

Challenge and Innovation
High precision transmitter with high reliability and stability

DOTECH
SENSING & CONTROL

HUMITRON® HTP1100

 -40 ~ 80°C
±0.2°C

 0 ~ 100%RH
±1.8%RH

 -40 ~ 60°C
±4°C Td



Humidity, Temperature and Dewpoint Transmitter HTP1100 series

- Temperature, humidity and dew point temperature transmitter with an economic price
- Compact probe type
- Wide measurement range: 0 ~ 100%RH, -40 ~ 80°C
- Easy connection through a detachable screw type probe cable
- Different types of outputs such as voltage, current and digital
- Easy maintenance via interchangeable probe

High reliability and stable Ultra Precision transmitter

HUMITRON® HTP1100 is a small probe type temperature, humidity, and dew point transmitters with a reasonable price. It has an excellent compatibility and long-term stability. In addition, can accurately measure the temperature and humidity.

Can be applied to various fields including clean rooms, greenhouses, fermentation chambers, glove boxes, etc.



Temperature

Measurement range	-10 ~ 80°C
Accuracy	±0.2°C (0 ~ 60°C)
Repeatability	±0.1°C
Response time	< 5sec
Long term drift	< 0.05°C/year

Humidity

Measurement range	0 ~ 100%RH
Accuracy *	±1.8%RH (0 ~ 80%RH)
Repeatability	±0.2%RH
Hysteresis	< ±1%RH
Response time	< 4sec
Long term drift	< 0.5%RH /Year

Dew point

Measurement range	-40 ~ 60°C
Accuracy **	±4°C (-10 ~ 20°C)

* Accuracy at 23 degrees Celsius

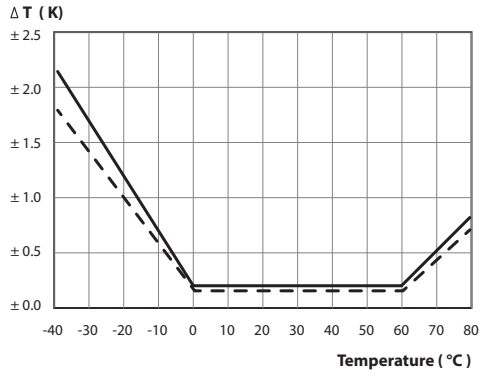
** Accuracy at 25 degrees Celsius of dry-bulb temperature

Common Specifications

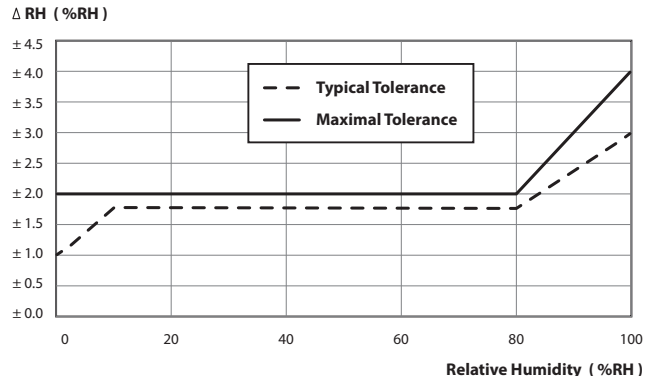
Power supply	8 ~ 28Vdc
Current consumption	Max 3mA @24Vdc
Voltage outputs	2-channels 0~1Vdc / 0~2.5Vdc / 0~5Vdc / 1~5Vdc (Output impedance : 100Ω)
Digital outputs	RS485 2-wire half duplex (Modbus RTU protocol) RS232 serial output (Modbus RTU protocol)
Filters	Plastic grid filter with a built in stainless steel mesh Plastic grid filter Plastic grid filter with a built in PTFE membrane Nickel coated sintered filter
Materials	Body : Stainless steel (SUS304) Filter : Cr coated PC/ABS plastic grid Cable material : PUR
Operating temperature	Temperature: -40 ~ 80°C, (Non condensation)
Storage temperature	Temperature: -40 ~ 80°C, Humidity: Below 95%RH
Dimensions	93mm x Ø12
Weight	20g

Technical data

Typical and maximal tolerance for temperature sensor

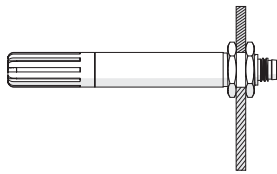


Typical and maximal tolerance at 23°C for relative humidity

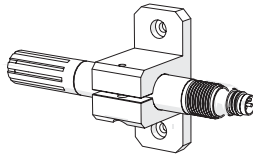


Mount installation

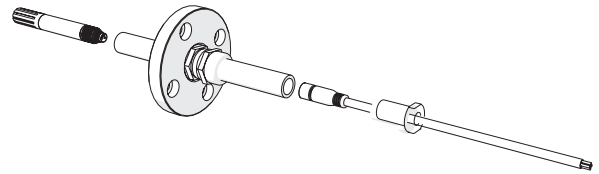
※ accessories purchase separately Item



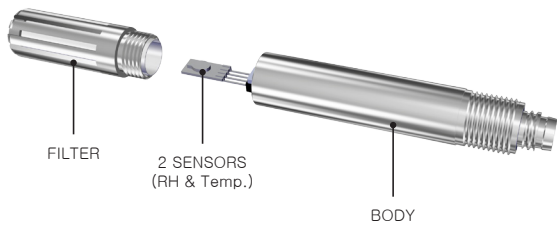
PANEL MOUNT
Installation with HTP1100 - OP



WALL MOUNT
Installation with HTP1100 - OW



DUCT MOUNT
Installation with HTP1100 - OD



Plastic grid filter with a built in stainless steel mesh



Plastic grid filter



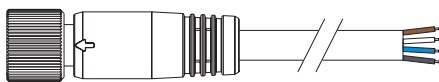
Plastic grid filter with a built in PTFE membrane



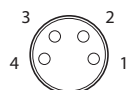
Nickel coated sintered filter

Filter replacement is possible according to the installation environment.

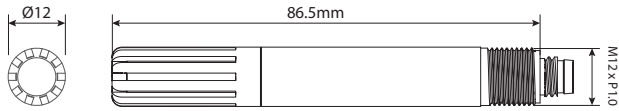
Wiring



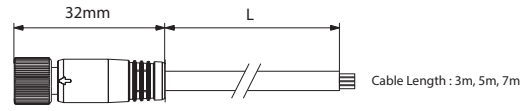
HTP1100-Connection cable



Dimensions



HTP1100



HTP1100-Connection cable

Ordering guide

HTP1100 -	①	②	③	④	⑤	Description
① Output signals	A					0 ~ 1V (Voltage output)
	B					0 ~ 2.5V (Voltage output)
	C					0 ~ 5V (Voltage output)
	D					1 ~ 5V (Voltage output)
	R					RS485 / Modbus RTU
	U					RS232 / Modbus RTU
② CH-1 Parameters		0				RS485 or RS232
		1				RH (Relative Humidity)
		2				T (Temperature, -40 ~ 80°C)
		3				Td (Dew Point, -40 ~ 60°C)
③ CH-2 Parameters			0			RS485 or RS232
			1			RH (Relative Humidity)
			2			T (Temperature, -40 ~ 80°C)
			3			Td (Dew Point, -40 ~ 60°C)
④ Sensor protection filter				A		Plastic grid filter with a built in stainless steel mesh
				B		Plastic grid filter
				C		Plastic grid filter with a built in PTFE membrane
				D		Nickel coated sintered filter
⑤ Cable length					3	M8, PUR 3m
					5	M8, PUR 5m
					7	M8, PUR 7m

Accessories (Options)

Model name	Description
HTP1100-OP	Pair of SUS nuts for Panel-mount kit
HTP1100-OW	Aluminum Clamp for Wall-mount kit
HTP1100-OD	Flange for duct mount kit

Specifications by Model Order

HTP1100 - D12B3
 Output signals : 1 ~ 5V Voltage output
 CH-1 Parameters : RH
 CH-2 Parameters : Temperature
 Sensor protection filter : Plastic grid filter
 Cable length : 3M