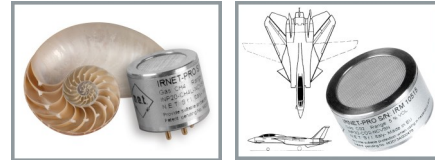




## NDIR sensor series

### Part number specification



The part number is composed of several fields as listed below. When specifying the part number in an order, please make sure to specify all the 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	-	9
Model	NET/OEM	Size*	-	Gas	Range	-	Certification	Output	Pol.	-	Pin
IN IF IA	P E	20 32	-	CO2 CH4 PRO SF6 125 134 1YF 507 ETI 404 47F 449 1ZE etc	B L M P T V 1 2 5	-	NC EX AX	VS VR LS LR BR	P N	-	[blank] 3 C

**Example:** INP20-CO25-NCVSN-3

IRNET Pro model, 20 mm, CO2, range 0-5% vol, not certified, standard voltage output, negative polarity, 3 pins.

**Example:** INP20-PROL-EXLSP

IRNEX Pro model, 20 mm, Propane, range 0-1.7% vol, IECEx certification, low power and standard voltage output, positive polarity, 5 pins

#### 1) Choose the sensor model

- IN :IRNET (not certified) or IRNEX (certified) sensor
- IF :IREF for refrigerants, SF6 and others (available only in 32 mm size)
- IA :IREF-A for refrigerants, SF6 and others (available only in 32 mm size flow type)

#### 2) Choose the sensor 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. Open enclosure on top.
- E :As "P" but with different enclosure only for OEM (not available for IA model).

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

- 20 :20 mm diameter (not available for the IREF and IREF-A model)
- 32 :32 mm diameter (not available for the IRNEX model)

#### 4) Choose the gas you wish to detect

- |               |              |            |              |
|---------------|--------------|------------|--------------|
| CO2 :CO2      | SF6 :SF6     | 125 :R125  | 1YF :R1234yf |
| CH4 :Methane  | PRO :Propane | 134 :R134a | 507 :R507    |
| ETI :Ethylene | 404 :R404a   | 410 :R410a | 449 :R449    |
| 1ZE :R1234ze  | 47F :R407f   |            |              |

*Other gases are available on request.*

# NDIR sensor series

## Part number specification

### 5) Choose the sensor range

V	:0 - 100% vol	Available for Methane and CO2
T	:0 - 20% vol	Available for CO2
L	:0 - 100% LEL	Available for hydrocarbons (4.4% vol for Methane, 1.7% for Propane, 2.3 % vol for Ethylene)
M	:0 - 1000 ppm	Available for SF6
B	:0 - 2000 ppm	Available for SF6 and R125, R134a, R1234yf, R507, R404a, R410a, R407f, R1234ze, R449
P	:0 - 5000 ppm	Available for CO2
1	:0 - 1% vol	Available for CO2
2	:0 - 2% vol	Available for CO2 and Propane (0-100 % LEL outside of Europe)
5	:0 - 5% vol	Available for CO2 and Methane (0-100 % LEL outside of Europe)

*Other full scale ranges are available on request.*

### 6) Choose the certification needed for the sensor

NC	:Not certified. Internal optical mechanics in aluminium, external enclosure in stainless steel (SS).
EX	:IECEX certified Ex d for flameproof equipment. Internal optical mechanics in aluminium, external enclosure in SS. Not available for 32mm size
AX	:ATEX certified Ex d for flameproof equipment. Internal optical mechanics in aluminium, external enclosure in SS. Not available for 32mm size

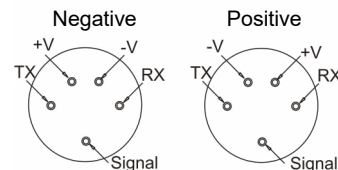
### 7) Choose the sensor output

VS	:standard voltage output [0.4 V—2 V] dc
VR	:customized rising voltage output. The rising voltage range must be specified separately in the order.
LS	:low power, standard voltage output [0.4 V—2 V] dc. Available only for IRNET and IRNEX versions in 20mm size.
LR	:low power, customized rising voltage output. The rising voltage range must be specified separately in the order. Available only for IRNET and IRNEX versions in 20mm size
BR	:customized rising bridge output [ $V_{cc}/2 + \Delta$ ] dc. To use when substituting a Low-power pellistor. The raising value $\Delta$ must be specified separately in the order.

*See the data sheet for further descriptions of the above outputs as well as for IRNET BASIC 7 pins, IRPELL—full pellistor output and IRIS intrinsically safe.*

### 8) Choose the polarity configuration of the sensor

P	:positive	Available only for 20 mm size
N	:negative	Available for 20/32 mm size



### 9) Choose the number of pins / communication

Left blank	:5 pins version (standard, with modbus protocol)
3	:3 pins version (+V, -V and signal output)
C	:5 pin version with UART P2P protocol