CONFIGURATION HANDBOOK

INP201
INP201i LED
INP201i LCD

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Download manual at : www.loreme.fr

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INP201

Presentation

INP201 is a 4-20 mA loop powered process field transmitter with local indicator.
It bring together in a single box (IP68) (ATEX ex-proof box on request):

- A configurable display (see below).
- A loop powered transmitter of any type (digital, analog, HART, SIL2, …).

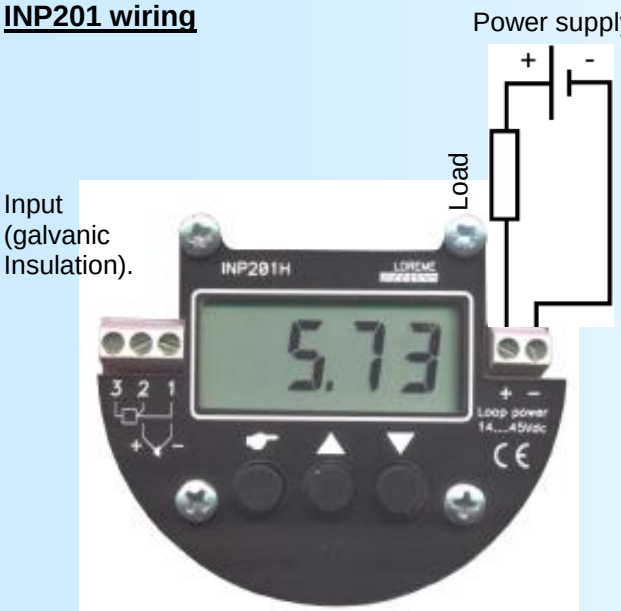
The configuration of the indicator display can be set by 3 buttons.
Adjustable parameters are:
- Decimal point.
- Low scale value (-999 à 9999).
- High scale value (-999 à 9999).

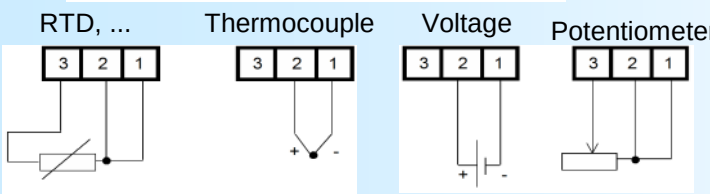
Input signal is interpreted into physical unit, making easier reading of measured information.
Ex: Input 4-20mA / Scale 0-1000 => Input = 12 mA, display = 500.

Technical specifications can be downloaded at: http://www.loreme.fr/fichtech/INP201_eng.pdf

INTERFACE UTILISATEUR

INP201 wiring





Configuration

Press ☛ button to start configuration mode.
All configurations parameters are reachable with the following menus:

Decimal point

=> **Menu 'dP'**

When configuration mode start, the device automatically display 'dP' with decimal point at its actual position.
To modify it, press key ▲ or ▼ up to required position.
The point move only from right to left (pressed key doesn't matter).

Low scale

=> **Menu 'Lo'**

To switch to low scale menu, press ☛ button.
Device display alternatively 'Lo' message and actual scale value.
By pressing key ▲ or ▼ , you can increment or decrement value.

High scale

=> **Menu 'Hi'**

To switch to high scale menu, press ☛ button.
Device display alternatively 'Hi' message and actual scale value.
By pressing key ▲ or ▼ , you can increment or decrement value.

To save new parameters in non volatile memory, press ☛ button.
Message 'Fin' is displayed for a short time indicating that parameters are saved. Then, device come back to measure mode.

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INP201i LED

Presentation

INP201i LED is a 4-20 mA loop powered process field transmitter with local indicator.
It bring together in a single box (IP68) (ATEX ex-proof box on request) :

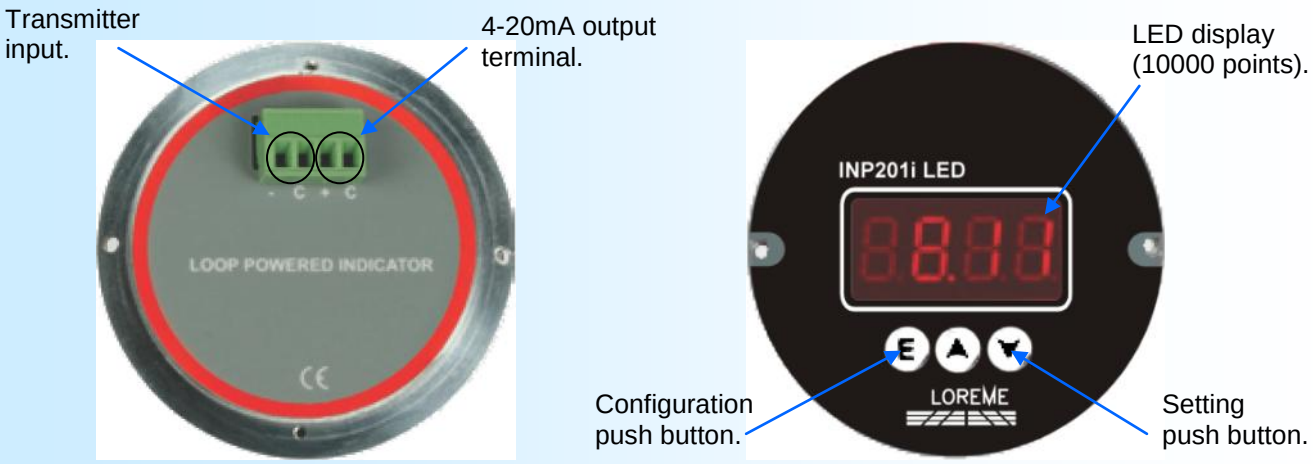
- A configurable display (see below).
- A loop powered transmitter of any type (digital, analog, HART, SIL2, …).

The configuration of display can be set by 3 buttons.
Adjustable parameters are:

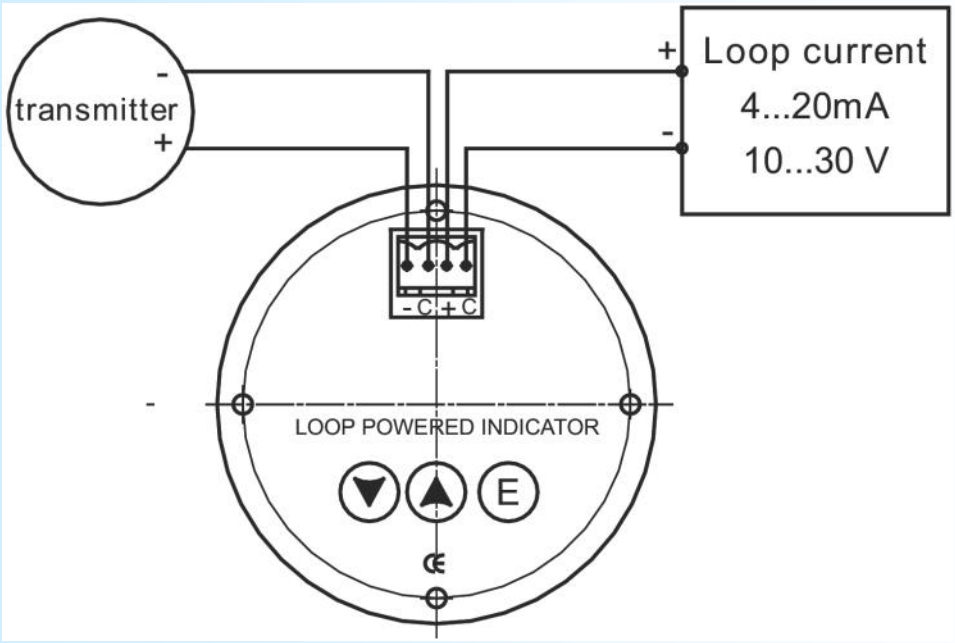
- Decimal point.
- Low scale value (-1999 à 9999).
- High scale value (-1999 à 9999).
- Overload limit.
- Sampling time.
- Unit.

Input signal is interpreted into physical unit, making easier reading of measured information.
Ex: Input 4-20 mA / Scale 0-1000 => Input = 12 mA, display = 500.

Technical specifications can be downloaded at: http://www.loreme.fr/fichtech/INP201_eng.pdf



Wirings



Configuration

All configurations abilities can be reachable with the following menus :

Press for several seconds the **E** button to start configuration mode.

Decimal point

=> **Menu 'dP'**

To switch to decimal point menu, press **E**. Device display '**dP**'.
Press ▲ or ▼ to move decimal point to required position.
(Ex : decimal point after third digit => Select « **3** » value)

Low scale

=> **Menu 'ZEro'**

To switch to low scale menu, press **E**. Device display '**Zero**' .
Press **E** one more time to set the value.
By pressing key ▲ or ▼ , you can increment or decrement value.

High scale

=> **Menu 'SPAn'**

To switch to high scale menu, press **E**. Device display '**SPAn**' .
Press **E** one more time to set the value.
By pressing key ▲ or ▼ , you can increment or decrement value.

Overload limit

=> **Menu 'Li'**

To switch to overload limit menu, press **E**. Device display '**Li**' .
By pressing key ▲ or ▼ , you can change the value: « **0** » for 4-20 mA and « **1** » for 3.6-20.4 mA

Sampling time

=> **Menu 'St'**

To switch to sampling time menu, press **E**. Device display '**St**'
By pressing key ▲ or ▼ , you can increment or decrement value (between 1 s and 10 s).

Unit

=> **Menu 'Unit'**

To switch to unit menu, press **E**. Device display '**Unit**'
By pressing key ▲ or ▼ , you can choose :
Non displayed unit : **nonE** or unit displayed alternatively with measure : **°C**, **°F**, **°K**, **%** (mesure: 4 s / unit: 2 s)

To save new parameters in non volatile memory, press ▲ and ▼ simultaneously for several seconds.
This action can be executed in every menu.

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INP201i LCD

Presentation

INP201i LCD is a 4-20mA loop powered process field transmitter with local indicator.
It bring together in a single box (IP68) (ATEX ex-proof box on request) :

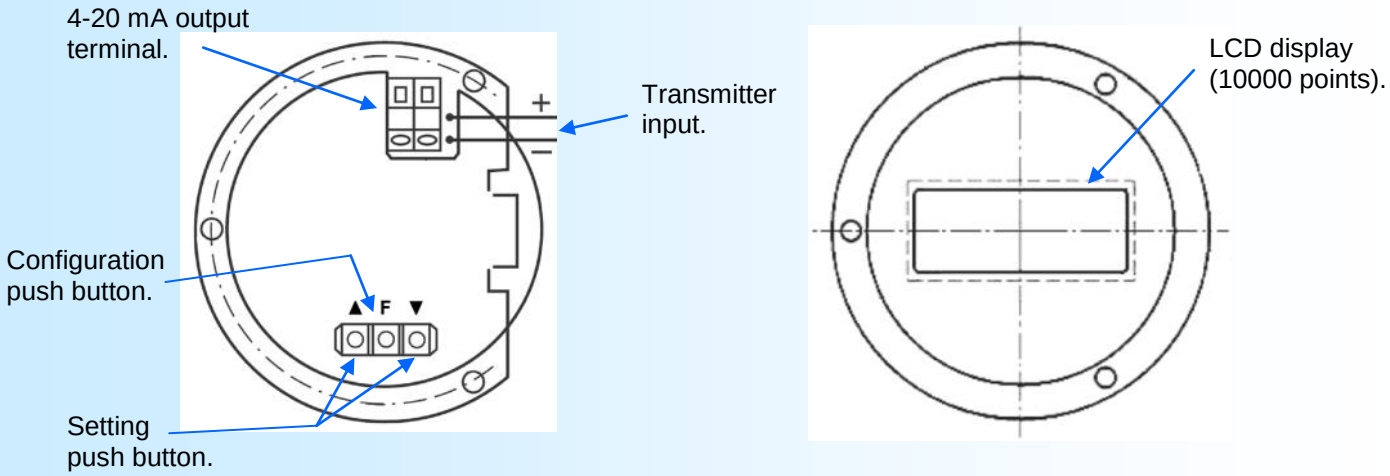
- A configurable display (see below).
- A loop powered transmitter of any type (digital, analog, HART, SIL2, …).

The configuration of display can be set by 3 buttons.
Adjustable parameters are:

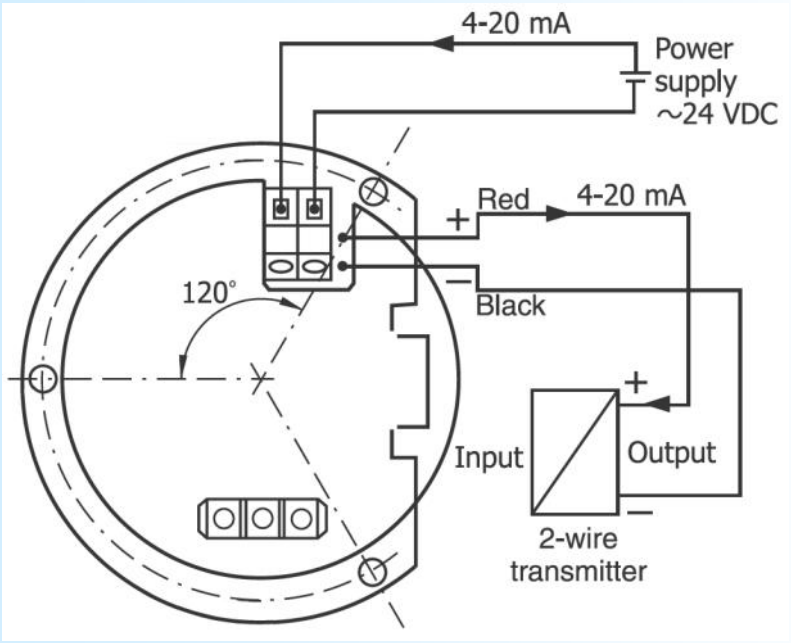
- Decimal point.
- Low scale value (-1999 à 9999).
- High scale value (-1999 à 9999).
- Overload limit.
- Sampling time.
- Unit.

Input signal is interpreted into physical unit, making easier reading of measured information.
(Ex: Input 4-20 mA / Scale 0-1000 => Input = 12 mA, display = 500);

Technical specifications can be downloaded at: http://www.loreme.fr/fichtech/INP201_eng.pdf



Wirings



Configuration

All configurations abilities can be reachable with the following menus :

Press for several seconds the **F** button to start configuration mode.

Decimal point

=> **Menu 'dP'**

Device display '**dP**'.
Press ▲ or ▼ to move decimal point to required position.
(Ex : decimal point after third digit => Select « **3** » value)

Low scale

=> **Menu 'ZEro'**

To switch to low scale menu, press **F**. Device display '**Zero**' .
By pressing key ▲ or ▼ , you can increment or decrement value.

High scale

=> **Menu 'SPAn'**

To switch to high scale menu, press **F**. Device display '**SPAn**' .
By pressing key ▲ or ▼ , you can increment or decrement value.

Limit on input current

=> **Menu 'Li'**

To switch to limit on input current menu, press **F**. Device display '**Li**' .
By pressing key ▲ or ▼ , you can change the value: « **0** » for 4-20mA and « **1** » for 4-20mA(+10%)

Filter

=> **Menu 'FiLt'**

To switch to filter menu, press **F**. Device display '**Filt**'
By pressing key ▲ or ▼ , you can choose :
1 => measure acquisition every 250ms (no filter)
2 => measure acquisition every 2 x 250ms = 500ms
3 => measure acquisition every 3 x 250ms = 750ms
…

Resolution

=> **Menu 'riS'**

To switch to resolution menu, press **F**.
By pressing key ▲ or ▼ , you can choose :
1 => no mean
2 => mean on the 2 last acquisition time intervals
3 => mean on the 3 last acquisition time intervals
…

To save new parameters in non volatile memory, press **F**.
To exit menu, press ▲ and ▼ simultaneously.

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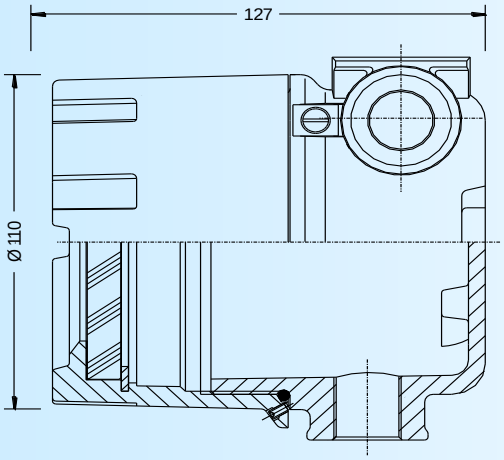
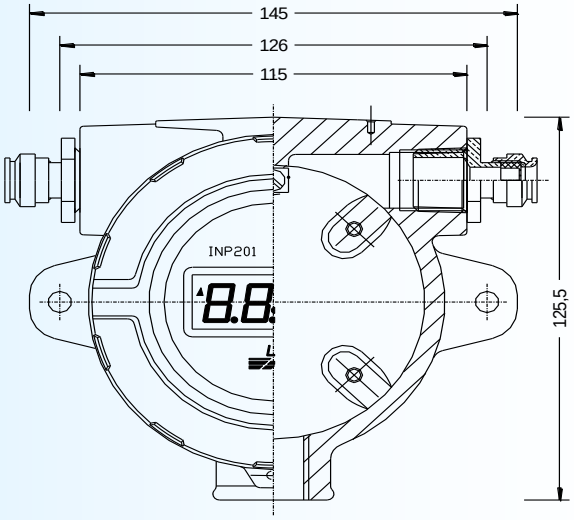
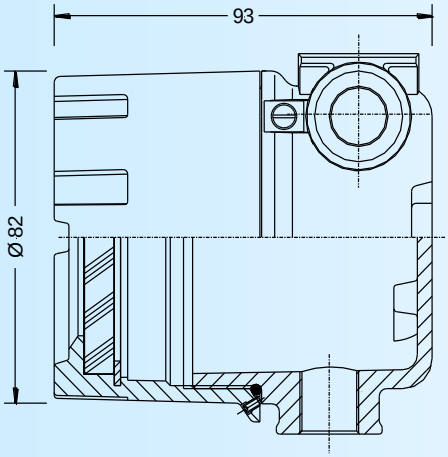
OUTLINE DIMENSION

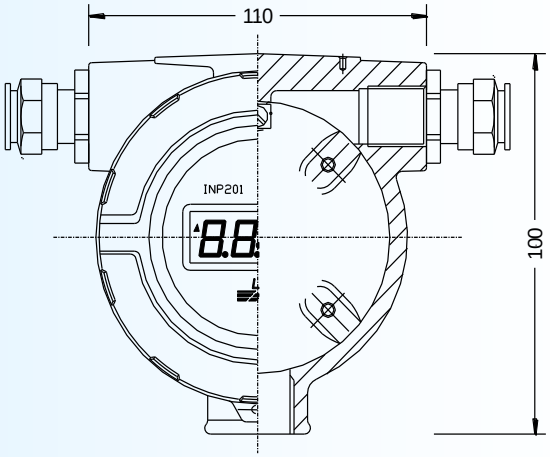
1/ INP201





2/ INP201i LED & INP201i LCD





EMC Consideration

1) Introduction

To meet its policy concerning EMC, based on the Community directives **2014/30/EU** & **2014/35/EU**, the LOREME company takes into account the standards relative to this directives from the very start of the conception of each product.
The set of tests performed on the devices, designed to work in an industrial environment, are made in accordance with **IEC 61000-6-4** and **IEC 61000-6-2** standards in order to establish the EU declaration of conformity. The devices being in certain typical configurations during the tests, it is impossible to guarantee the results in every possible configurations. To ensure optimum operation of each device, it would be judicious to comply with several recommendations of use.

2) Recommendations of use

2.1) General remarks

- Comply with the recommendations of assembly indicated in the technical sheet (direction of assembly, spacing between the devices, ...).
- Comply with the recommendations of use indicated in the technical sheet (temperature range, protection index).
- Avoid dust and excessive humidity, corrosive gas, considerable sources of heat.
- Avoid disturbed environments and disruptive phenomena or elements.
- If possible, group together the instrumentation devices in a zone separated from the power and relay circuits.
- Avoid the direct proximity with considerable power distance switches, contactors, relays, thyristor power groups, ...
- Do not get closer within fifty centimeters of a device with a transmitter (walkie-talkie) of a power of 5 W, because the latter can create a field with an intensity higher than 10 V/M for a distance fewer than 50 cm.

2.2) Power supply

- Comply with the features indicated in the technical sheet (power supply voltage, frequency, allowance of the values, stability, variations ...).
- It is better that the power supply should come from a system with section switches equipped with fuses for the instrumentation element and that the power supply line be the most direct possible from the section switch.
- Avoid using this power supply for the control of relays, of contactors, of electrogates, ...
- If the switching of thyristor statical groups, of engines, of speed variator, ... causes strong interferences on the power supply circuit, it would be necessary to put an insulation transformer especially intended for instrumentation linking the screen to earth.
- It is also important that the installation should have a good earth system and it is better that the voltage in relation to the neutral should not exceed 1V, and the resistance be inferior to 6 ohms.
- If the installation is near high frequency generators or installations of arc welding, it is better to put suitable section filters.

2.3) Inputs / Outputs

- In harsh conditions, it is advisable to use sheathed and twisted cables whose ground braid will be linked to the earth at a single point.
- It is advisable to separate the input / output lines from the power supply lines in order to avoid the coupling phenomena.
- It is also advisable to limit the lengths of data cables as much as possible.

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