

A300 Duct-Mounted CO₂ Transmitter (A300-C-D / A300-CTH-D)

Introduction:

Industrial-Grade CO₂ Transmitter for Optimal Climate Control

The **A300 Duct-Mounted Series** is a high-performance CO₂ transmitter engineered for precise monitoring, with seamless installation and sophisticated operation in diverse commercial applications.

Specifically designed to meet evolved smart buildings' needs, it provides critical data needed to manage both air quality concentrations and the reliability of interior environments.

Equipped with the latest Senseair S12 sensors, the A300 Duct-Mounted Series upholds a high accuracy to achieve its perfect equilibrium between energy efficiency and individuals' well-being. By regulating demand-controlled ventilation through real-time measurements, it ensures unrivaled air within the breathing zones, preventing accumulated CO₂ levels.

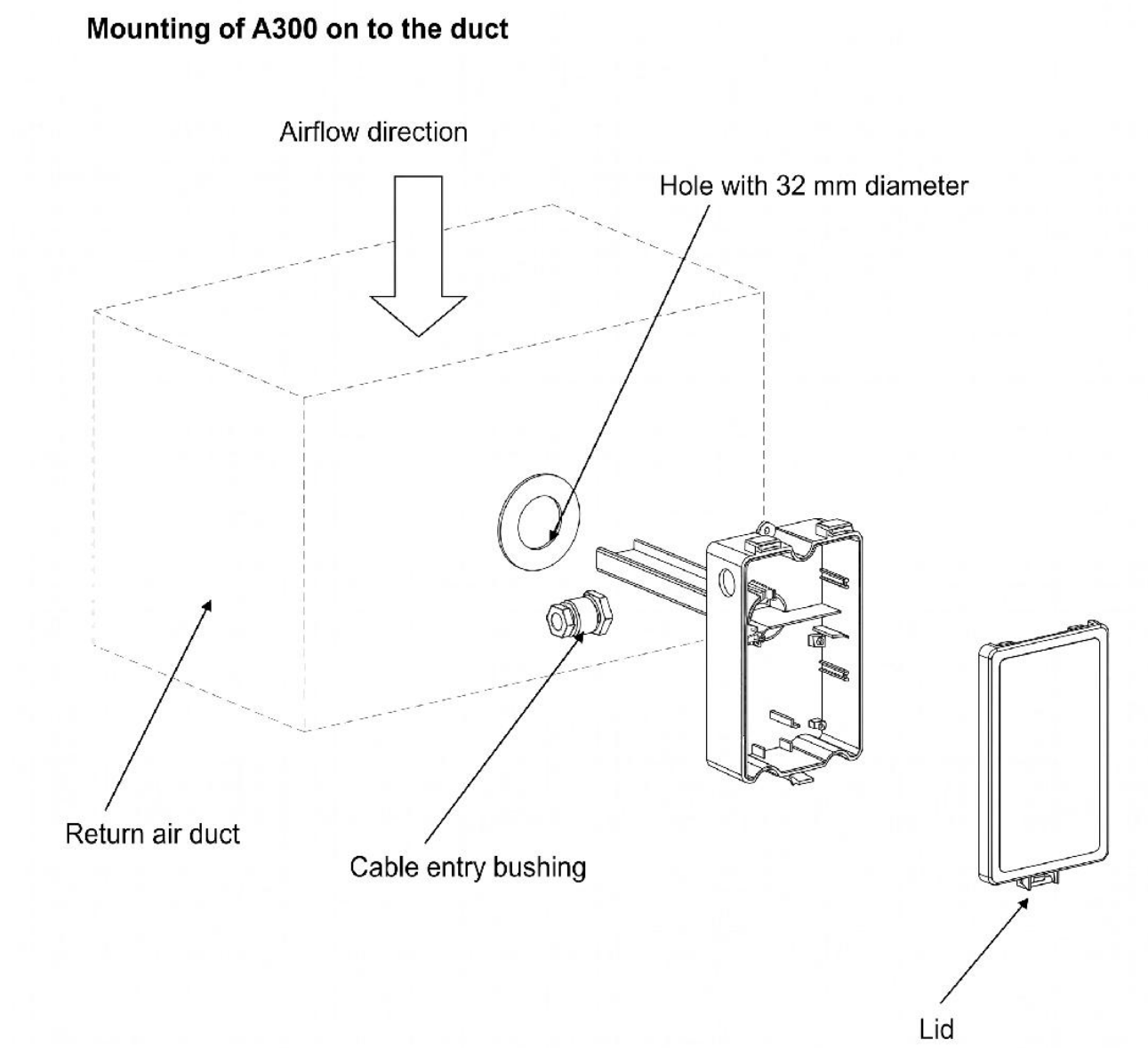
With the latest advancement that meets global compliance standards for Passive Houses, the EU's (European Union) Zero-Emission Buildings (ZEB), and WELL certified establishments, the A300 Duct-Mounted Series is suited for settings ranging from commercial to residential. Its long-term service lifespan acts as a vital tool for a fully optimized and ideal indoor climate for every occupant.

Key Benefits:

1. Upgraded Sensor: Senseair S12 CO₂ Sensor (18*15*6 mm), optimized for modern, space-constrained equipment designs.
2. Precision Sensing: Accuracy of ± 30 ppm and $\pm 3\%$ of readings.
3. Compliance-Focused: Fully compliant with ANSI/ASHRAE 62.1-2022, RESET Grade B, and WELL Building Standard® (WELL v2™).
4. Future-Proof: Supports the EU's (European Union) Energy Performance of Buildings Directive (EPBD) for zero-emission standards.

Device Installation:

The illustration shows the recommended installation method for mounting the A300 Duct-Mounted Series onto an air duct for accurate airflow monitoring and reliable operation.



Model Available:

Model	Dimensions (L*W*H)	IP Rating	Mounting Type	Measured Gas	Modbus	Analog Output	Temp&Humidity
A300-C-D	140*45*45MM, Probe Length: 140 mm	IP65	Duct-Mounted	CO2	Yes	Yes	No
A300-CTH-D					Yes	Yes	Yes

Technical Specification:

Parameter	Specification
Sensor	Senseair S12 (Next-Gen)
Operating Principle	Non-Dispersive Infrared (NDIR) – LED-based

Measured Gas	CO ₂
Measurement Range	0 – 10,000 ppm
Accuracy	±30 ppm ±3% of reading (Upgraded from ±40 ppm)
Operating Conditions	-10 ~ 60 °C / 0 – 95% RH
Response Time	T90: ~120s ; T63: < 30s
Power Supply	24 V AC/DC
Power Consumption	Avg. Current < 34 µA
Communication	UART:Output 1: 0-10 V (0-2000ppm) Output 2:2-10 V/4-20 mA(0-2000 ppm) Modbus RTU
Compliance	ANSI/ASHRAE 62.1-2022, RESET Grade A/B, WELL v2™
Maintenance	Maintenance Free
Life Expectancy	> 15 years
Dimensions	140 x 45 x 45 mm (Enclosure)
Storage Conditions	-40 ~ 70 °C