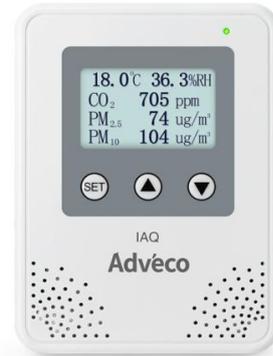


## BCS-3Q Series Integrated Air Quality Sensor

### Overview

The BCS-3Q Series Integrated Air Quality Sensor can be used to measure temperature, relative humidity, PM2.5& PM10, carbon dioxide, and formaldehyde (HCHO) concentration in indoor environments, as well as Volatile Organic Compound (VOC) concentration.



### Features

- Built-in high-precision sensors for stable air quality measurement
- LCD display + three-color LED indicator can intuitively indicate air quality status, which can be turned off optionally
- Complete overvoltage and reverse connection protection, with high long-term reliability
- Built-in Modbus protocol, RS485 wiring
- Lightweight and beautiful shell design, standard 86 junction box installation hole spacing

### Specifications

#### Temperature

Sensor:	Digital temperature sensor
Range:	0°C~50°C
Accuracy:	±0.5°C@20°C, ≤±1°C@0~50°C
Responding Time:	10~30s (20°C, slow-flow air)

#### Relative Humidity

Sensor:	Digital temperature sensor
Range:	0%~100%RH
Accuracy:	±3% (20°C and 20~80%RH)
Responding Time:	≤10s (20°C, in slow-flow air)

#### PM2.5/PM10

Sensor:	Laser dust sensor
Range:	PM2.5: 0~500ug/m <sup>3</sup> , Particle size: 0.3~2.5μm PM10: 0~600ug/m <sup>3</sup> , Particle size: 0.3~10μm
Accuracy:	PM2.5: ±10μg/m <sup>3</sup> @0~100μg/m <sup>3</sup> , ±10%FS@100~500μg/m <sup>3</sup> @25°C
Resolution:	1μg/m <sup>3</sup>
Responding Time:	<1s (single time in continuous measuring), <10s (comprehensive)

#### Carbon Dioxide

Sensor:	NDIR sensor
Range:	0~5000ppm
Accuracy:	± (40ppm + 3%MV) ppm
Responding Time:	2min

### HCHO

Sensor: Electrochemical gas sensor  
 Range: 0~1 ppm  
 Accuracy:  $\pm 10\%FS@25^{\circ}C$   
 Responding Time: <2 min

### VOC

Sensor: Metal oxide semiconductor gas sensor  
 Range: 0~2 ppm  
 Resolution: 1 ppb  
 Warm-up Time: 1 hour for initial power-on, 3 minutes for power-on preheating

### Output Signal

Modbus RTU (RS485)

### Power Supply

12~36VDC/24VAC  $\pm 20\%$

### Operating Environment

0°C~50°C, 0%~95%RH (non-condensing)

### Storage Environment

-20°C~60°C, 0%~95%RH (non-condensing)

### Display

LCD

### LED Indicators

Green, yellow, red (three colors)

### Protection Class

IP30

### Weight

NW: 142.3g, GW: 194.4g

### Certifications

CE, RoHS

### Wiring

Terminal applicable wire gauge 14-22AWG

### Material

PC housing

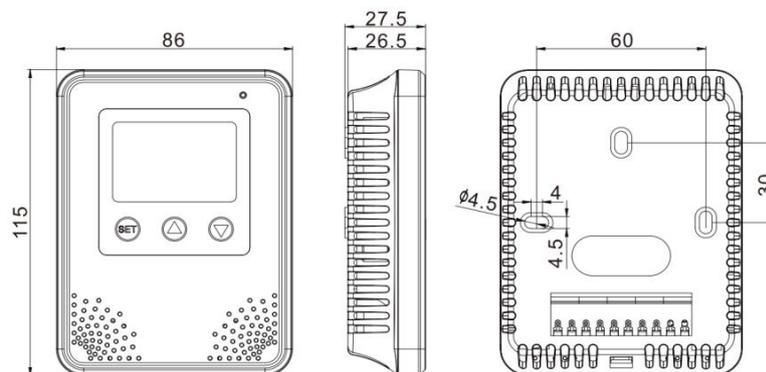
### Installation Type

Wall mount

### Ordering Information

Model No.	Output Signal/Protocol
BCS-3QRM-111W	Modbus RTU (RS485)

### Appearance Dimensions



Copyright ©Advenco. All specifications and other information provided herein are the latest for the revised version of this document. Changes are subject to be made without prior notice.