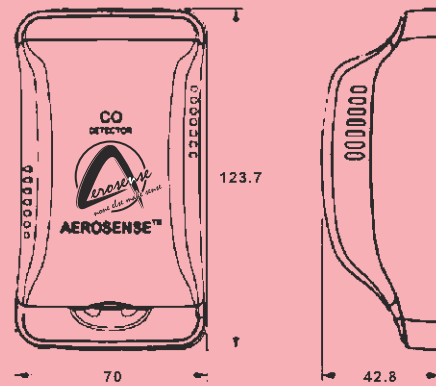




CARBON MONOXIDE TRANSMITTER



Dimensions (unit : mm)



Series CMT-100, Carbon Monoxide Transmitter which is designed to detect Carbon Monoxide gas in air with analog output and RS-485 MODBUS output.

It is 3-wired supporting and gives current, voltage and RS485 MODBUS output.

FEATURES:

- Pre-calibrated
- Convenient use with varying voltage applications
- Easily installed at a low cost when used with exclusive case
- Provides output signal proportional to CO level
- Optimum for parking lot, tunnel & underground places.

SPECIFICATIONS:

- Sensing method:** Semiconductor type
- Operating Temperature range:** -10 to 50°C
- Operating Humidity range:** 10-90% RH
- Storage temperature:** -30 to 60°C
- Storage Humidity:** 10-95% RH
- Measurement range:** 0 to 250 ppm (0-100, 300 ppm is optional)
- Accuracy:** ±3% FS
- Coverage area:** 400 sq. m
- IP Rating:** IP54
- Response time:** < 1 minute
- Sampling interval:** every 30 seconds
- Input power:** 24VDC (3-wired)
- Size:** 123mmX70mmX43mm

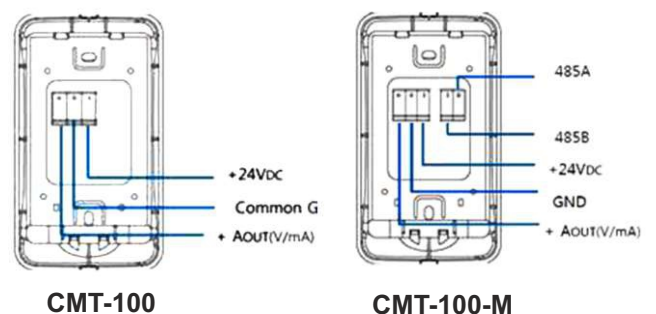
Ordering Table:

Model NO	Specifications
CMT-100	Carbon Monoxide Transmitter
CMT-100-LCD	Carbon Monoxide Transmitter with display
CMT-100-M	Carbon Monoxide Transmitter with MODBUS Communication
CMT-100-M-LCD	Carbon Monoxide Transmitter with MODBUS Communication & display

Output:

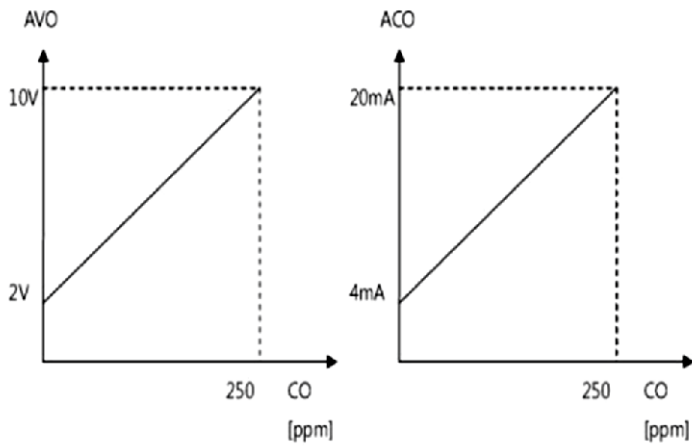
- Voltage:** 2-10 VDC (0-10 VDC)
- Current:** 4-20mA (0-20mA)
- RS485 MODBUS Output**

Wiring method

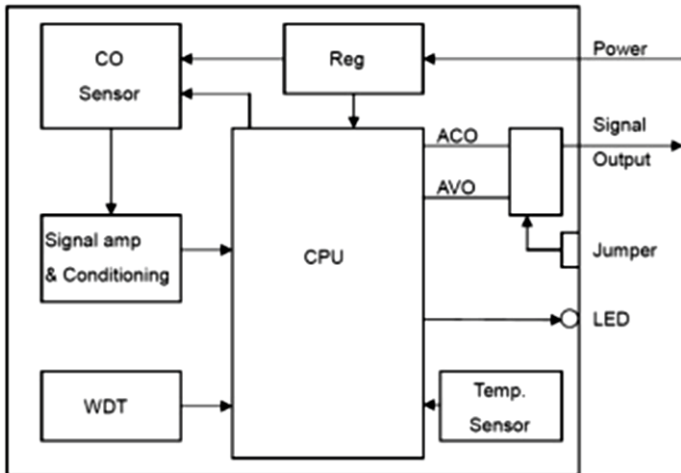
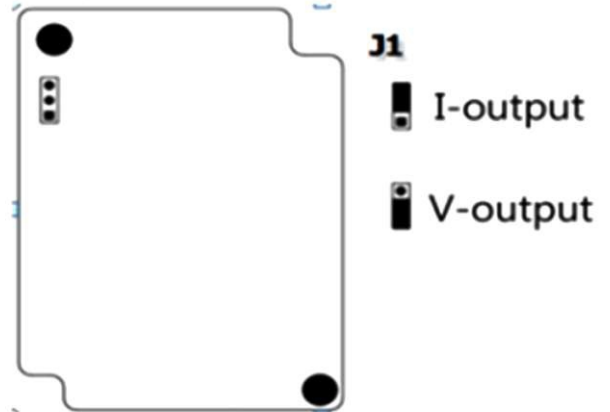


CARBON DIOXIDE TRANSMITTER

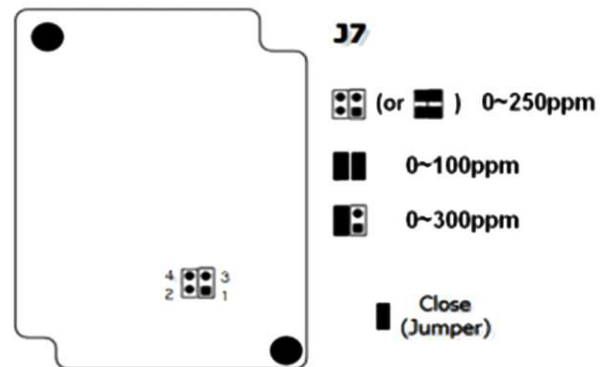
Analog Voltage & Current Output and Block diagram



Jumper Selection: J1



Jumper Selection: J7



V/mA output Selection Method CO Range Selection

Current output is default setting on scale.

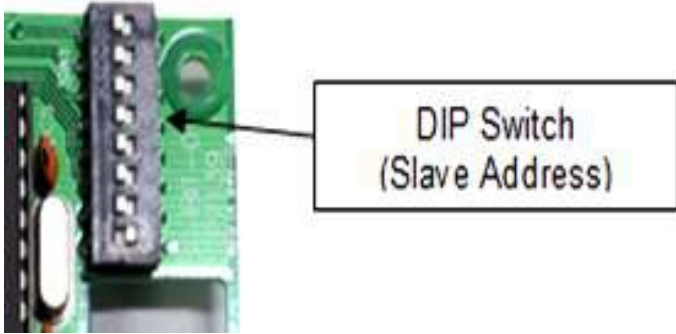
Jumper location on PCB and Setting & Function

Jumper	Location	Setting
SW1	Right Up Side	24V / 12V
J1	Left Up	Current/Voltage
J7	Center Down	Reading Range

CARBON DIOXIDE TRANSMITTER

RS485 Mod-Bus Slave Address setting

Mod-Bus slave address can be set by DIP Switch



• DIP Switch

ON	<input type="checkbox"/>							
OFF		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7	8

Example) setting Slave Address 1

RS-485 MODBUS Protocol

1. Modicon Mod-Bus RTU Mode: Follow Modicon Modbus protocol
2. Communication specifications

Parameter	Description
Baud Rate	9600 BPS
Data Bit	8 Bits
Parity Bit	None
Stop Bit	1
Flow Control	None

3. Hold Register specifications
Mapping Base Address: 0x0050
Hold Register: Max. Read size: 4

Register Address	Value	Data type	Unit	Description
0 x 0050	CO	2 Byte WORD	PPM	Co Ex) 80 ->80 PPM
0 x 0051	Reserved			
0 x 0052	Reserved			
0 x 0053	Reserved			

4. Supported Function Code
 - Currently supported only code 03 and exception responses.
 - Error Code 0x83 or other

Exception code	Description
01	Exception of Function code
02	Exception of starting address
03	Exception of Quantity of Registers