



# SEN-0072 Install

SEN-0072 Duct VOC Sensor

## READ THESE INSTRUCTIONS BEFORE YOU BEGIN INSTALLATION

### INSTALLATION

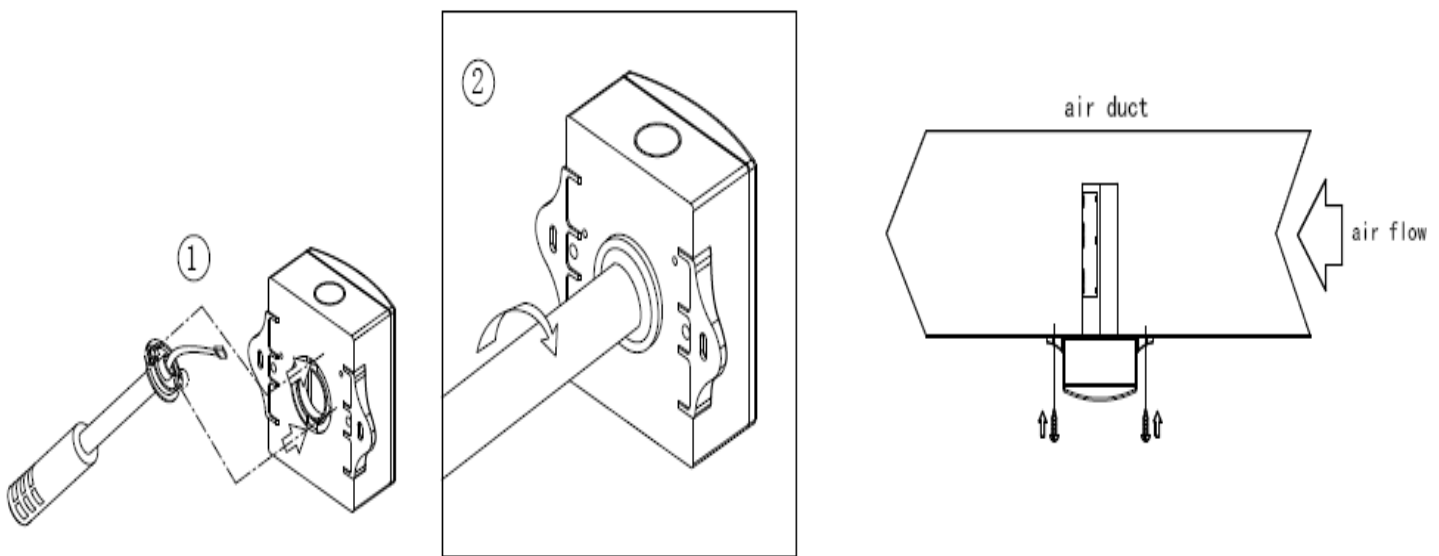
The **iAIRE** VOC sensor is a versatile product and can be mounted to any standard duct. It is designed for real-time VOC detection in basic HVAC and Ventilation systems.

### MOUNTING

Drill a 1-1/8" [28mm] hole in the air duct.

Slide a sealing ring onto the pitot tube and insert into the hole in the air duct. Orientate the pitot tube (see dimension drawing) based upon the direction of the airflow. Use a Phillips screwdriver to secure the pitot tube to the air duct with screws.

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.



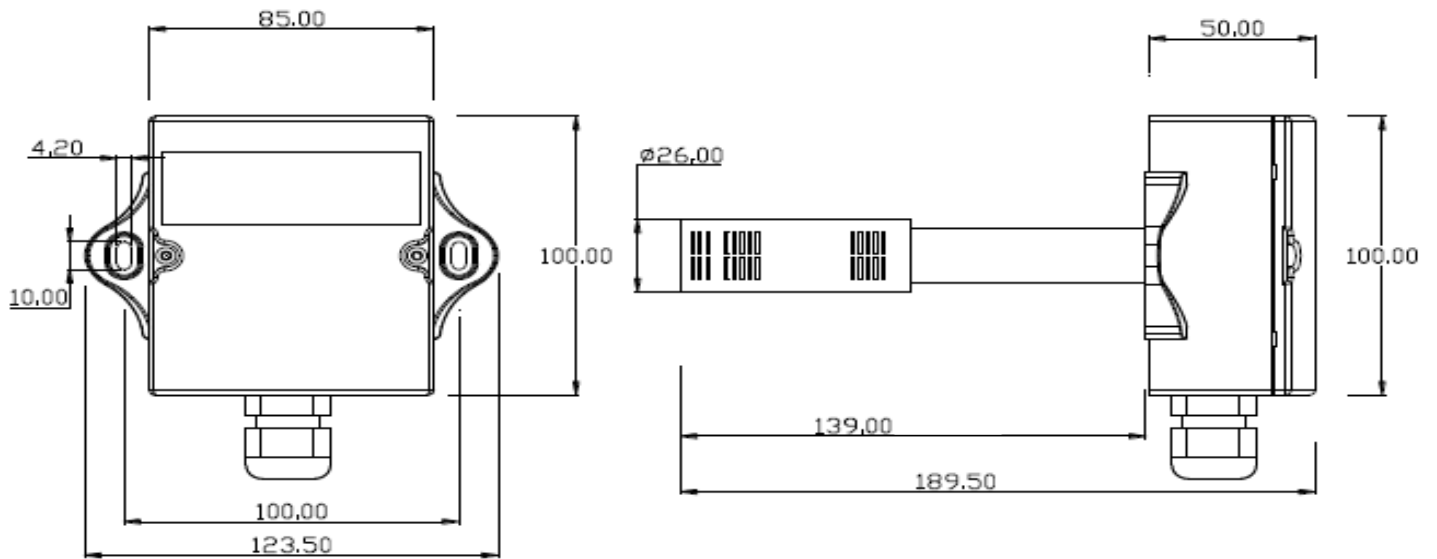
Install or move the probe

The air flow direction


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

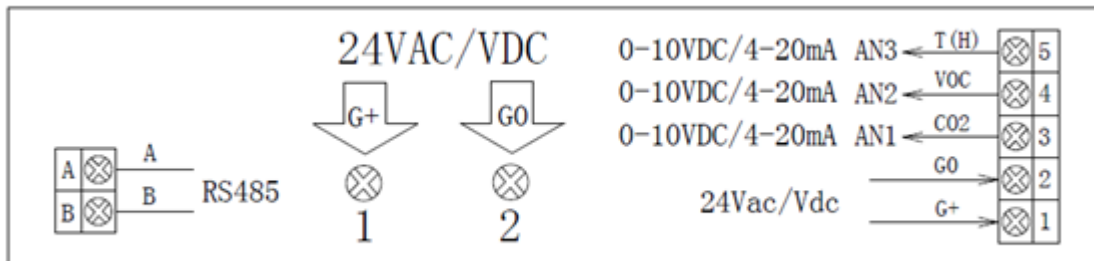
After wiring the connections (see wiring diagram below), lock the inlet of the waterproof connection by tightening it securely. Replace the electrical casing and secure with the (2) screws.

## DIMENSIONS



## WIRING

 (Be sure to follow all local and electrical codes. Turn off power to the unit before mounting or making any connections.)



## SPECIFICATIONS

Monitoring parameters	CO <sub>2</sub>	Air Quality (VOC)
<b>Sensing element</b>	Non-Dispersive Infrared Detector (NDIR)	Semiconductor mix gases sensor
<b>Measuring range</b>	0~2000ppm(default) 0~5000ppm (selectable in the order)	0~30ppm
<b>Display Resolution</b>	1ppm	5ppm
<b>Accuracy@25°C(77°F)</b>	±50ppm + 3% of reading	-----
<b>Life time</b>	15 years (normal)	5~7 years
<b>Calibration cycle</b>	ABC Logic Self Calibration	-----
<b>Response Time</b>	<2 minutes for 90% change	<1 minute (for 10ppm hydrogen, 30ppm ethanol) <5 minute (for a cigarette) in 20m <sup>2</sup> room
<b>Warm up time</b>	2 hours (first time) 2 minutes (operation)	
Electrical Characteristics		
<b>Power supply</b>	24VAC/VDC	
<b>Consumption</b>	3.5 W max. ; 2.5 W avg.	
<b>Analog Outputs</b>	Two analog outputs 0~10VDC (default) or 4~20mA (selectable by jumpers) 0~5VDC (selected at place the order)	
<b>Modbus RS485 interface</b>	RS-485 with Modbus protocol, 19200bps rate, 15KV antistatic protection, independent base address	
Conditions of Using and Installation		
<b>Operating conditions</b>	0~50°C(32~122°F); 0~95%RH, non condensing	
<b>Storage conditions</b>	0~50°C(32~122°F)/ 5~95%RH	
<b>Weight</b>	320g	
<b>Installation</b>	Fixed on the air duct with 100mm installation hole size	
<b>IP class of the housing</b>	PC/ABS IP50 for models without LCD; IP40 for models with LCD	
<b>Standard</b>	CE-Approval	