



## All-in-One Gas Sensing Unit, Multi-Channel Gas Sensor, Advanced Multi-Gas Sensor

### Overview

The **BS300-08 Multi-in-One Gas Sensor** utilizes a high-precision chip for data acquisition, combined with advanced manufacturing techniques and surface-mount technology to ensure accurate and reliable measurement data. It delivers exceptional performance in terms of measurement accuracy, linearity, repeatability, interoperability, and overall consistency. This sensor is ideal for integration with environmental monitoring systems, equipment customization, and a wide range of general environmental testing applications.

The **BS300-08** supports comprehensive monitoring of up to 5–6 customizable parameters, including air temperature, air humidity, CO<sub>2</sub> concentration, CO concentration, particulate matter (PM1.0, PM2.5, PM10), atmospheric pressure, formaldehyde (HCHO), ozone (O<sub>3</sub>), oxygen (O<sub>2</sub>), volatile organic compounds (VOCs), and overall air quality index (AQI). This flexibility makes it a powerful and versatile solution for diverse environmental sensing needs.

### Features

- ✓ High Sensitivity
- ✓ Fast Response
- ✓ Effective Resistance to Water Vapor
- ✓ Excellent Stability
- ✓ Long Service Life

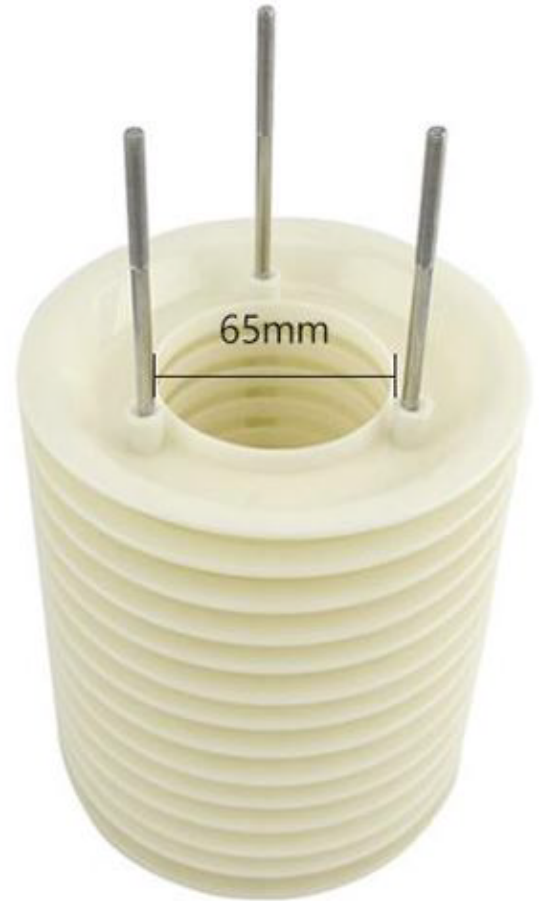
## Technical Specifications

Item	Technical Specification		
	Range	Resolution	Accuracy
Temperature	-30°C ~ 70°C	0.1°C	±0.2°C
Humidity	0 ~ 100%RH	0.1%RH	±3%RH
Illuminance	0 ~ 200K Lux	10 Lux	±5%
Dew point Temperature	-100°C ~ 40°C	0.1°C	±0.3°C
Air Pressure	600 ~ 1100hPa	0.1hPa	±0.5hPa
CO <sub>2</sub>	0 ~ 5000ppm	1ppm	±75ppm + 2%rdg
Civil CO	0 ~ 500ppm	0.1ppm	±2%FS
PM1.0/2.5/10	0 ~ 1000µg/m3	1µg/m3	±3%FS
TVOC	0 ~ 5000ppb	1ppb	±3%
CH <sub>2</sub> O	0 ~ 5000ppb	10ppb	±3%
O <sub>2</sub>	0 ~ 25%VOL	0.1%VOL	±2%FS
O <sub>3</sub>	0 ~ 10ppm	0.01ppm	±2%FS
Air Quality	0 ~ 10mg/m3	0.05 mg/m3	±2%FS
NH <sub>3</sub>	0 ~ 100ppm	1ppm	±2%FS
H <sub>2</sub> S	0 ~ 100ppm	1ppm	±2%FS
NO	0 ~ 250ppm	0.1ppm	±3%FS
NO <sub>2</sub>	0 ~ 20ppm	0.1ppm	±2%FS
Odour	0 ~ 50ppm	0.01ppm	±2%FS
SO <sub>2</sub>	0 ~ 20ppm	0.1ppm	±2%FS
Cl <sub>2</sub>	0 ~ 10ppm	0.1ppm	±2%FS
Civil Gas	0 ~ 5000ppm	50ppm	±3%FS

Item	Specification
Supply	12 ~ 24VDC
Output	RS485
Warm Up Time	3min
Response Time	<1s
Stability	<±1%FS
Repeatability	<±2%FS
Operating Temperature	-20°C ~ 60°C @ 15 ~ 80%RH
Storage	-40°C ~ 70°C @ 20% ~ 90%RH
Shell Material	ABS

## Dimension

Unit: mm



For comprehensive details, visit: [www.buraq.com/BS300-01](http://www.buraq.com/BS300-01)



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