



OVERVIEW

The Flamefast Carbon Dioxide, VOC (Volatile Organic Compounds), Temperature and Relative Humidity transmitter offers an accurate and cost effective solution for the HVAC market, with 0-10V outputs for CO2, VOC, Temp and RH Levels (outputs depend on model selection). When both CO2 and VOC levels are being measured, the unit will display/output the higher of the two concentrations as the VOCs are measured in CO2 equivalent for easy interpretation.

Using the built in Volt Free Contact, the unit can be easily interfaced with Ventilation and Window Control Systems, as well as Gas Safety Systems. The unit can also simply be used as a traffic light indication to raise awareness of CO2, VOC, Temp or RH levels.

The unit offers four user selectable programmes for different applications; two aimed at Ventilation and a further two aimed at Gas Safety. Custom software profiles are also available to control the relay set point and the traffic light changeover levels, based on any combination of CO2, VOCs, Temp & RH (CO2/VOC as default).

KEY FEATURES

- 24V AC/DC Power Supply
- Low power consumption
- Pluggable terminal block for ease of installation
- Optional digital readout
- Optional traffic light indication
- 3x 0-10V outputs (full-scale linear)
- Volt free contact output
- Typical 10 year life expectancy
- Self-calibrating CO2 and VOC sensors
- Mounts onto any standard single gang junction box or conduit box
- **UK MANUFACTURED**

CO2T

CO2, VOC, TEMP & RH TRANSMITTER (24V)

Dimensions

Height 125mm | Width 86mm | Depth 36mm

Technical Specification

Power Supply	24V AC/DC ±10%
Power Consumption	50mA Max
CO2 Range (0-10v)	0 - 2,000 / 5,000ppm
CO2 Accuracy	±50 ppm +3% @ NTP
CO2 Display Resolution	1ppm
CO2 Sensing Method	Solid State NDIR
CO2 Response Time (T90)	30 Seconds
CO2 Typical Sensor Life	10 Years
VOC Range (CO2 Equivalent)	400-2,000ppm
VOC Accuracy	±5% @ NTP
VOC Display Resolution	1ppm
VOC Sensor Type	Semiconductor
Temp Range (0-10v)	0 - 50°C
Temp Accuracy	±0.3°C @ 20 - 40°C
Temp Display Resolution	0.1°C
RH Range (0-10V)	0 - 100%
RH Accuracy	±2% @ 20 - 80%
RH Display Resolution	0.1%
VFC Output Rating	SPST - 100mA @ 240V Max
Operating Conditions	Temp 0°C - 50°C
	Humidity 0 - 95% (NC)
Sampling Method	Diffusion
Warm-up Time	30 Seconds
IP Rating	IP40
Housing Material	Flame Retardant ABS
Approval	CE

Installer Selectable Options

- Backlight (Enable/Disable)
- Traffic light changeover levels and Volt Free Contact activation
- Display options:
 - On standard Model Replace PPM reading with 'CO2'
 - On -H model Remove RH readout

The CO2T has four factory set user selectable programmes to control the Volt Free Contact and LCD Traffic Light behaviour. These are as follows:

Programme	1	2	3	4
Green - Yellow	1,000	1,000	1,500	1,500
Yellow - Red	1,500	1,500	2,800	2,800
Relay Position	N/O	N/O	N/C	N/C
Relay Set Point	1,000	1,500	2,800	4,500
CO2 Range	2,000	2,000	5,000	5,000

Custom programs available on request

Part Numbers & Options/Accessories

Part No	Description
CO2T	CO2 Transmitter
CO2T-H	CO2, Temp & RH Transmitter
CO2T-V	CO2 & VOC Transmitter
CO2T-VH	CO2, VOC, Temp & RH Transmitter
CO2T-P	CO2 & Temp Transmitter (10K3)
-L	Adds a Traffic Light LCD to any of the above