

Product Descriptions

VC2400 is an Indoor Air Quality (IAQ) monitoring device. It measures TVOC and CO2 concentration, temperature and relative humidity simultaneously. It is ideal for demand controlled ventilation and indoor environment monitoring.

VC2400 is available in different housing to meet the installation requirements. It provides RS485 modbus communication protocol and can be linked to most building management system. The installation of VC2400 IAQ sensor/transmitter is simple and straight-forward, easy to operate and cost effective. It is an excellent choice for indoor environment monitoring and control.



Specification

General Performance

Compliance with	EMC directive 2014/30/EU
Operating range	0 – 50°C/0 – 95%RH(non-condensing)
Storage temperature range	-40°C ~ 70°C
Display status	Four-digit display

Electrical

Power supply input	24V ac/dc $\pm 20\%$, 50 Hz
Power consumption	< 1.7 watt
Terminal connections	Use 1.5 mm ² control wires for power supply input (G+,G0) for RS485 modbus connection.(CR+, CR-)

TVOC measurement

Sensing technology	CMOS sensing element
Measurement range	0 – 500 AQI
Response time	< 10sec (T63%)
Accuracy	< $\pm 15\%$
Repeatability	< $\pm 5\%$

Three-stage LED status indicator

Green light (Good)	AQI : 0 – 50
Yellow light (Normal)	AQI : 51 – 150
Red light (Poor)	AQI : 151up

Specification

CO₂ measurement

Measuring principle	Infrared (NDIR) wave-guide technology with Automatic Background Calibration (ABC) ,and passive gas diffusion
Measuring Range	400 – 6,000ppm (extension range 6,000 – 10,000ppm)
Repeatability	± 1 % of reaging ± 20 ppm
Accuracy	± 3 % of reading ± 50 ppm
Annual drift	< ±10ppm(with ABC function activated)
Pressure dependence	+ 1.6 % of reading per kPa

Relative humidity (RH) measurement

Sensing technology	CMOS
Working range	0 – 95% RH
Repeatability	± 0.1% RH
Accuracy	± 3% RH
Delay response	± 1% RH
Long term drift	< 0.5% RH

Temperature measurement

Sensing technology	CMOS
Working range	0 – 80°C
Repeatability	± 0.1°C
Accuracy	0.3°C
Long term drift	< 0.04°C

Remarks :

1. Not suitable for use in environment with high SO₂.
2. Specifications are at 25°C, 50% RH and typical VDD. The sensors have been operated for at least 24h before the first characterization.

Models

VC2400

Measurement Items

VOCs	—
VOCs/Temp/RH	TR
VOCs/CO ₂ /Temp/RH	TR2

LC Display

No LC Display	—
with LC Display	D

Nousing options

Wall housing	—
Duct housing	K

Duct type only have [No LC Display] model

housing options



Wall IP30 housing

size : 113 × 80 × 25 mm (L×W×H)



Wall with LC Display IP30 housing

size : 113 × 80 × 25 mm (L×W×H)



Duct IP65 housing

size : 142 × 85 × 47 mm (L×W×H)

Duct probe length : 130 mm

Accessories



US base-plate

size : 128 × 80 mm (L×W)