoint) of Transmission output Scale (at 4mA)	0 ... 100 % -40 ... 120 Td	0 % -40 Td	
4	<i>r.0oF</i>	Offset humidity(dewpoint) of Transmission output	-3.00 ... + 3.00 mA	0.00 mA	
5	<i>t.oFS</i>	Measure temperature offset value	-10.0 ... +10.0 $^\circ\text{C}$	0.0 $^\circ\text{C}$	
6	<i>t.SCH</i>	Max. temperature of Transmission output Scale (at 20mA)	-40 ... 120 $^\circ\text{C}$	80 $^\circ\text{C}$	
7	<i>t.SCL</i>	Min. temperature of Transmission output Scale (at 4mA)	-40 ... 120 $^\circ\text{C}$	-20 $^\circ\text{C}$	
8	<i>t.0oF</i>	Offset temperature of Transmission output	-3.00 ... + 3.00 mA	0.00 mA	
9	<i>C.Adr</i>	Address for End Address	1 ... 64	1	
10	<i>C.Pro</i>	Protocol Mode	0 : MODBUS RTU 1 : MODBUS RTU2 2 : MODBUS RTU3	0	
11	<i>C.bPS</i>	Baud-rate	0 : 600, 1 : 1200 2 : 2400, 3 : 4800 4 : 9600, 5 : 19200 6 : 38400	4 : 9600 bps	
12	<i>C.Pr1</i>	Parity	0 : None 1 : Even 2 : Odd	0 : None	
13	<i>C.StP</i>	Stop bit	1 : 1-bit 2 : 2-bit	1 : 1-bit	
14	<i>C.dLn</i>	Data bit	7 : 7-bit 8 : 8-bit (fixed)	8 : 8-bit	

Operation Sequence and Parameter map

o Set display mode

Pushing for 3Sec. +

23.2 °C
58.2 %
Display Temperature / Humidity

12.32 °C
15.82 %
Retrans. Display
(Unit : mA)

-dP - °C
10.2 %
Dew point Display
(Unit : °C)

r.nA4 °C
70.2 %
Humidity Max.
(Unit : %) Reset

r.n In °C
38.2 %
Humidity Min.
(Unit : %) Reset

t.nA4 °C
38.2 %
Temperature Max.
(Unit : °C) Reset

t.n In °C
10.2 %
Temperature Min.
(Unit : °C) Reset

Prno °C
1.30 %
Program No. Display

o Set point change mode

Pushing for 3Sec.

r.oFS Cal. of Humidity(dewpoint)
r.SCH Range Max. of Humidity(dewpoint)
r.SCL Range Min. of Humidity(dewpoint)
r.OoF Cal. of Humidity(dewpoint) Retrans

t.oFS Cal. of Temperature
t.SCH Range Max. of Temperature
t.SCL Range Min. of Temperature
t.OoF Cal. of Temp Retrans

CAdr Communication ID
CPro Communication Protocol Method
CbPS BPS Set
CPrI Communication Parity bit set
CStP Communication Stop bit set
CdLn Communication Data Length set

n.d IS Display interval set

Pushing for 3Sec.