

WALL TYPE

T&H Transmitter

4-20mA, 0-5VDC, 0-10VDC OUTPUT

RS485 Communication Output, Relay Output

Model No.: TH800



General Specifications

GS 19A16D01-01EN



TEMPERATURE HUMIDITY
HIGH QUALITY
TH800

Overview

TH800 is high quality wall type temperature and humidity sensor, adopting Switzerland advanced sensor module and high performance single chip, designed for temperature humidity measurement indoor room, widely used building automation, library room, warehouse, Medical Industry, HAVC Industry, Greenhouse etc. High humidity environment

Feature

- High Accuracy, High Stability, Anti-Interference dealing on PCB
- High sealing technology and excellent three-proof coating protection
- SMT Technology, with indicator, optional
- Range: T: -20 to 80°C, -20 to 120°C, 0-50°C, -40 to 60°C; H: 0-100%
- Output: 4-20mA, 0-5VDC, 0-10VDC, RS485 output, optional
- With 2 relays outputs, optional
- Temperature range, offset function can be set by keys
- Probe can be dust-proof, water-proof type, high-temperature
- Probe can be with external lead cable max.10m as separate type
- Accuracy: T: $\pm 0.3^{\circ}\text{C}$, H: $\pm 3\%$;
- Protection: Electrical housing: IP65; Probe: IP54
- Wide power supply: 12-36VDC or AC24V ($\pm 20\%$)

Front Panel



TH800 Wall Type Intelligent
Temperature Humidity Transmitter
With Indicator, Optional

Specification

Accuracy	T: $\pm 0.3^{\circ}\text{C}$ (Full range in average);	Power Supply	15-36VDC (4-20mA Output); 24VAC
	RH: 3%RH		12-36VDC (0-5VDC, 0-10VDC; RS485); 24VAC
	(non-linear, repeatability, hysteresis)	Power consumption	Less than 1VA
Long Stability	T: $< 0.04^{\circ}\text{C}/\text{year}$; RH: $< 0.05\%\text{RH}/\text{year}$	Case /Probe Material	ABS (-20 to 80°C ; 0 to 50°C , -40 to 60°C)
Range (T)		Cable Material	Rubber cable or Silica gel with Teflon cable
Analog Output	T: -20 to 80°C ; 0 to 50°C , -40 to 60°C ;	Probe Type	Dust-proof (standard); water-proof
	T: $0-100^{\circ}\text{C}$, $0-120^{\circ}\text{C}$, customized	High-temp. Probe	316LSS with zincification and cooperies
RS485 Output	T: -20 to 80°C	Case Size	134mmx90mm (LXD)
Range (RH)	RH: 0-99.9%	Probe Size	96mm/115mmx 16mm (LXD) (normal Temp.)
Resolution	T: 0.1°C , RH: $0.1\%\text{RH}$		73mmx16mm (LXD) (High temperature)
Response time	T: 6t(63%): min=5s, max=30s;	Cable Length	1-10m, optional
	H (90% static air): 8second	Terminals Size	1x2.5 mm ² or 2x1.5 mm ²
Load resistor	$< 500\text{ohm}$	Entry connector	M16x1.5mm
Output	4-20ma, 0-5VDC, 1-5VDC; RS485 output	Installation	Wall Type
RS485 Protocol	Standard MODBUS-RTU protocol	Protection	Electrical Case: IP65; Probe: IP54
Baud rate	9600; customized	Working Ambient	T: -40 to 80°C ,
Relay Output	Load $< 2\text{A}/30\text{VDC}$ ($0.5\text{A}/125\text{VAC}$), max. 2A	Storage Temperature	$10-50^{\circ}\text{C}$ ($0-125^{\circ}\text{C}$ at peak)
Indicator	LCD display, optional	Storage Humidity	H: 0-99.9%, no dew,

Dimension (mm)

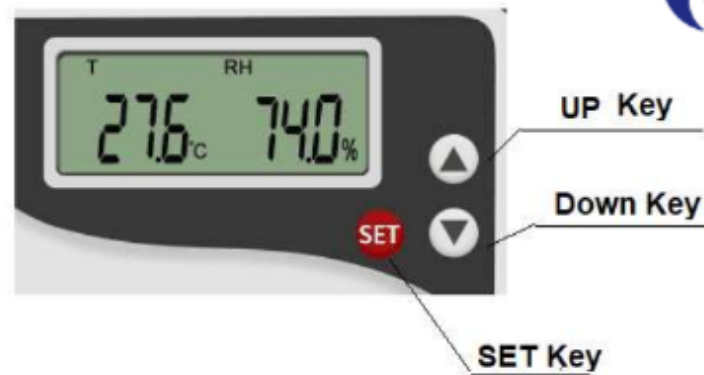
Integrated type with Normal Temperature Probe



Separated type with normal, high-temperature probe



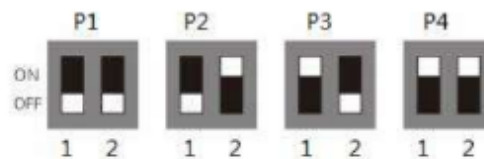
TH800-D Indicator Type



D-Indicator type: Temperature range, offset function, communication address functions can be set by keys directly.

TH800-N Without Indicator Type

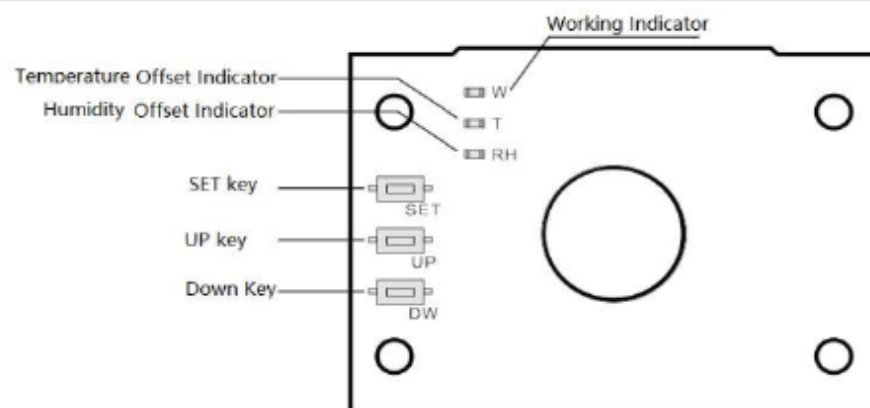
Temperature Range Output can be Set for A: without Indicator Type by Inner DIN Switch Setting



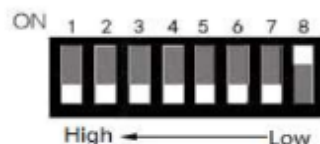
DIN Switch	P1	P2	P3	P4
Range	0 to 50°C	-20 to 80°C	-40 to 60°C	Reserved

△ Temperature Range Setting

Offset function can be Set for N: without Indicator Type by Inner keys Setting



Rs485 Address Setting (RS485 Output: -20 to 80°C can be through inner DIN Switch directly

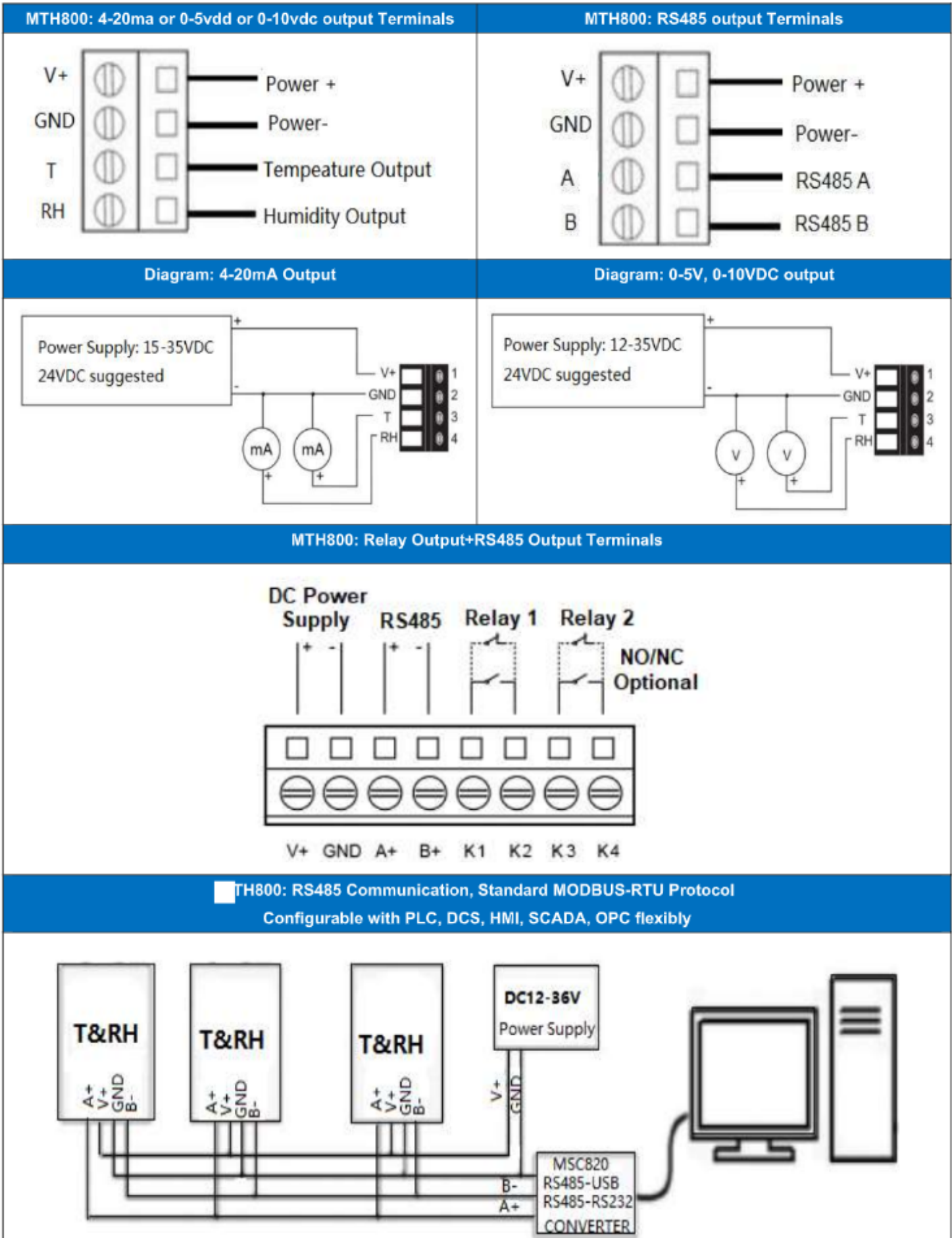


DIN Switch on ON: 1
DIN Switch on OFF: 0

Address Setting as Follows

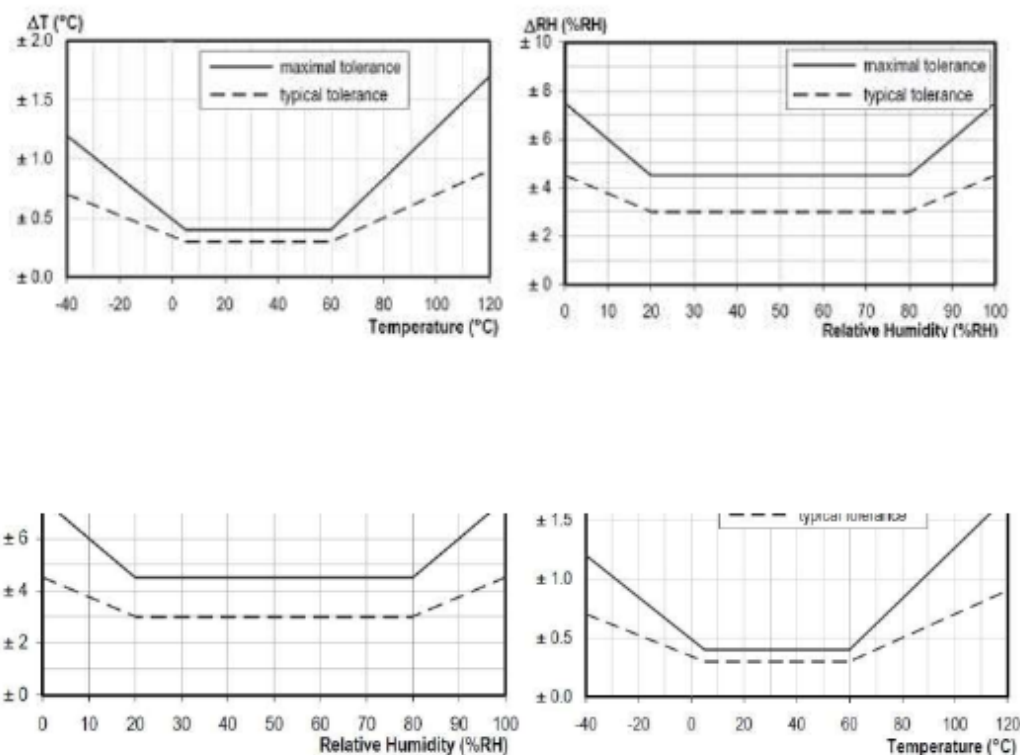
DIN Switch Address	Decimal System Address
00000001	1
00000010	2
00000011	3
00000100	4
.....	
11111111	255

■ Diagram



Accuracy

Analog Output: 4-20mA, 0-5VDC, 0-10VDC



Order Code

TH800 temperature and humidity transmitter						
Order Code: MTH800-NN-ANN						Description
MTH800	-X	X	X	X	X	MTH800 temperature and humidity transmitter
Indicator	-N					None, without indicator
	-D					Yes, with indicator
Probe type		N				Integrated, probe without extended lead cable
		E				Separated, probe with extended cable, please advise the cable length need
Output			-A			4-20mA
			-V			0-5VDC
			-V2			0-10VDC
			-R			RS485 output
			-E			Ethernet TCP/IP output
			-S			2 Relay Output. 2 Relay NO or NC, optional
			-M			RS485+2 Relay Output
			-K			Ethernet +2 Relay Output
Probe Type			N			Standard, dust-proof
			W			Water-proof
			H			High Temperature
Cable Length (m)				N		None
				X		0-10m, please advise the remote cable length exactly, such as 2, means 2m

Note: Order Code: E.g.: TH800-NN-AN, TH800 wall type temperature and humidity sensor without indicator, 4-20ma output, integrated type without external lead cable.



CONTROL Y REGULACIÓN TÉRMICA, S.L.

Camí Vell de Russafa, 713 Pol. Ind. Catarroja

46470 CATARROJA (VALENCIA)

coreterm@coreterm.es

www.coreterm.es