



## MODELS

The gas detectors of the MOON series are composed of two electronic boards; one that controls the calibration and compensation algorithms of the sensing element (1), while the other controls the communication to the control body (2).

The gas detector is supplied in combination with one of the following communication boards:

–**OC** Output module with O.C. Optoisolated NPN. A series of on-board resistors, selectable via dip-switches, allow the forwarding of Prealarm, Alarm and Fault to different types of conventional control units or third-party input modules.

–**AS** Absorption output module. It allows connection to conventional control panels and input modules without adding balancing resistors (before order, check the resistances required by the control panel or module).

–**42** 4-20 mA analogue output module, active and passive signal, positive or negative voltage. Typical connection for PLC applications. Possible to calibrate the full scale values of the signal.

–**RL** 3 Relay output module for Fault, Prealarm, Alarm. Free contact outputs that can be set as NO or NC, typically used for connection of security alarm control units or directly for the wiring on electrical panels.

–**LV** Communication module for analogue control units with VEGA protocol. The module is able to transmit pre-alarm, alarm and fault information using a single loop address (depending on the control panel). Up to 240 detectors per loop.

–**LE** Communication module for SmartLoop or SmartLight analogue control units, with ENEA protocol. The module is capable of transmitting pre-alarm, alarm and fault information using a single loop address. Up to 240 detectors per loop.

**NEW. MB Communication module with MODBUS protocol.**

The complete detector code is therefore G700IR-2-xx, where XX identifies the communication card.

## G700IR-2

Gas Detector Infrared for Methane in IP55 housing

## DESCRIPTION

The G700IR-2 gas detector for Methane is part of the new family of gas detectors for industrial use.

The gas detector is equipped with a head sensor with a catalytic sensing element that measures the concentration of the explosive gas on the LEL (Lower Explosive Limit) scale.

The gas detector is preset with Pre-alarm thresholds of 15% and Alarm of 30% of the LEL.

The pre-set standard thresholds are valid only for sensors with relay, OC and AS outputs.

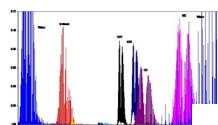
Working scale from 0-100% L.E.L.

Optionally available an interface with Android App and PC software, which allow the testing of the detector in the field, and configuration modification: detection thresholds, alarm filters, addressing, full scale, etc..

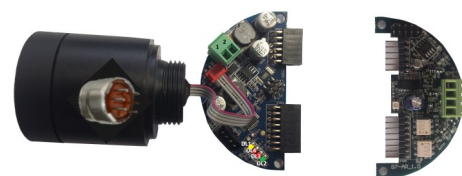
In case of exhaustion or failure of the sensitive element, it can be replaced directly in the field, in a simple and fast way with considerable savings on the maintenance costs of the detector.

The detector is equipped with ADFT IP55 dustproof metal housing, which contains the electronics board and the sensitive element, positioned at the lower part and protected by a special bronze filter.

### BASE BOARD 2



### OUTPUT BOARDXX



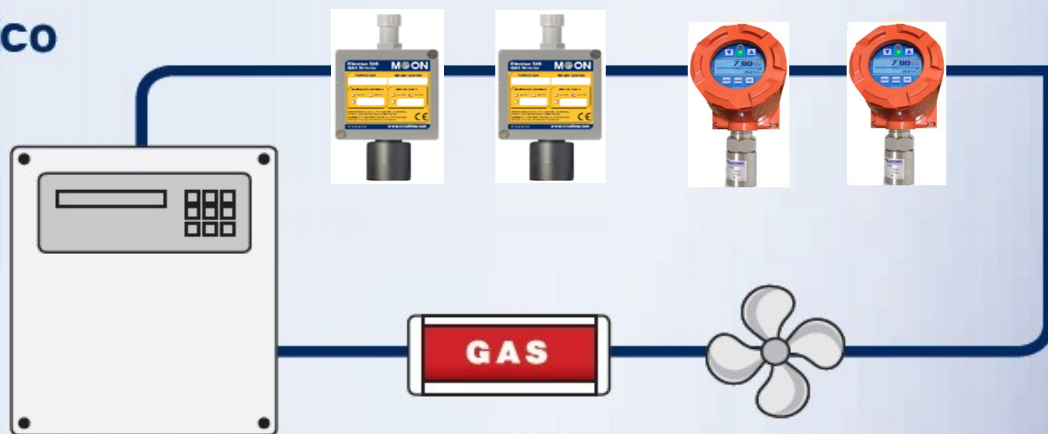
## TECHNICAL FEATURES

|  |                   |
|--|-------------------|
| Supply voltage                                     | 12/24 Vdc         |
| Sensing element (Pre-heating 150")                 | Infrared          |
| Durability of the IR element in optimal conditions | 5 years           |
| Standard Consumption                               | 90mA max          |
| Alarm Consumption                                  | 110 mA max        |
| Operating temperature                              | 0°C / +50 °C      |
| Resolution   | 1 up to 5% vol    |
| Linearity  | ± 5% of reading   |
| Precision  | ± 5% reading 20°C |
| Response time T90 for Methane                      | < 30 seconds      |
| Weight   | 370g              |
| Housing  | ADFT IP55         |
| Dimension HxWxD (mm)                               | 175 x 100 x 60    |
| Cover with ceiling installation                    | 5 meters radius   |

## BLOCKS DIAGRAM

### Loop Analogico

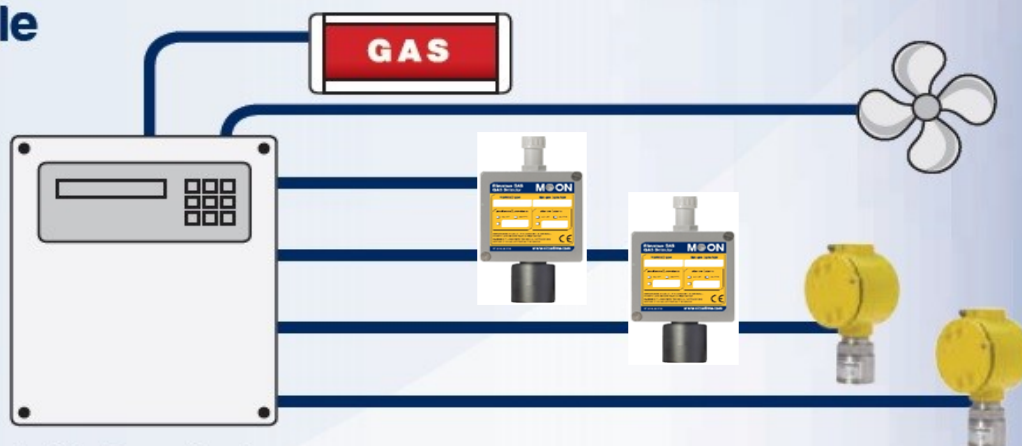
-LV  
-LE



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### Convenzionale

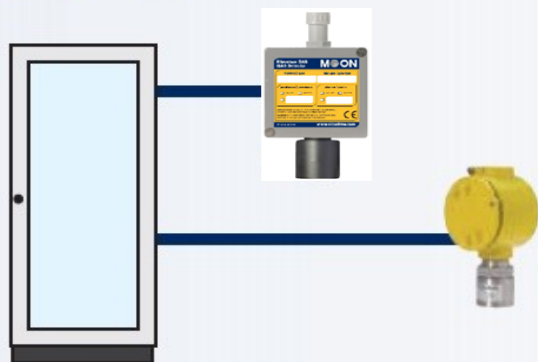
-OC  
-AS



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### Linea 4-20mA

-42



PLC

### Cablaggio a Relè

-RL



Quadro elettrico