

AI-Powered

Smart City Ecosystem



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Carbon Dioxide Sensor

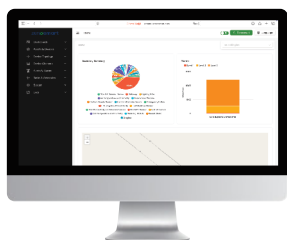
ZS-CO201

The Zensmart LoRaWAN CO₂ Sensor Module detects carbon dioxide (CO₂) levels in the surrounding air and transmits the data wirelessly. It is compatible with the LoRaWAN™ Class A protocol and can operate on battery or mains power. It is designed for air quality monitoring.

Carbon dioxide (CO₂) is a colorless, odorless gas that is denser than air. It occurs naturally in the atmosphere and is released through processes such as respiration and combustion. However, at high concentrations, it can have adverse effects on health and the environment. You can safely use Zensmart LoRaWAN CO₂ sensor modules to monitor CO₂ emissions.

Communication Range	2500m ¹
Sensor Features	CO ₂ Measurement Range: 0–2000 ppm
Power	3.6V 19000mAh
Frequencies	EU433 – KR920 – US915 /EU868 – AS923 – AU915
Connections	LoRaWAN ¹  ²
Monitoring	Web and Mobile-Based Remote Monitoring
Dimensions	(H×W×D): 154 × 67 × 60 mm

1. The range may vary depending on the gateway antenna gain and geographic conditions.
2. Bluetooth is offered as an optional feature based on preference.



You can manage your CO₂ monitoring either through our web management platform at zensmart.com or via your own servers

Installation

Once the CO₂ sensor's battery is inserted, it immediately connects to the nearest LoRaWAN gateway and starts sending data to the IoT server. The operating temperature should be between -20°C and 60°C

Usage

The device is fully waterproof (IP67 rated) and, when powered by a 3.6V 19Ah lithium battery, offers up to 10 years of battery life depending on usage