

SD-043/044

CO₂ Transmitter Indoor / Duct Type



SENSOR DATA

SD-043/044

CO₂ transmitter Indoor/ Duct Type

FEATURES

- Accurate and excellent long-term life cycle
- Measuring up to 10000 PPM
- Voltage or current output and optional RS-485, and display
- Free software configuration

Technical specifications

Display	
display readout	5 digits (upon request)
display	LCM with backlight
digit height	5.56mm
Input	
sensor type	NDIR sensor
measuring range	0 ... 2000 / 5000 / 10000 PPM
Output	
output	4 ... 20mA / 0 ... 20mA 0 ... 10V / 0 ... 5V / 0 ... 1V
modbus	RS-485
signal connection	3-wire
load resistance	voltage output $\geq 10K\Omega$ current output $< 250 \Omega$
linear accuracy (at +25 °C)	400 ... 2000 PPM $\pm 40 \text{ ppm} \pm 3 \%$ of reading. other : $\pm 50 \text{ PPM} \pm 3 \%$ of reading
output calibration (ZERO & SPAN)	factory software calibration
warm up time	< 2 min.
response time (t90)	GS43: < 2 min.; GS44 : < 6 min.
sampling time	about 6 secs.
ADC default	2000 PPM : on ; 5000 PPM / 10000 PPM : off
Environment	
media measured	non-aggressive gas HVAC system)
working temperature	0 ... 50°C

APPLICATIONS

- Monitoring air quality and saving energy
- Environmental control and monitoring system
- Ventilation system control for building, library, train station, supermarket, office
- Agriculture, green houses, fruit and vegetable storage, mushroom farming, hatcheries and incubators

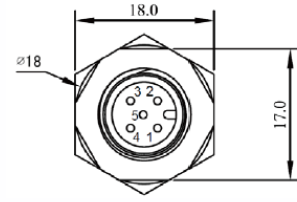
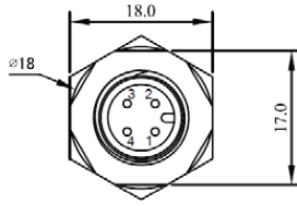
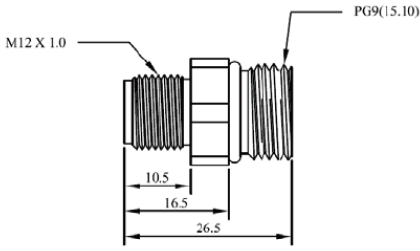
working humidity	tarps: 0 ... 95 %RH (on-cond) non-woven: 0 ... 85 %RH (non-cond.)
storage temperature	-20 ... + 60°C
Electrical	
power supply	DC 12 ... 36V & AC 24V $\pm 10 \%$
current consumption	DC : 37 mA / AC : 70 mA
starting current	DC : > 200 mA / AC : > 210 mA
electrical connection	M12(4P or 5P) metal connector with 2m cable or terminal (cable gland)
Installation	
installation	indoor type: wall-mounting duct type: flange
Protection	
protect degree	GS43 : IP54 ; GS44 : IP64
electric protection	polarity protection over-voltage short-circuit
Certification	
certification	CE
Material	
housing	PC fire-proof (PC-110) (UL94V-2)
filter for duct type	POM
ventilation-cloth	2000 PPM: non-woven 5000 / 10000 PPM: tarps
weight	GS43: 126 g GS44: 155 g

Order guide

type	GS	43	-	1	1	1	2	-	0	M
installation	wall	43	-							
	duct	44	-							
input	CO2			1						
	output	4 ... 20 mA			1					
		0 ... 20 mA				2				
		0 ... 10 V					6			
		0 ... 5 V						7		
		0 ... 1 V							8	
power supply	RS-485									N
	12 ... 36 VDC 24 $\pm 10\%$ VAC & 12 ... 36 VDC					1 3				
CO2 range	2000 PPM						2			
	5000 PPM						5			
	10000 PPM						8			
	RS-485							N		
modbus	analogue								0	
	RS-485								1	
	RS-485 & analogue								2	
	M type - M12 (5P) metal connector									
option	M12 (4P or 5P) metal connector (with 2 m cable)									M
	display									D

Electrical connector

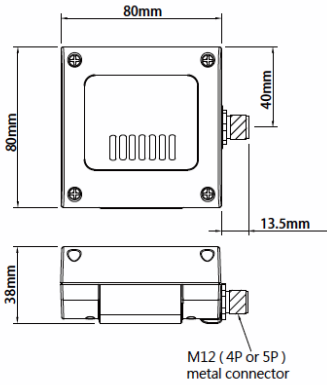
【 M type (M12-4PIN metal connector) RS-485 or analogue 】 【 M type (M12-5PIN metal connector) RS-485+analogue 】



unit : mm

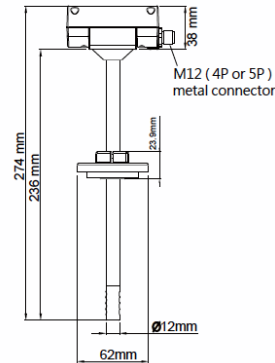
Dimensions

【 GS43 (indoor) 】



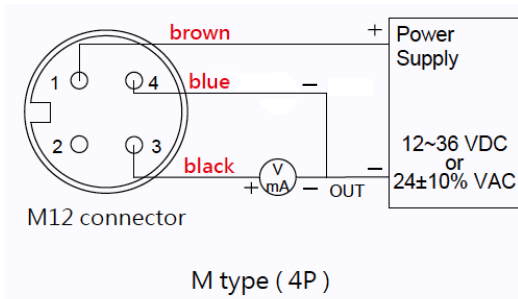
M type (4P) : RS-485 or analogue
M type (5P) : RS-485 + analogue

【 GS44 (duct) 】

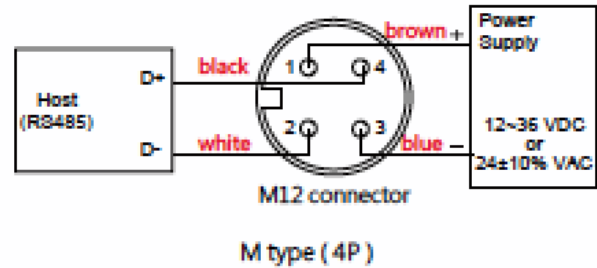


M type (4P) : RS-485 or analogue
M type (5P) : RS-485 + analogue

Analogue Diagram



RS-485 Diagram



Analogue + RS-485 Diagram

