

INPUTS/OUTPUTS ACQUISITION SYSTEM



Series μ Cs



The series μ Cs 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

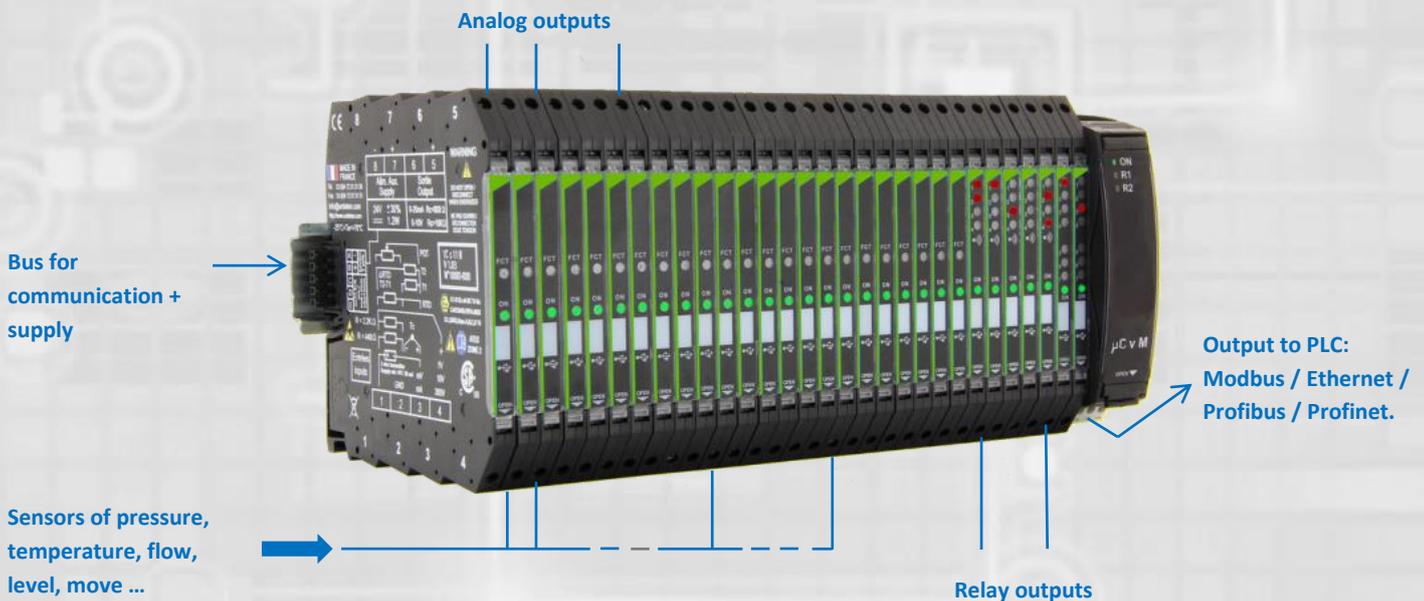
Extra thin housing: 7.2 x 114 x 114 mm.

Easy programming by μ USB plug on front face or quick configuration by μ switches for the versions S.

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

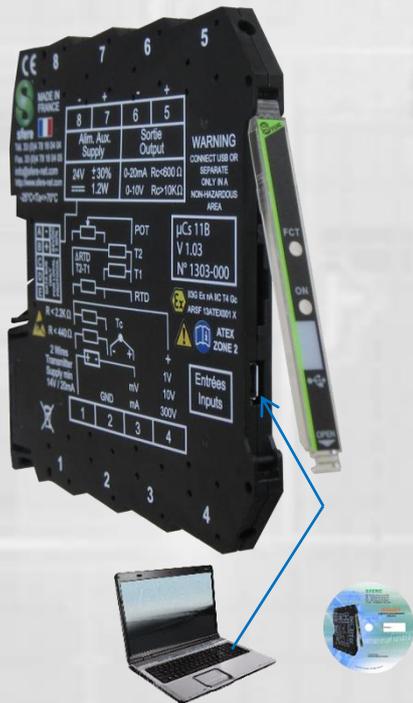
Marking:  

Typical example of implementing:



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Programmable converters:



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

Fast version F (<10 ms) available for the μ Cs 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:

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



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

Footing mandatory for the types with 2 analog outputs.

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Optional modules:



Modules of analog outputs

μ Cs 2A : 2 isolated analog outputs

μ Cs 4A : 4 isolated analog outputs



Modules of relay outputs

μ Cs 4R : 4 relay outputs



Modules of logic inputs

μ Cs 2T : 2 logic inputs, non isolated

μ Cs 4T : 4 logic inputs, isolated

μ Cs 6T : 6 logic inputs, non isolated



Modules of measure inputs

μ Cs 4E11 : 4 universal inputs

μ Cs 4E12 : 4 inputs mA, mV, V.

Concentrator supervisor:



The μ Cv M is a 24 VDC power supply controller and a concentrator of measures for the converters or modules of the series μ Cs. It allows configuring and supervising the measures and the inputs/outputs of a local network consisting of μ Cs'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 μ USB 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 μ Cv M allows to direct the main power supply 24 VDC or the emergency power supply on the footings of a network of maximum 50 μ Cs 's.

Available versions:

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



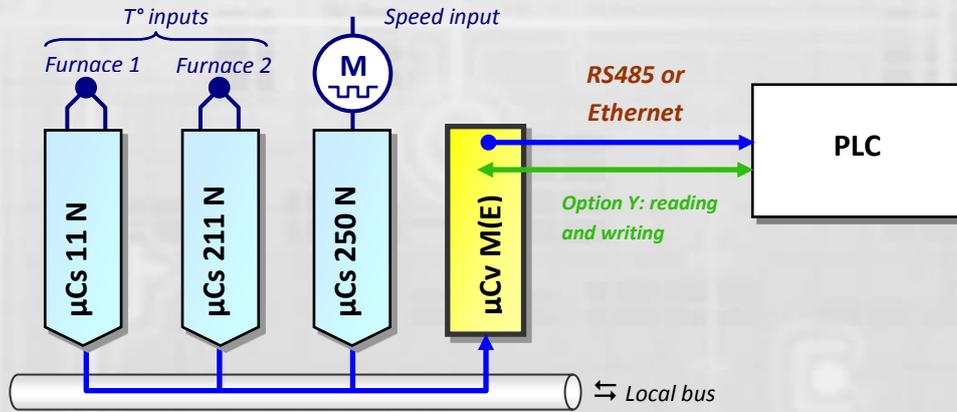
Supervisor and concentration module in 7.2 mm housing

- **μ Cs M**: RS485 Modbus communications

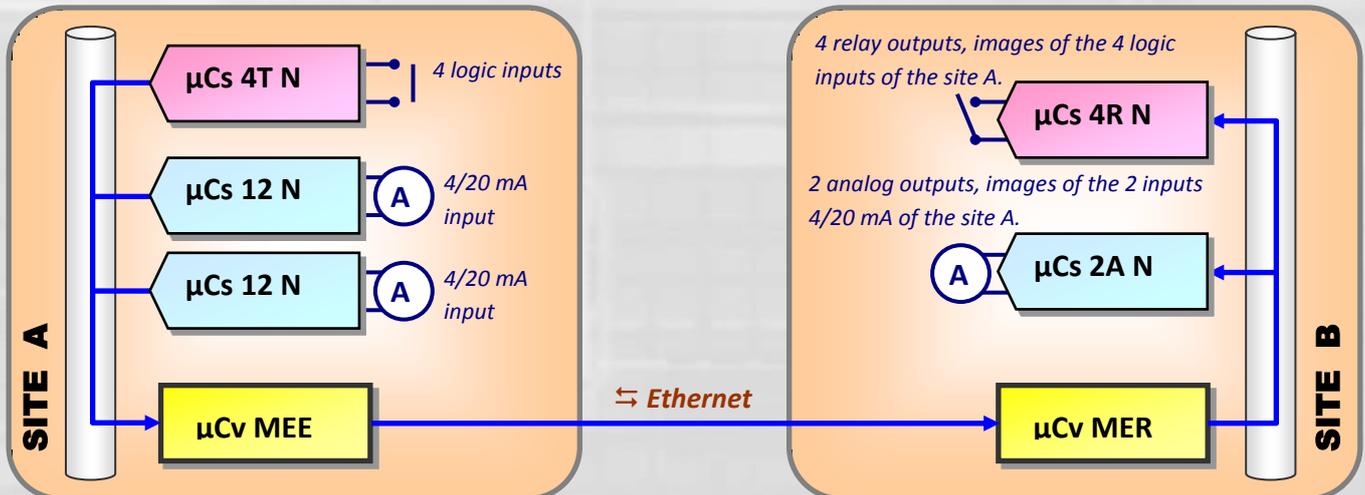
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Examples of applications:

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:

