A+ CO_2 SENSOR MODULE

- CO_2 sensor measurement of indoor air quality
- Easy and fast installation, RF technology
- Capacitive button for manual control

Application

The sensor module is a device to measure air quality in a residential environment. The typical application is to measure indoor air quality and send this via RF to a ventilation unit. The Genvex ventilation unit can react on the information from the sensor accordingly.

With the capacitive button manual control functions can be selected.

Genvex

Technical details

Material
Casing front and back: ABS plastics

Size
100 x 100 x 30 mm (b x h x d)

Power supply
230 VAC- 50Hz

Communication
Honeywell 868 MHz RF protocol.
Multipoint bi directional communication

Environmental conditions
Temperature: - in operation: 4…40°C.
- transportation: -20…55°C.
Relative humidity battery powered: 5..100% condensing
Relative humidity 230 VAC powered: 5…90% non-condensing

User Interface

Capacitive button:	1
5 LED's :	Green
bicolor LED:	Red/Green

Mounting
On wall (over a flush mounted box)

Certifications
ETSI EN 300 220-1:
- Electromagnetic compatibility and Radio spectrum Matters (ERM);
- Short Range Devices (SRD);
- Radio equipment to be used in the 25 MHz to 1000 MHz frequency range with power levels ranging up to 500 mW;
- Part 1: Technical characteristics and test methods
- For a class 1F application

EN61000-6-3:2007 emission standard, residential, commercial and light industry.

EN61000-6-1:2007 immunity standard, residential, commercial and light industry.

NEN-EN 60730-1:2007
"Automatic electrical controls for household and similar use
Part 1: general requirements".

RohS and WEEE compliant

Sensor specifications

CO_2

Sampling Method	Non-dispersive infrared (NDIR), gold plated optics. Diffusion sampling.
Measurement Range	400 to 2000 ppm factory calibrated.
Accuracy	± 100 ppm @ 22°C (72°F)
Stability	<2% of FS over life of sensor (15 years typical)

Typical application

A combined 230 VAC powered CO_2 level/ manual control in a combined kitchen/living room area
- It measures the CO_2 level and sends out a signal via RF to the Genvex ventilation unit to speed up (or slow down) to a default defined ventilation speed.
- Use it as manual control to set a default defined ventilation speed. It can override the CO_2 ventilation request.
- Capacitive button will be used to bind RF and to select speed or automatic (sensor) function.
- LED's will indicate a certain CO_2 level, the position of the ventilation select manually or a communication status.

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