



NDIR sensor series

Part number specification



The part number is composed of several field as listed below. When specifying the part number in an order, please make sure to specify all the 8 fields of the list in the correct order according to the steps here below. See the separate product data sheet for detailed specifications and options for each model.

1	2	3	4	5	6	7	8
Model	Pro/7 pin	Size	Gas	Range	Certification	Output	Polarity
IN- IS- IP-	P- 7-	20- 32-	CO2- CH4- PRO-	L- V- P- 2- 5-	NC- IS- EX-	DU- VS- VR- VF- BR- BF- PE-	P- N- 0-

Example: IRNET-P-20-CO2-5-NC-VS-N

IRNET model, Pro, 20 mm, CO2, range 0-5% vol, not certified, voltage output, negative polarity.

1) Choose the sensor model

IN- :IRNET sensor, standard model
IS- :IRIS sensor, intrinsic safety model
IP- :IRPELL sensor, full pellistor model designed to substitute an ordinary pellistor sensor.

2) Choose the 7 pin, dummy version or the smart microprocessor version

P- :The smart microprocessor version has an incorporated signal linearization and temperature compensation and is suited for manufacturers without any specialist knowledge in IR technology.
7- :The 7 pin "dummy" version needs to be provided with suitable electronic and software interfaces in order to produce an output that is linearized and temperature compensated. (Not available for the IRPELL model)

3) Choose the size of the sensor suitable for your equipment

20- :20 mm diameter (not available for the IRIS model)
32- :32 mm diameter

4) Choose the gas you wish to detect

CO2- :CO2
CH4- :Methane
PRO- :Propane

5) Choose the sensor range

L- :0 - 100% LEL Available for methane and propane
V- :0 - 100% vol Available for CO2, methane and propane
P- :0 - 5000 ppm Available for CO2
2- :0 - 2% vol Available for CO2
5- :0 - 5% vol Available for CO2

6) Choose the certification needed for the sensor

NC- :Not certified. Available for IRNET and IRPELL models. Internal optical mechanics in aluminium, external enclosure in PVC (stainless steel (SS) available on request).
IS- :ATEX certified Ex ib for intrinsically safe equipment. Included only in IRIS model. Internal optical mechanics in aluminium, external enclosure in SS.
EX- :ATEX-IECEx certified Ex d for flameproof equipment. Internal optical mechanics in aluminium, external enclosure in SS. Future certification.

7) Choose the sensor output

DU- :“dummy” output. Available only for IRNET-7 and IRIS-7
VS- :standard voltage output [0.4 V–2 V] dc . Available for IRNET-P and IRIS-P models.
VR- :customized rising voltage output. The rising voltage range must be specified separately in the order. Available for IRNET-P and IRIS-P models.
VF- : customized falling voltage output. The falling voltage range must be specified separately in the order. Available for IRNET-P and IRIS-P models.
BR- :customized rising bridge output [$V_{cc}/2 + \Delta$] dc. To use when substituting a low-power pellistor. The raising value Δ must be specified separately in the order. Available for IRNET-P and IRIS-P models.
BF- :customized falling bridge output [$V_{cc}/2 - \Delta$] dc. To use when substituting a low-power pellistor. The falling value Δ must be specified separately in the order. Available for IRNET-P and IRIS-P models.
PE- :full pellistor. Substitutes an ordinary pellistor. Available only for IRPELL model.

See the data sheet for the further descriptions of the various outputs

8) Choose the polarity/pin configuration of the sensor

P- :positive Available for IRNET
N- :negative Available for IRNET and IRIS models
0- :null (wired) Available only for IRPELL model

