

# Indoor Sensors

# DSW

CO<sub>2</sub> Density

CO Density



## ■ Sensor Type

Measurement Target	Measurement Range	Output	Model
CO	0 to 250ppm	4 to 20 mA DC	DSW-100-CO-A
		1 to 5 V DC	DSW-100-CO-V
CO2	0 to 2000ppm	4 to 20 mA DC	DSW-100-CO2-1A
		1 to 5 V DC	DSW-100-CO2-1V
	0 to 5000ppm	4 to 20 mA DC	DSW-100-CO2-2A
		1 to 5 V DC	DSW-100-CO2-2V
	0 to 10000ppm	4 to 20 mA DC	DSW-100-CO2-3A
		1 to 5 V DC	DSW-100-CO2-3V

## ■ Specifications

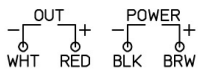
Output	4 to 20 mA DC, 1 to 5 V DC (must be specified.)										
Supply Voltage	24 V DC ± 10%										
Power Consumption	CO: 6 W CO2: 17 W										
Measurement Method	CO: Semiconductor CO2: Non dispersive infrared (NDIR)										
Performance	<table border="1"> <thead> <tr> <th></th> <th>Accuracy</th> <th>Response Characteristics</th> </tr> </thead> <tbody> <tr> <td>CO</td> <td>0 to 100ppm: ±5%FS at 23°C 50%RH 100 to 250ppm: ±10%FS at 23°C 50%RH</td> <td>Within 120 seconds (Varies depending on the air flow of measurement environment.)</td> </tr> <tr> <td>CO2</td> <td>0 to 2000ppm: ±30ppm (±5% of indicated value) 0 to 5000ppm: ±30ppm (±5% of indicated value) 0 to 10000ppm: ±30ppm (±5% of indicated value)</td> <td>Within 30 seconds (Varies depending on the air flow of measurement environment.)</td> </tr> </tbody> </table>			Accuracy	Response Characteristics	CO	0 to 100ppm: ±5%FS at 23°C 50%RH 100 to 250ppm: ±10%FS at 23°C 50%RH	Within 120 seconds (Varies depending on the air flow of measurement environment.)	CO2	0 to 2000ppm: ±30ppm (±5% of indicated value) 0 to 5000ppm: ±30ppm (±5% of indicated value) 0 to 10000ppm: ±30ppm (±5% of indicated value)	Within 30 seconds (Varies depending on the air flow of measurement environment.)
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Dimensions, Weight	Dimensions: W90 x H90 x D32 mm (excluding lead wire) Weight: Approx. 100g										
Mounting	To the outlet box (inside wall), via outlet box cover: mounting dimension: 66.7 mm (JIS-C8340: 1999). (JIS: Japan Industrial Standards.)										
Operating Environment	CO: Temperature: -10 to 50°C Humidity: 10 to 95%RH (non-condensing) CO2: Temperature: 0 to 50°C Humidity: 0 to 95%RH (non-condensing) <b>[Caution]</b> Do not use this sensor in an environment where dew condensation occurs. Do not use this sensor in an environment where chlorinated and sulfidizing gases are being generated.										
Storage Environment	CO	Temperature: -30 to 60°C Humidity: 10 to 95%RH (non-condensing) <b>[Caution]</b> If the sensor is exposed to a temperature lower than 0°C or higher than (and including) 40°C for several hours, sensor measurement value will be affected. If the sensor is stored at high humidity (90% or more) over a long period without power supplied, the sensor will deteriorate. If the sensor is left in an environment where there is no oxygen (only nitrogen), errors will occur in sensor measurement values.									
	CO2	Temperature: -30 to 60°C Humidity: 0 to 95%RH (non-condensing) <b>[Caution]</b> Do not apply sustained pressure or shock to the cavity (golden section) when handling (installing or storing) the sensor. If the sensor is exposed to a temperature lower than 0°C or higher than (and including) 40°C for several hours, sensor measurement value will be affected. If the sensor is stored at high humidity (90% or more) over a long period without power supplied, the initial measurement value may become slightly high until the humidity inside the cavity disappears.									
Accessories	Sensor main unit mounting screw: M3 x 4 (3 pieces), Mounting Plate, Mounting Plate screw: M4 x 8 (2 pieces), Spring washer (2 pieces)										

## ■ Wiring

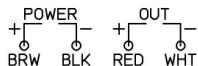
Lead wire: 300 mm Cross-section: 0.5 mm<sup>2</sup>

Lead wire color: White (WHT), Red (RED),  
Black (BLK), Brown (BRW)

### DSW-100-CO



### DSW-100-CO2



## ■ External Dimensions (Scale: mm)

