

# A+ INPUT/ OUTPUT MODULE



- RF to analogue 0-10 VDC out
- Wireless for easy installation
- 1 two color LED for status indication

## Application

The Input / Output module is a device to transform RF signals to a wired output signal or transform digital inputs signals to RF.

The output of the platform is an analogue 0-10 VDC signal, normally used to control a Genvex ventilation unit. You can bind e.g. a wireless sensor to this product which converts the wireless sensor information into a 0-10 VDC wired signal.

On the inputs you can connect e.g. an error relay out and a filter dirty relay output. Then this signal can be transformed in a wireless RF signal. This feature requires an extra relay to be built in between the Genvex Optima PCB and the I/O module.



## 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 or 24 VDC

Max. power consumption 2W

### Communication

Honeywell 868 MHz RF protocol.

Multipoint bi directional communication

### Environmental conditions

Temperature: - in operation: 4...40°C.

- transportation: -20...55°C.

Relative humidity: 5...90%

230 VAC powered

non-condensing

### User Interface

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

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

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

NEN-EN 60730-1:2012

"Automatic electrical controls for household and similar use

Part 1: general requirements".

RohS and WEEE compliant

RohS and WEEE compliant

### Input specifications

Digital in: 3.3 VDC 3.3mA

### Output specifications

Output: 0-10 VDC analogue

Maximum current: 10 mA

Resolution output voltage: +/-10mV

## Typical application

As control for a Genvex ventilation unit.

- The Input / Output module will be connected to the 0-10 VDC input of the Genvex ventilation unit. And on the RF side you can bind wireless products e.g. a CO<sub>2</sub> sensor.
- The CO<sub>2</sub> sensor measures the CO<sub>2</sub> level in the room.
- Based on the CO<sub>2</sub> level the CO<sub>2</sub> sensor sends out a signal via RF to the Input / Output module.
- The Input / Output module converts this CO<sub>2</sub> level in a voltage between the 0 and 10 VDC depending on the CO<sub>2</sub> level. The Genvex ventilation unit uses this 0-10 VDC signal to speed up or down the fans.
- A digital input could be used to indicate an error coming from the Genvex ventilation unit. The output error of the Genvex ventilation unit control PCB can be connected to the input of this module. And a signal can be sent to all RF products connected to indicate error by an LED.
- LED's indicate a certain state.