

SEN-0076 Duct IAQ Sensor

READ THESE INSTRUCTIONS BEFORE YOU BEGIN INSTALLATION

INSTALLATION



Drill a 1-3/8" [35mm] hole in the air duct.

Slide the air duct sealing ring onto the pilot tube and insert into the hole in the air duct. Orientate the windward side of the pitot tube (see dimension drawing) towards the source of the airflow. Use a Phillips screwdriver to secure the pitot tube to the air duct with screws.

Align the fixing mark of the main unit back face wit the pitot tube connection mark. Slide main unit in horizontally (top of main unit is downstream) and then rotate it on the pitot tube interface 90 degrees clockwise. This will fix the main unit in place.

Open the casing for the electrical wiring by removing the (2) bottom screws.

The left terminal is for power supply wiring. The right terminal is for RS485 wiring.

Remove the left terminal block. Thread the power cables through the waterproof connector on the bottom of the main unit. Land the power cables to the appropriate connections on the terminal block and push back into place.

Lock the inlet of the waterproof connection by tightening it securely. Replace the electrical casing and secure with the (2) screws.

DIMENSIONS



General Data

Power Supply	12~28VDC/18~27VAC
Communication Interface:	BACNet MS/TP
Data upload interval cycle	Average / 60 seconds
Applicable air speed of duct	2.0~15m/s
Operating Condition	(-4 °F~140 °F) -20 °C~60 °C/ 0~99%RH, (No condensation)
Storage Condition	(32 °F~122 °F) 0 °C~50 °C/ 10~60%RH
Overall Dimension	180X125X65.5mm (7.09X4.92X20.58in)
Pitot tube size	240mm (9.45in)
Net weight	850g (1.87lb)
Shell material	PC material

Temp & Humidity Data

Sensor	Band gap material temperature sensor、Capacitive humidity sensor
Temperature range	-20℃~60℃
Relative humidity range	0~99%RH
Output Resolution	Temperature: 0.01°C humidity:0.01%RH
Accuracy	±0.5℃, 3.5%RH (25℃, 10%~60%RH)

TVOC Data

Sensor	Metal oxide sensor
Measuring Range	0~3.5mg/m3
Output Resolution	0.001mg/m3
Accuracy	<±0.05mg/m3+ 15% of reading (25 ^o C/77 ^o F, 10%~60%RH)

CO₂ Data

Sensor	Non-Dispersive Infrared Detector (NDIR)
Measuring Range	0~2,000ppm
Output Resolution	1ppm
Accuracy	±50ppm + 3% of reading or ±75ppm (whichever is bigger) (25 °C/77 °F, 10%~80%RH)

Particle Data

Sensor	Laser particle sensor
Measuring Range	PM2.5: 0~500 µ g/m3 ;
	PM10: 0~500 µ g/m3;
Output values	moving average/60 seconds, moving average/1 hour, moving average/24 hours
Output Resolution	0.1 µ g/m²
Zero Point Stability	<2.5 µ g/m³
PM2.5 Accuracy (mean per hour)	<±5 µ g/m [*] +10% reading (0~300 µ g/m [*] @10~30OC/50~86OF, 10~60%RH)