

HTO Temperature & Humidity & CO & CO₂ Transmitter ADTEK

Features

- CO₂ measuring element: NDIR Sensor
- CO measuring element: Electrochemical sensor
- Temperature/Humidity sensing element : CMOS sensor
- Analog output option:4~20mA or 0~10V
- Communication output option:RS-485 Modbus RTU
- Present value offset adjustable
- Inside buttons for adjust output parameters
- LCD backlight color to Indicated CO/CO₂ concentration



Ordering Information

HTO — Measure Item — CO/CO₂ Measuring Range — Signal Output —

CODE	Measure Item	CODE	Range of CO	CODE	Range of CO ₂	CODE	Range of CO+CO ₂	CODE	Signal Output	CODE	Signal Output
1	Temp. & Humi.	N	None	N	None	N	None	N	None	N	None
2	Temperature	1	100ppm	2	0~2000ppm	1	100+2000ppm	A	4~20mA	1	4~20mA CO+CO ₂ +Temp.
4	CO ₂ +Temp. & Humi.	3	300ppm	5	0~5000ppm	2	100+5000ppm	V	0~10Vdc	2	4~20mA CO+CO ₂ +Humi.
7	CO+Temp. & Humi.	5	500ppm	A	0~10000ppm	3	100+10000ppm	R	RS-485	3	0~10Vdc CO+CO ₂ +Temp.
A	CO+CO ₂ +Temp. & Humi.					4	300+2000ppm	M	RS-485+4~20mA	4	0~10Vdc CO+CO ₂ +Humi.
						5	300+5000ppm	S	RS-485+0~10Vdc	5	RS-485+4~20mA CO+CO ₂ +Temp.
						6	300+10000ppm		If measure item is Temperature only, the output option code is "A" only	6	RS-485+4~20mA CO+CO ₂ +Humi.
						7	500+2000ppm			7	RS-485+0~10Vdc CO+CO ₂ +Temp.
						8	500+5000ppm			8	RS-485+0~10Vdc CO+CO ₂ +Humi.
						9	500+10000ppm				

Note: Code A not available in Duct and Remote Probe type

Option 1: LCD Display

CODE	LCD Display
N	None
L	LCD

If output option with RS485, display must be with LCD.

Option 2: USB Cable

CODE	USB Cable
N	None
U	USB Cable

Option 3: Power Supply

CODE	Power
D24	DC 24V

Option 4: Duct Type

CODE	Duct Type
1	Duct V Type
2	Duct H Type
3	Remote Probe
4	Wall Mount

Option 5: Cable Length

CODE	Cable Length
5	5M
10	10M
15	15M

Remote Probe type must be assign cable length

This code only for measure item code A, there are with analog output.

※Option To be purchased separately

Example 1:
Temperature, Humidity, RS-485, LCD and Wall mount.
HTO-1-N-R-L-N-D24-4

Example 2:
Temperature, Humidity, CO(300ppm), RS-485, 4~20mA output(CO+Temp.+Humi), LCD and Duct Vertical type.
HTO-7-3-M-L-N-D24-1

Example 3:
Temperature, Humidity, CO₂(2000ppm), RS-485, 0~10V output(CO₂+Temp.+Humi.), LCD, Remote probe and 10M length.
HTO-4-2-S-L-N-D24-3-10

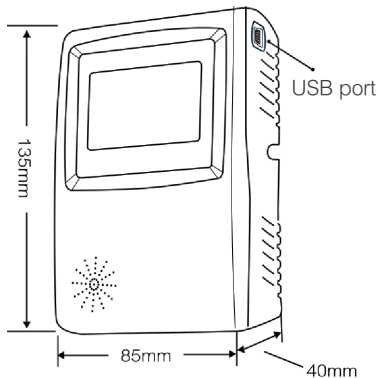


技術規格

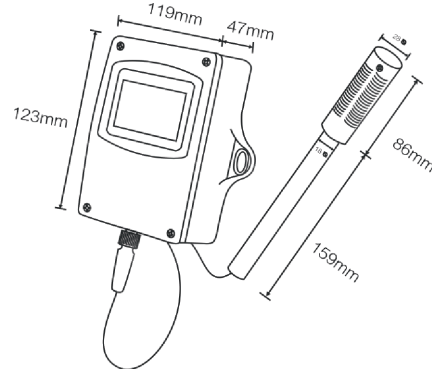
RS-485 signal output	RS-485 Modbus RTU (Remote real-time monitoring by PLC, DDC, PC)
Supported system transmission formats	N81 N82 O81 E81
Baud rate	2400 or 4800 or 9600 or 19200 or 38400 or 57600 or 115.2K
RS-485 address	1~255
RS-485 response time	<200mS
Temp. & Humi. sensing element	CMOS sensor
Temp. & Humi. sampling time	1~10 second programmable
Temp. & Humi. measuring accuracy	±3%RH(10~90%RH)(at 25°C) , ±0.4°C (at 25°C) (Power supply 24Vdc, operating temperature at 25°C)
Temperature measuring range	-50°C ~100°C , Can be via USB console port to setting. Initial value is 0°C ~50°C
Humidity measuring range	0%RH~100%RH
Gas sensing element	CO: Electrochemical sensor / CO ₂ : NDIR sensor
CO measuring range	0~100ppm or 0~300ppm or 0~500ppm
CO ₂ measuring range	0~2000ppm or 0~5000ppm or 0~10000ppm
CO backlight LCD indication	Green:0~9ppm / Blue:10~30ppm / Orange:31ppm 以上
CO ₂ backlight LCD indication	Green:0~600ppm / Blue:600~1000ppm / Orange:1001ppm 以上
Gas measuring accuracy	CO:±10ppm / CO ₂ :±70ppm
Gas response time	CO:60 second / CO ₂ :1 second
Analog Output driver ability	4~20mA ≤ 500Ω / 0~10V ≥ 600Ω
Analog Output resolution	15 bits
USB port	Can via this port to supply power by PC or charger. Option function.
Operating temperature and condition	Temperature: -10°C ~50°C / Humidity: 0~100%RH(Non-condensing)
Current consumption	≤DC:50mA
Wall Mount type dimensions and housing	Length135mm X Width85mm X Height40mm, Housing:ABS / PC
Duct and Remote Probe type dimensions and housing	Length123mm X Width119mm X Height47mm, Tube 168mm / Housing:ABS / PC
IP degree of protection(IEC60529)	Wall Mount type:IP20 Duct V Type / Duct H Type / Remote Probe type:IP65 Body, IP54 Sensor
Power Supply	DC24V ±20%

Dimensions

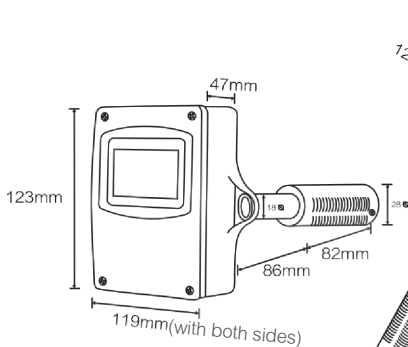
Wall Mount type



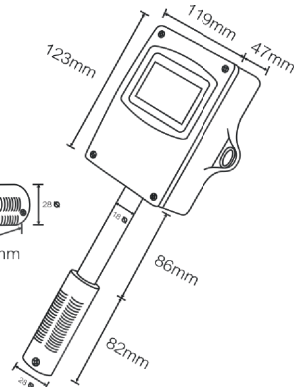
Remote Probe



Duct V type



Duct H type



LCD Backlight Indication



HTO

Connection Diagram

