

- **14 temperature measures per module**
RTD PT1000, Thermistor NTC inputs
- **Power supply and communication bus**
Into the DIN rail. up to 32 modules Interconnected
- **1 Ethernet Modbus TCP link**
For the entire BUS, up to 448 measurement points, embedded Web Server
- **Application:**
Silo-thermometry, Acquisition Interface for PLC, process monitoring, supervision ...



The CML36 is a compact temperature monitoring unit allowing to concentrate up to 32 modules of 14 channels into one Ethernet connection (Modbus TCP protocol) via the internal bus.

Available configurable inputs:

- 14 RTD PT1000 or NTC / PTC sensors in 2 wires assembly with one common and the possibility of adding new sensors type with firmware update (serial link), USB cable supplied separately.
- support the sensors with embedded diodes (automatic detection of the diode element and its direction with measurement compensation, for multiplexed systems sensors).
- all inputs with common ground (isolated from communication).

Front face:

- Measure display: Green LEDs 7 segments, 3 digits (1100 pts), digits height: 10 mm, resolution 1 °C
- Sensor break detection or scale overflow (display: LO, HI or Err).
- Two push buttons under the cover for the configuration

Feature:

- Mounting on DIN rail, communication bus (built-in DIN rail)
- connection on spring terminal block (max section 1 mm²)
- Conformal coating, protection rating : IP20

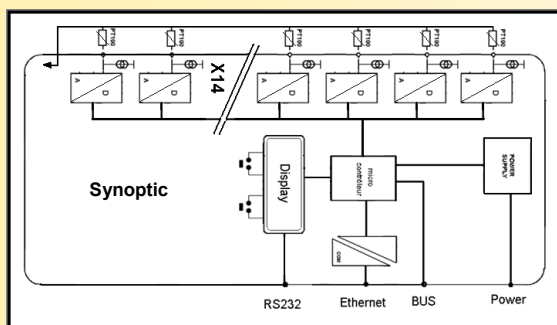
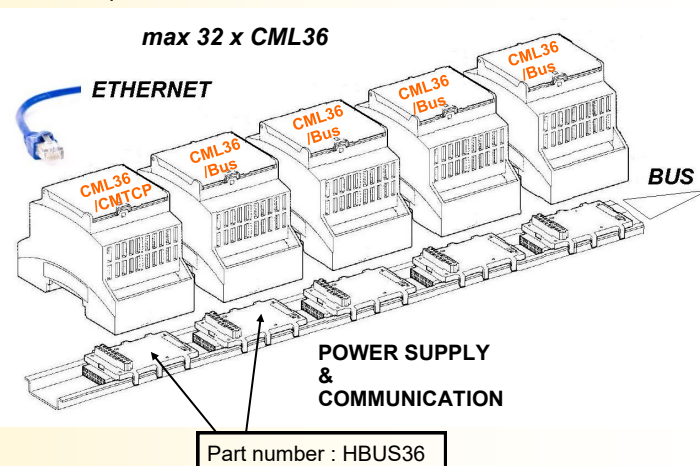
Configuration / update:

- The device can be configured via the front panel,
- Firmware update is possible via serial link.

Communication:

- Modbus TCP over Ethernet 10/100 T base (RJ45 connection)

BUS composition on the DIN rail.



Version and order code:

CML36/CMTCP	Master module with the Ethernet MODBUS TCP link
CML36/BUS	Slave module on the internal bus
HBUS36	Connecting element for the internal bus.
NAPPE-HBUS	Interconnection ribbon cable (length 50cm) (for bus continuity on another DIN rail) only one ribbon cable by Bus

INPUT (16 bits resolution)

Type	Range	Accuracy
Pt1000 2 wires	-50.....150 °C	+/- 0.8 °C
NTC/PTC 2 wires	-20.....100 °C	+/- 0.8 °C

The accuracy on 2 wires connection depends on the resistance binding the sensor (offset correction possible).

Measure current	< 2 mA
Measurement rate	5 per second

COMMUNICATION

Modbus TCP over Ethernet 10 /100 T Base Port 502
RJ45 socket.

Auxiliary POWER SUPPLY

8 32 Vdc

consumption:	(CML36/CMTCP)	60 mA typical @ 24V
consumption:	(CML36/BUS)	25 mA typical @ 24V

ENVIRONMENT

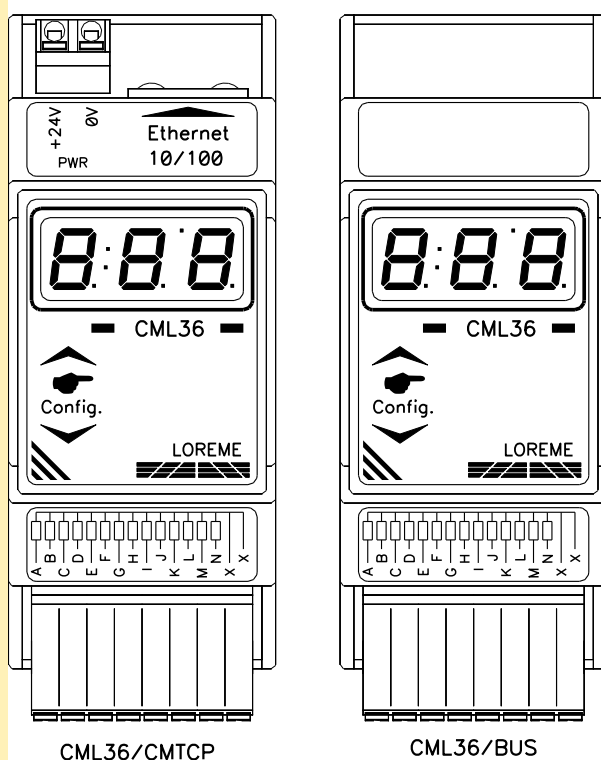
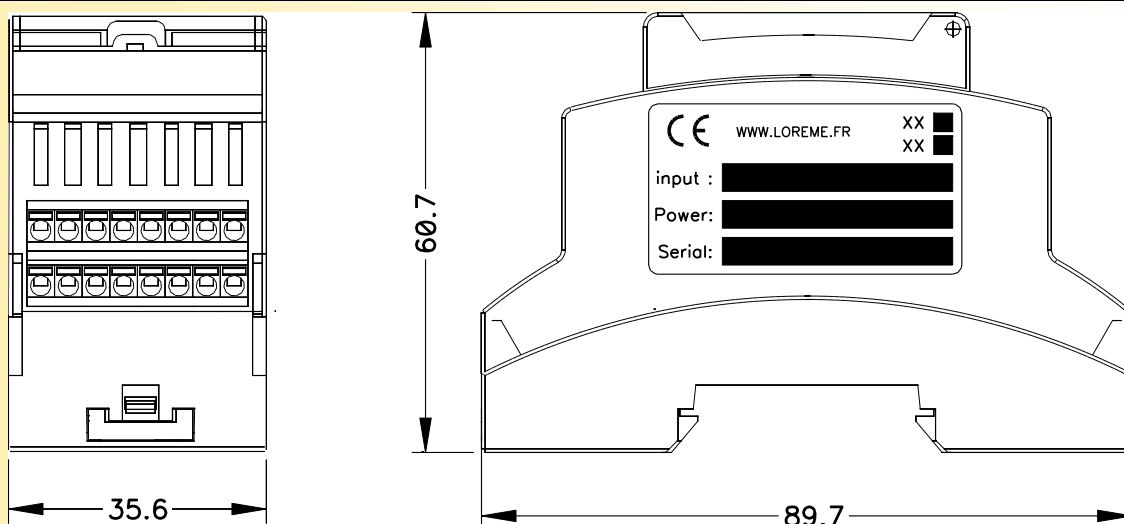
Operating temperature	-20 to 65 °C
Storage temperature	-20 to 85 °C
Thermal drift	< 0.1 % / °C
Humidity	85 % not condensed
Weight	100 g
Protection rating	IP 20
Dielectric strength:	
inputs / power supply:	no isolation
input / input:	no isolation
inputs / Ethernet communication:	500 V

Electromagnetic compatibility 2014/30/UE / Low Voltage Directive 2014/35/UE

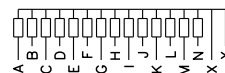
Immunity standard for industrial environments EN 61000-6-2		Emission standard for industrial environments EN 61000-6-4
EN 61000-4-2 ESD	EN 61000-4-8 AC MF	EN 55011 group 1 class A
EN 61000-4-3 RF	EN 61000-4-9 pulse MF	
EN 61000-4-4 EFT	EN 61000-4-11 AC dips	
EN 61000-4-5 CWG	EN 61000-4-12 ring wave	
EN 61000-4-6 RF	EN 61000-4-29 DC dips	



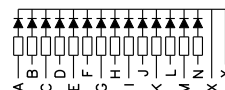
WIRING AND OUTLINE DIMENSIONS:



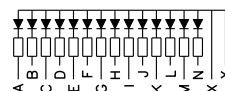
possible use:



Sensor RTD 1000 with common point:



Sensor NTC with common point and internal diode. direct sense:



Sensor NTC with common point and internal diode. reverse sense: