

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: RS485 Modbus RTU
- Configured by PC with free software via USB cable (option)
- Present value offset adjustable
- Inside buttons for adjust output parameters
- LCD backlight color to Indicated CO/CO₂ concentration
- Temperature measuring range can be -50~100°C via USB console port to setting



Ordering Information

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

CODE	Measure Item	CODE	Range of CO	CODE	Range of CO ₂	CODE	Range of CO+CO ₂	CODE	Output	CODE	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.
3	CO ₂	3	300ppm	5	0~5000ppm	2	100+5000ppm	V	0~10Vdc	2	4~20mA CO+CO ₂ +Humi.
4	CO ₂ +Temp. & Humi.	5	500ppm	A	0~10000ppm	3	100+10000ppm	R	RS485	3	0~10Vdc CO+CO ₂ +Temp.
5	CO ₂ +Temperature					4	300+2000ppm	M	RS485+4~20mA	4	0~10Vdc CO+CO ₂ +Humi.
6	CO					5	300+5000ppm	S	RS485+0~10Vdc	5	RS485+4~20mA CO+CO ₂ +Temp.
7	CO+Temp. & Humi.					6	300+10000ppm	If measure item is Temperature only, the output option code is "A" only		6	RS485+4~20mA CO+CO ₂ +Humi.
8	CO+Temperature					7	500+2000ppm			7	RS485+0~10Vdc CO+CO ₂ +Temp.
9	CO+CO ₂					8	500+5000ppm			8	RS485+0~10Vdc CO+CO ₂ +Temp.
A	CO+CO ₂ +Temp. & Humi.					9	500+10000ppm			8	RS485+0~10Vdc CO+CO ₂ +Humi.

Note: Code 9 and A not available in Duct type

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

LCD Display — USB Cable — Power Supply — Duct Type — Cable Length

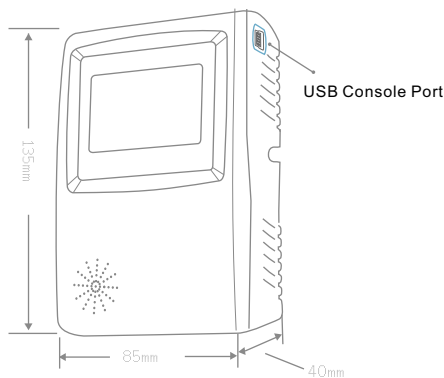
CODE	LCD Display	CODE	USB Cable	CODE	Power	CODE	Duct Type	CODE	Cable Length
N	None	N	None	D24	DC 24V	1	Duct	5	5M
L	LCD	U	USB Cable			2	Duct & Wall Mount	10	10M
If output option with RS485, display must be with LCD. If measure item is Temperature only, display will be none.						3	Remote Probe	15	15M
						This code not available in Wall Mount type		Remote Probe type must be assign cable length	

Technical Specification

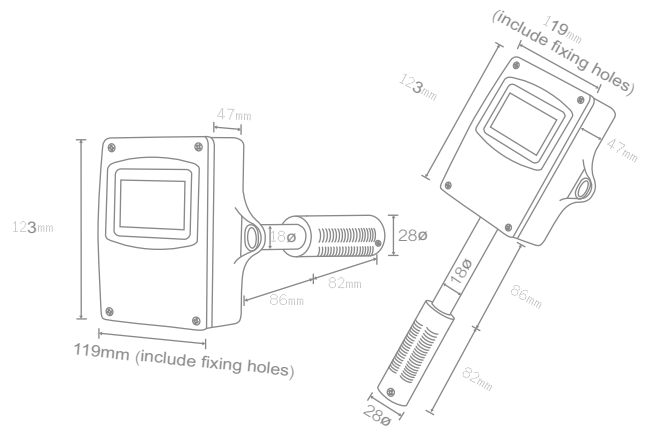
RS485	RS485 MODBUS RTU (Remote real-time monitoring by PLC, DDC, PC)
RS485 Modbus RTU	N81, N82, O81, E81
Baud rate	2400 or 4800 or 9600 or 19200 or 38400 or 57600 or 115.2K
RS485 address	1~255
Output response time	<200mS
Temp.&Humi sensing element	CMOS sensor
Temp.&Humi sampling time	1~10 second programmable
Temp.&Humi measuring accuracy	$\pm 3\%RH(10\sim 90\%RH)(at\ 25^{\circ}C)$, $\pm 0.4^{\circ}C(at\ 25^{\circ}C)$ (Power supply 24Vdc, operating temperature at 25°C)
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	0~2000pp or 0~5000ppm or 0~10000ppm
CO backlight LCD indication	Green:0~9ppm / Blue:10~30ppm / Orange: >31ppm
CO ₂ backlight LCD indication	Green:0~600ppm / Blue: 600~1000ppm / Orange:>1001ppm
Gas measuring accuracy	CO: $\pm 10ppm$ / CO ₂ : $\pm 70ppm$
Gas response time	CO:60 second / CO ₂ :1 second
Analog Output driver ability	4~20mA $\leq 500\Omega$ / 0~10V $\geq 600\Omega$
Analog Output resolution	15 bits
USB console port	Can via this port to supply power by PC or charger and setting parameter. Option function.
Operating temperature and condition	Temperature: -10~50°C / Humidity: 0~100%RH(Non-condensing)
Current consumption	$\leq DC\ 50mA$
Wall Mount type dimensions and housing	Length:135mm X width 85mm X Height 40mm / Housing: ABS / PC
Duct and Remote Probe type dimensions and housing	Length:123mm X width119mm X Height 47mm Tube168mm / Housing: ABS / PC
Power Supply	DC24V $\pm 20\%$

Dimensions

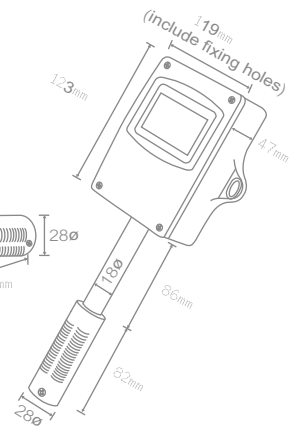
Wall Mount type



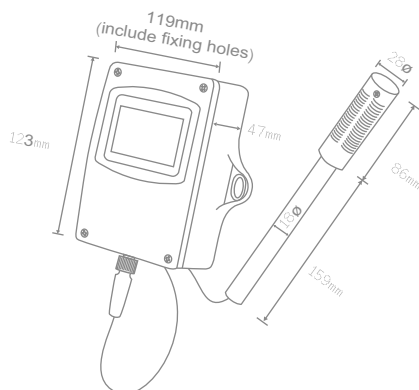
Duct type



Duct & Wall Mount type

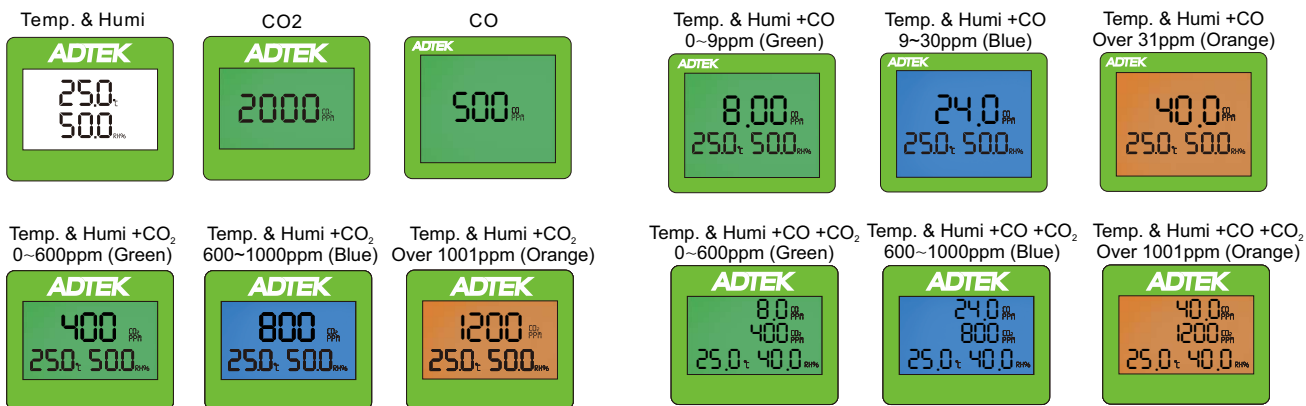


Remote Probe type



HTO

LCD Backlight Indication



Connection Diagram

