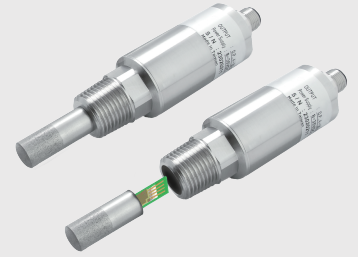


- Dew point calibration, highly accuracy, 4~20 mA and RS-485 output.
- Reduce insensitivity temperature zone, quickly response.
- Hysteresis compensation, resistance to moisture, extreme high and low humidity impact.
- EMC anti-interference, anti-condensation, low-temperature influence, long-term stability.
- Three thread (1/2"PT, 1/2"G, and 5/8"UNF) mode can be selected.
- Compressed air system/ Air separation equipment/ Freezer/ Adsorption machine/ Plastic dryer/ Industrial drying process/ Paper/ Chemical process monitoring.

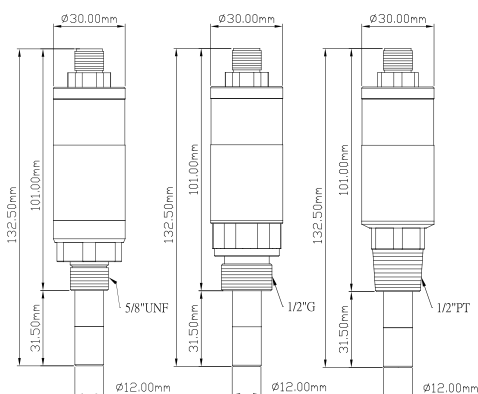


SPECIFICATION

Input		Environment	
Input type	Capacitive humidity sensor & Pt100	Medium	Air
Operating range of dew point	-60 ... +60 dp°C	Operating Temp. for housing	-40 ... +60°C
		Operating Humid. for housing	0 ... 95%RH (Non-condensing)
		Operating Temp. for probe	-40 ... +60°C
Output		Storage temperature	-25 ... +60°C
Max. scaling range	Dew point : -100 ... +60 dp°C	Pressure resistance	16 bar
Dew point switch to another physical quantity range	Frost point : -60 ... 0 fp°C ; Absolute humid.(Volume)0 ... 50000 ppm/v Absolute humid.(Weight)0 ... 50000 ppm/w	Installation	
Output signal	Standard 4 ... 20 mA+RS-485 / 0 ... 10 V+RS-485 on request	Installation	1/2"PT, 1/2"G, and 5/8"UNF
Signal connection	3-wire	Protection	
Linear accuracy	±1 dp°C (at -20 ... +20 dp°C) ±1.5 dp°C(at -40 ... +20 dp°C) ±2 dp°C (at -60 dp°C) Reference (at -100 ... -60 dp°C)	IP rating	IP65(Probe : IP20)
Load resistance	Current output : ≤ 500 Ω Voltage output : ≥ 100 KΩ	Electrical protection	■ Polarity protection ■ Over-voltage ■ Short-circuit
Output calibration	Software	Material	
(ZERO & SPAN)adjustment range		Housing	S.S.(SUS304)
Response time t90(Temp. at+25°C)	<20 sec	Probe	S.S.(SUS304) ; SUS sintered filter(SUS316)
Electrical		Weight	168 g
Power supply	DC 24 V±15%		
Current consumption	DC 24 V, 50 mA		
Electrical connection	M12 connector		

*Please make sure the product and the device which connect with RS-485 are on common ground, avoid damaged product.

DIMENSION



※ Standard — M12-5PIN 2M waterproof cable

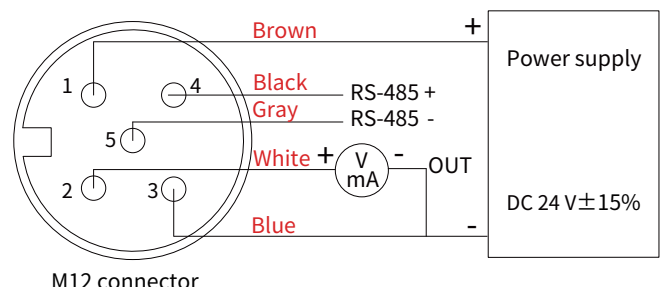
ORDER INFORMATION

DTHS88BOX - Code1 - Code2

Code1	Dew point measuring range	Code2	Connector
A	-20~+20	1	1/2"PT (R1/2")
B	-40~+20	2	1/2"G
C	-60~+20	3	5/8"UNF
E	-100~+20		

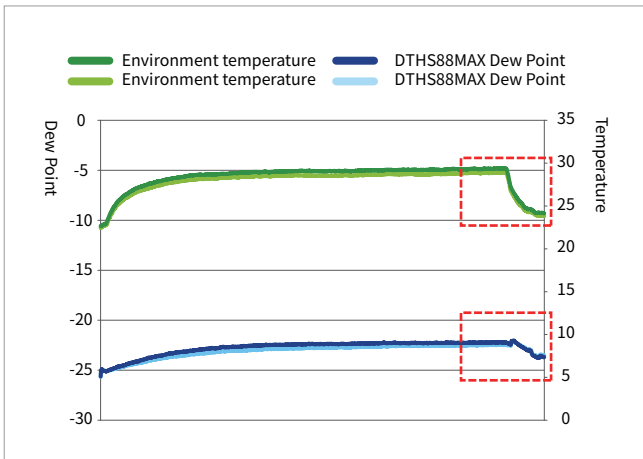
*Max. scaling range : -100 dp°C ... +60 dp°C
*Linear accuracy : Reference (at -100 ... -60 dp°C)

WIRING CONNECTION



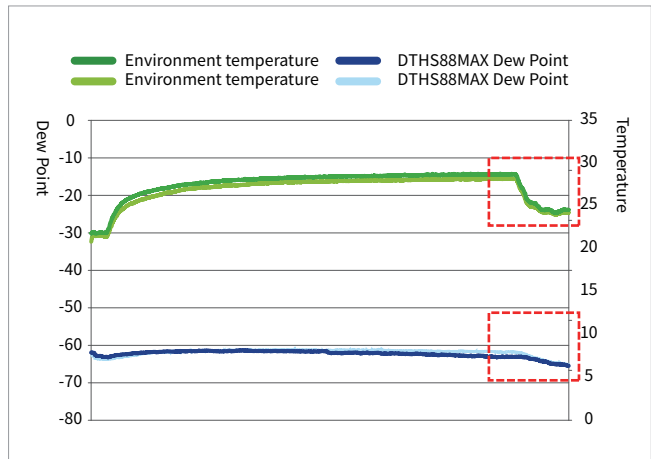
ENVIRONMENTAL TEMMP. CHANGE CURVE

● -25 dp°C

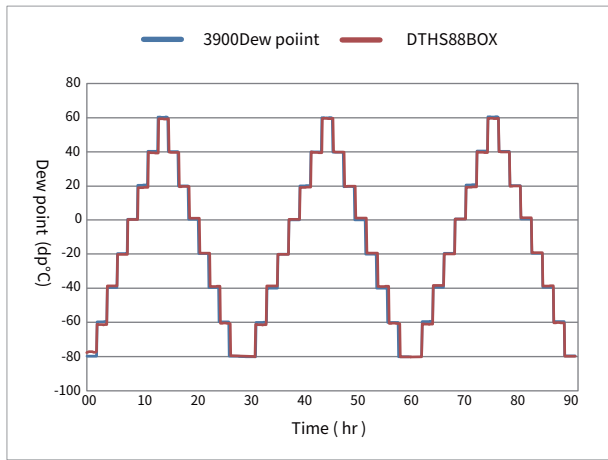


When the environment changes (red frame), the impact of temperature changes is low.

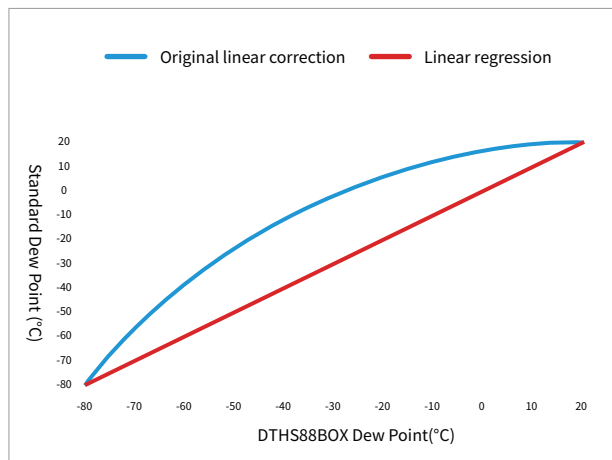
● -60 dp°C



3-CYCLE CURVE



3-CYCLE CURVE



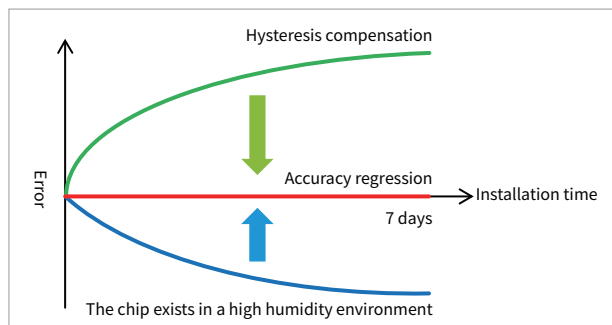
※ According to IEC 61298 and ISO 17025 standard to measuring 3-cycle curve. As the charts result, accuracy of test sample match with accuracy chart of humidity generator + dew point mirror

RESOLUTION INCREASED

	Previous product	DTHS88BOX
Sampling frequency(Hz)	24,000,000	72,000,000
conclusion frequency setting(Hz)	10,000	6,000
Hardware resolution(Count)	2,400	12,000
Maximum sampling error	1/2,400	1/12,000
Maximum sampling error(PPM)	417	83

The resolution of eyc-tech THS88MAX is significantly improved by 5 times compared with the others.

HYSTERESIS COMPENSATION



In the application of low dew point temperature, continuous drying of the wafer may cause the measurement value such as the blue curve to cause the accuracy of the initial use to not meet the product standard. The firmware is relieved by the compensation (hysteresis compensation) of the green curve so that the product accuracy standard can be reached at the initial stage of installation.

INSENSITIVITY TEMP. ZONE

