

aSENSE Duct (Disp)



CO₂ and temperature sensor for installation in ventilation duct.

aSENSE Duct (Disp) is an advanced sensor for installation in the ventilation duct. It measures both carbon dioxide concentration and temperature in the ambient air. The data is transmitted to a BMS system or controller and can be configured with UIP Software.

aSENSE Duct (Disp) is a key component for climate control of buildings and other processes. The sensor is flexible and suits many different ventilation strategies. It is also a cost-efficient gas alarm sensor for spaces where CO₂ gas is a potential danger.

aSENSE Duct (Disp) is designed to control ventilation by transmitting the measured carbon dioxide and temperature value to the Master or DDC of the system. A common application is controlling ventilation in rooms with varying numbers of people such as offices, classrooms and cinemas. The ventilation control is based on CO₂ and temperature measurements and helps to save energy and create a healthy indoor environment.

Standard specification

Measured gas	Carbon dioxide (CO ₂)
Operating principle	Non-dispersive infrared (NDIR)
Measurement range	0–2000ppm
OUT1 linear output (CO ₂)	0/2–10VDC or 0/4–20mA, 0–2000ppm
OUT2 linear output	0/2–10VDC or 0/4–20mA, 0–50 °C
Accuracy (CO ₂)	±30ppm ±3% of reading
Dimensions	152 x 85 x 47mm
Life expectancy	> 15 years
Operation temperature range	0–50 °C
Power supply	24VAC/VDC
Power consumption	< 1W average
Communication	UART (prepared for Modbus)

Key benefits

- Alternative control outputs
- Compliant with ANSI/ASHRAE Standard 62.1-2022
- Compliant with RESET grad B
- Compliant with WELL Building Standard® (WELL v2™)
- Contributes to lower energy costs
- RS-485 communication as option



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Senseair

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an Asahi Kasei company