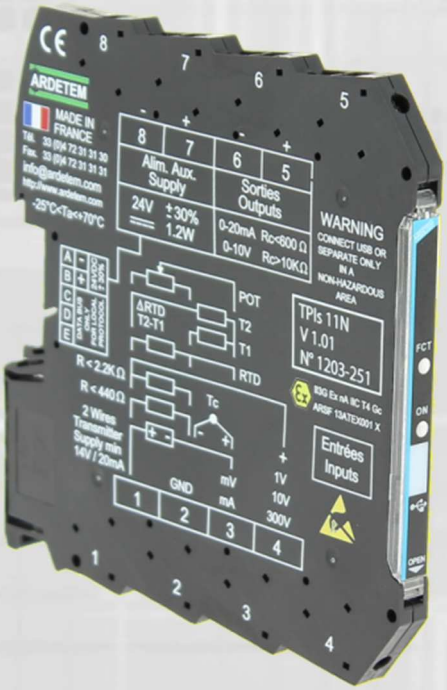
INPUTS/OUTPUTS ACQUISITION SYSTEM

Series TPIs



The series TPIs consists of measure converters for industrial signals (process, temperature, resistance, frequency...) which can either operate in an independent and autonomous way or be interconnected in a local network with interfaces of analog and relay outputs, or logic inputs.

Possibility to add on the communication bus a supervision and concentrator module with output Modbus, Ethernet, Profibus, Profinet and optionally with Datalogger.

DIN rail footing for the distribution of the power supply and the communication signals.

Power supply 24 V DC

Galvanic isolation between input/output/supply: 2.5 kV

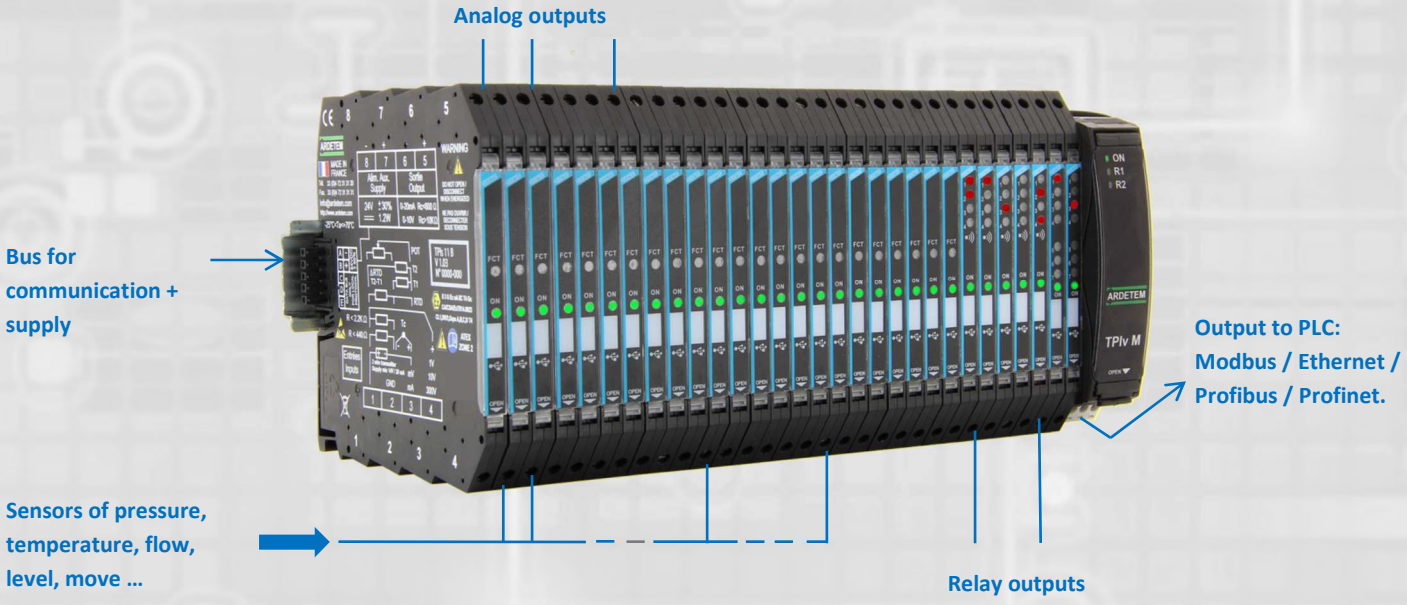
Extra thin housing: 7.2 x 114 x 114 mm.

Easy programming by µUSB plug on front face or quick configuration by µswitches for the versions S.

ATEX area 2 **II 3 G Ex nA IIC T4 Gc**
CL1,DIV2,Grps ABCD T4

Marking: CE

Typical example of implementing:



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Series TPIs

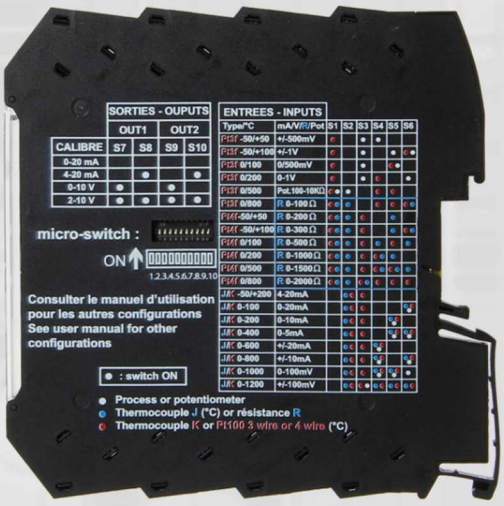
Programmable converters:



- ***TPIs 12***: Input mA, mV, V ➔ 1 analog output
- ***TPIs 212***: Input mA, mV, V ➔ 2 analog outputs
- ***TPIs 11***: Universal input ➔ 1 analog output
- ***TPIs 211***: Universal input ➔ 2 analog outputs
- ***TPIs PT100***: PT100 input ➔ 1 analog output
- ***TPIs 50***: Frequency input ➔ 1 analog output
- ***TPIs 250***: Frequency input ➔ 2 analog outputs
- ***TPIs 60***: 2 frequency inputs ➔ 1 analog output
- ***TPIs 260***: 2 frequency inputs ➔ 2 analog outputs
- ***TPIs 61***: 2 frequency inputs + integrator ➔ 1 analog output
- ***TPIs 261***: 2 frequency inputs + integrator ➔ 2 analog outputs
- ***TPIs 70***: TRMS voltage input ➔ 1 analog output
- ***TPIs 71***: TRMS current input ➔ 1 analog output

Fast version F (<10 ms) available for the TPIs 11/12/211/212

Converters configurable by switches:



Easy and quick configuration of the input and outputs without need of recalibrating, via 10 micro-switches.

Available versions:

- ***TPIs 13 S: Universal input (except voltage >1 V), 1 output***
- ***TPIs 213 S: Universal input (except voltage >1 V), 2 outputs***
- ***TPIs 13 S PT100: PT100 input, 1 output***
- ***TPIs 213 S PT100: PT100 input, 2 outputs***
- ***TPIs 14 S: Input mA, mV, V, 1 output***
- ***TPIs 214 S: Input mA, mV, V, 2 outputs***



Connection of the 24 vdc supply either on the TPIs housing or via the DRB-5 footing.

Footing mandatory for the types with 2 analog outputs.

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Series TPIs

Optional modules:



Modules of analog outputs

TPIs 2A: 2 isolated analog outputs

TPIs 4A: 4 isolated analog outputs



Modules of relay outputs

TPIs 4R: 4 relay outputs



Modules of logic inputs

TPIs 2T: 2 logic inputs, non isolated

TPIs 4T: 4 logic inputs, isolated

TPIs 6T: 6 logic inputs, non isolated



Modules of measure inputs

TPIs 4E11: 4 universal inputs

TPIs 4E12: 4 inputs mA, mV, V.

Concentrators supervisors:



The TPIv M is a 24 VDC power supply controller and a concentrator of measures for the converters or modules of the series TPIs.
It allows configuring and supervising the measures and the inputs/outputs of a local network consisting of TPIs's. The measures can be time-dated and stored inside a memory card of the type « microSD » (option D)

The programming is done through the software SlimSET via the µUSB access.

The supervision is performed depending on the version via a RS485 Modbus, Ethernet, Profibus or Profinet link (reading and writing with the option y). Option C « software workshop »: 20 calculation formulas, programmable in a dynamic way (operators, pre-defined functions, constants...)

The TPIv M allows to direct the main power supply 24 VDC or the emergency power supply on the footings of a network of maximum 50 TPIs 's.

Available versions:

- ***TPIv M: RS485 Modbus communications***
- ***TPIv MPB: Profibus link***
- ***TPIv MP: Profinet link***
- ***TPIv ME: Ethernet link***
- ***TPIv MEE: Ethernet link + Sender to remote network***
- ***TPIv MER: Ethernet link + Receiver from remote network***
- ***TPIv MEER: Ethernet link + Sender to and receiver from remote network***



Supervisor and concentration module in 7.2 mm housing

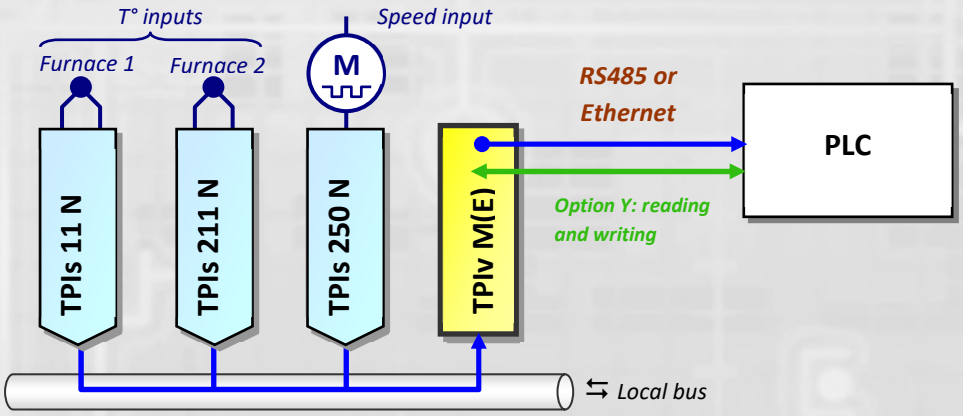
- ***TPIs M: RS485 Modbus communications***

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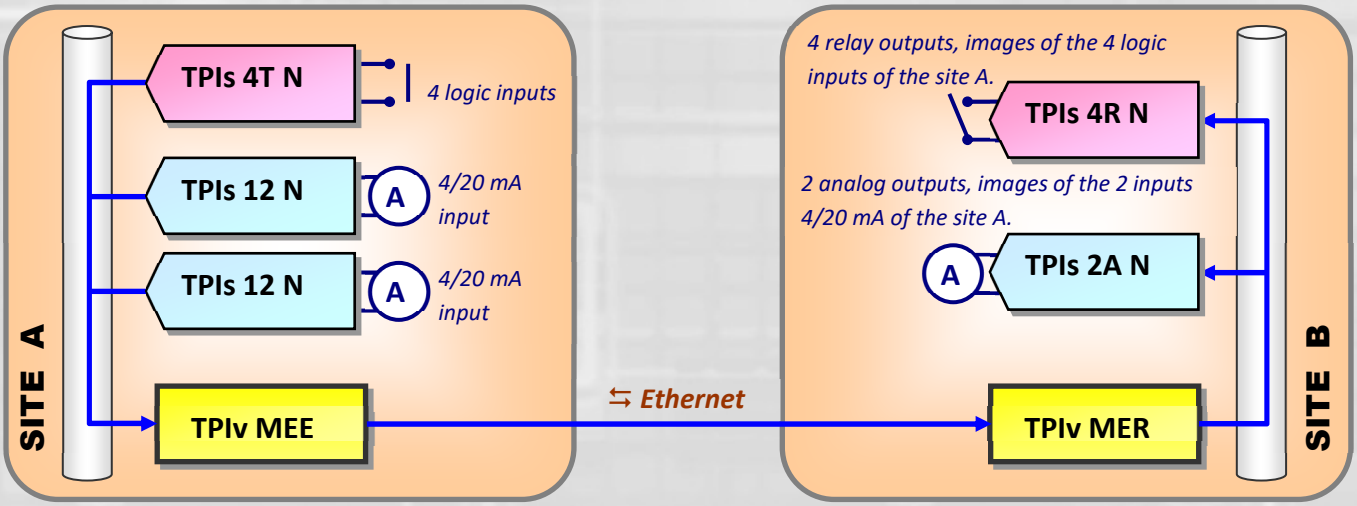
Series TPIs

Examples of applications:

1 - Sending of several measures on a PLC, in MODBUS (RS485) or Modbus TCP (Ethernet)



2 - Sending of the measures from a site to a remote site:



3 - Exchanges of inputs/outputs between 2 remote sites:

