

NDIR CO₂ OEM Sensor

Process & Environmental Monitoring Solutions



technical specification

The compact OEM version of our dual channel NDIR CO₂ trace gas sensor allows the integration of our high quality sensor solution in customer electronic assemblies. This product offers the outstanding performance of our NDIR sensor modules in a compact, versatile form factor that meets the high requirements for sensitive trace gas detection in combination with the given constraints of a standard-compliant electrical circuit design.

In this way, we effectively support efficient product development and a secure market launch by ensuring not only the highest quality and reliable CO₂ detection options, but also security of supply.

NDIR Sensor Module features

- compact and reliable
- high precision sensor
- fast response times
- stable performance at high and low temperatures
- low power consumption
- integrated dust and humidity filter
- wide application spectrum
 - fast prototyping in application development scenarios
 - integration in specific electronic circuit designs
 - OEM component in commercial products
 - control in air cleaner and air conditioner

general

description	high quality CO ₂ trace gas sensor for continues concentration monitoring
measuring type	dual wavelength Non-Dispersive-Infrared (NDIR) spectroscopy
measuring range	0 to 3000 ppm ^[1] ^[1] other ranges 5 % and 10 % on request
accuracy	±2 % FS, ±3 % of measured value
operating conditions	0 to 50 °C, 0 to 95% RH (non-condensing) ^[2] ^[2] condensation resistant coating on request
response time	2 s ^[3] ^[3] 90 s warm-up time at 25 °C
supply voltage	7 VDC to 12 VDC ^[4] ^[4] 5 VDC Regulated (±4%) on request
current consumption	35 mA (Peak 80 mA)
interface	UART (TTL 3.3 V) and analog (0 to 3 V)
dimensions	(W) 65 mm x (H) 45 mm x (D) 17.6 mm
weight	22 g

temperature sensor (optional)

measuring range	-25 °C to 80 °C
accuracy	±0.3 K
response time	5 s to 30 s

humidity sensor (optional)

measuring range	0 to 99.9 % RH
accuracy	±3 % RH
response time	8 s

scope of delivery

integrated temperature and humidity sensors
on request
bare PCB with Molex 5267 connector
quality inspection and calibration process
prior delivery
temperature and humidity sensor extension
(optional)
external signal transmitter (optional)
external controller module (optional)

