



# GS33/34 CO2 Transmitter Wall / Duct Type



## 產品應用

### 〈 Feature 〉

- With the high CO<sub>2</sub> concentration indoors, people will feel tired easily. So by controlling the CO<sub>2</sub> value relevantly, people will feel more energetic. CO<sub>2</sub> transmitter now is substantially used inside the buildings and some even being applied in agriculture to help foster the growth the plants in a more healthier and quicker way.

### 〈 Application 〉

- HVAC control
- Instrument testing equipment
- Environmental control and monitoring system
- Ventilation system control for parking lot and building
- Green houses, fruit and vegetable storage

## Specification

### Input

sensor type	NDIR sensor
measuring range & working range	2000 / 5000 / 10000 PPM

### Output

output	0~1V / 0~5V / 0~10V / 1~5V / 0~20mA / 4~20mA ; RS-485 ; RS-485 & analogue
signal connection	3-wire
linear accuracy	0~50°C ±50ppm ±3% of measured value
sensitivity	±1ppm ±1% of measured value
load resistance	≤ 500Ω for 4~20mA ; ≥ 10 KΩ for 0~10V
output calibration ( ZERO & SPAN )	factory software calibration
response time ( t63 )	GS33:30 sec. ; GS34 :<15min. diffusion time

### Environment

media measured	non-aggressive gas ( HVAC system )
working temperature	0 ... 50 °C
working humidity	0~95 RH % ( non-cond. )
storage temperature	-20 ... +70 °C

### Electrical

power supply	12 ... 30 VAC / 8 ... 35 VDC
current consumption	DC24V:60mA;DC12V:180mA AC24V:140mA;AC12V:230mA
starting current	> 0.5A
electrical connection	M12 ( 4P or 5P ) metal connector with 2 m cable or terminal ( cable gland )

### Installation

installation	wall-mounting / duct-mounting flange
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### Protection

protect degree	GS33 : IP54 ; GS34 : IP64
electric protection	◎Polarity protection ◎over-voltage ◎short-circuit

### Certification

certification	CE
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### Material

case	PC fire-proof ( PC-110 ) ( UL94V-2 )
filter	2000 PPM : Non-woven
weight	5000 / 10000 PPM : Tarps 140g

## Ordering Guide

ordering code	----->	GS	33	-	1	1	1	2	-	0	M
Installation											
Input											
Output											
Power supply											
CO2 range											
Modbus											
Option											

### 【Ordering item】

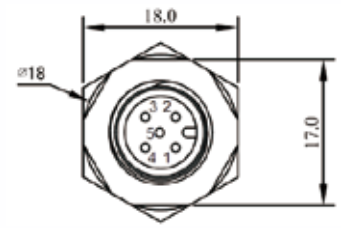
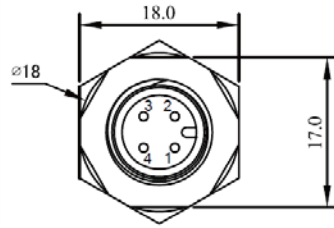
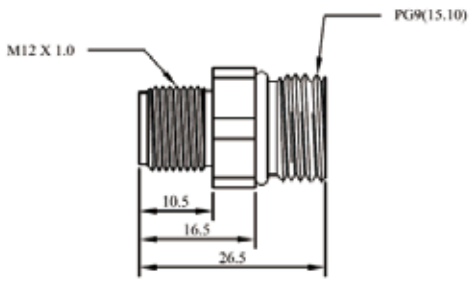
Installation	code	Input	code	Output	code	Power supply	code	CO2 range	code
wall	33	CO2	1	4~20 mA	1	12~30 VAC or 8~35 VDC	1	2000 PPM	2
duct	34			0~20 mA	2			5000 PPM	5
				1~5 V	5			10000 PPM	8
				0~10 V	6			RS-485	N
				0~5 V	7				
				0~1 V	8				
				RS-485	N				

Modbus	code	Option	code
analogue	0	M12 ( 4P or 5P )	M
RS-485	1	metal connector	
RS-485 & analogue	2	( with 2 m cable )	
※ M type - M12 ( 5P ) metal connector			

Electric Connector

【 M type (M12-4PIN metal connector) RS-485 or analogue】

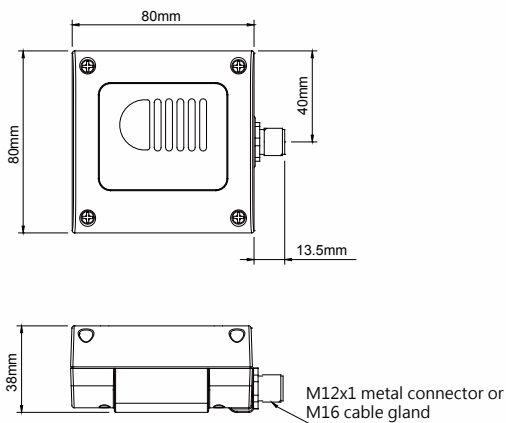
【 M type (M12-5PIN metal connector) RS-485+analogue】



單位 : mm

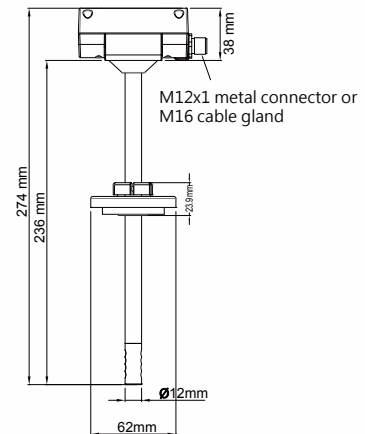
Dimension

【GS33(indoor)】



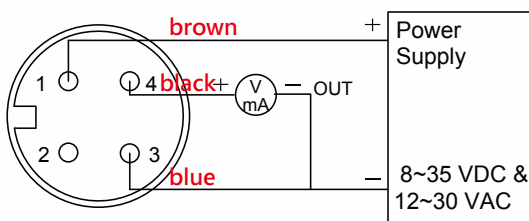
M type (4P) : RS-485 or analogue  
M type (5P) or N type : RS-485 + analogue

【GS34(duct)】



M type (4P) : RS-485 or analogue  
M type (5P) or N type : RS-485+analogue

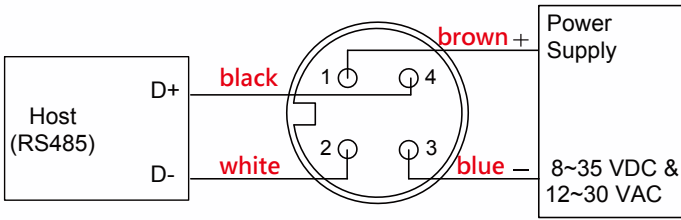
Analogue Diagram



M12 connector

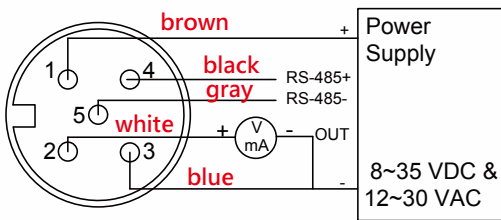
M type ( 4P )

## RS-485 Diagram



M type ( 4P )

## Analogue + RS-485 Diagram



M type (M12, 5P) connector