



SMART420MA

4-20mA gas detector interface module



The SMART420MA module interfaces any 4-20mA output gas detector with any control panel.

The module will control the sensor output and will manage the following outputs:

- A normally closed fault contact [terminals 8 and 9 - **FAULT**] which opens in case of sensor fault (missing of 4mA supervision current).
- A normally open pre-alarm contact [terminals 10 and 11 - **PRE ALARM**] which closes when sensor level reaches the first threshold (adjustable by RV2 trimmer).
- A normally open alarm contact [terminals 12 and 13 - **ALARM**] which closes when sensor level reaches the second threshold (adjustable by RV3 trimmer).
- A balanced output for connecting directly to the VEGA input module terminals; the pre-alarm resistance can be adjusted by means of RV1 trimmer.

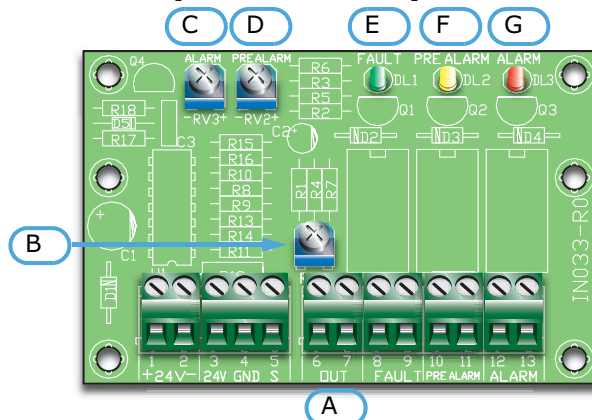
Status LED are provided to indicate the **FAULT**, **PRE ALARM** and **ALARM** status.

TECHNICAL SPECIFICATION	Val.
Power supply	24 V=
MAX current	30 mA
Operating temperature range	-5°C / +40°C
Dimensions	105 x 58 x 18 mm

Installation

The module receives power from an external source on terminals 1 and 2 [**+24V-**], the gas detector is connected on terminals 3, 4 and 5 (terminals 3 and 4 supply power to the sensor, terminal 5 [**S**] receives the detector's output current signal).

Description of components



Element	Name	Description
A	Terminals 1 2 + 24V -	External power supply connection for detector and module feed. From 20 to 30 Vdc
	Terminals 3 4 5 24V GND S	Terminals for gas detector connection. 24V and GND terminals supply power to detector, S terminal receives the detector's current output.
	Terminals 6 7 OUT	Balanced output for connection to VEGA series analog addressable input module connectable to addressable fire control panels.
	Terminals 8 9 FAULT	Normally closed fault contact, it opens in the event of detector fault.
	Terminals 10 11 PRE ALARM	Normally open pre-alarm contact, it closes when the gas level measured from detector reaches the first threshold.
	Terminals 12 13 ALARM	Normally open alarm contact, it closes when the gas level measured from detector reaches the second threshold.
B	RV1	Trimmer to adjust the OUT terminals pre-alarm resistance.
C	RV3 ALARM	Trimmer to adjust the second threshold (alarm).
D	RV2 PRE ALARM	Trimmer to adjust the first threshold (pre-alarm).
E	FAULT	Green LED for gas sensor fault indication.
F	PRE ALARM	Yellow LED for pre-alarm indication.
G	ALARM	Red LED for alarm indication.

INIM Electronics reserves the right to change the technical specifications of this product without prior notice.

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