



• 8 isolated analog input, temperature and process

- 4 input channels for 4-wires PT100
- 4 input channels for 4...20 mA current

• Communication :

- Modbus-TCP (Ethernet) 6 simultaneous connections
- Embedded Web Server



• Application :

- measurement, control, management
- acquisition interface
- monitoring: motor, transformer, generator ...
- protection: temperature, pressure, current



The CML106 is a multichannel measurement unit for demanding applications in terms of accuracy and functional safety. This fully isolated product ensures total independence of each measurement channel.

Measure inputs:

(All inputs are isolated from each other)

Channel 1 to 4 : 4-wire Pt100
configurable linearization (2nd order polynomial).

Channel 5 to 8 : Current 4...20 mA
configurable display range.

Front face :

- LCD display with 2 lines of 16 characters (back-lighted).
- Three push buttons to configure the product.
(communication, display range, polynomial linearization)
- Configuration locked by password.

Communication:

Ethernet 10/100 link, Modbus-TCP protocol (RJ45 connection)
Up to 6 simultaneous connections.
Data format: 32 bits IEEE floating point.
Embedded WEB Server.

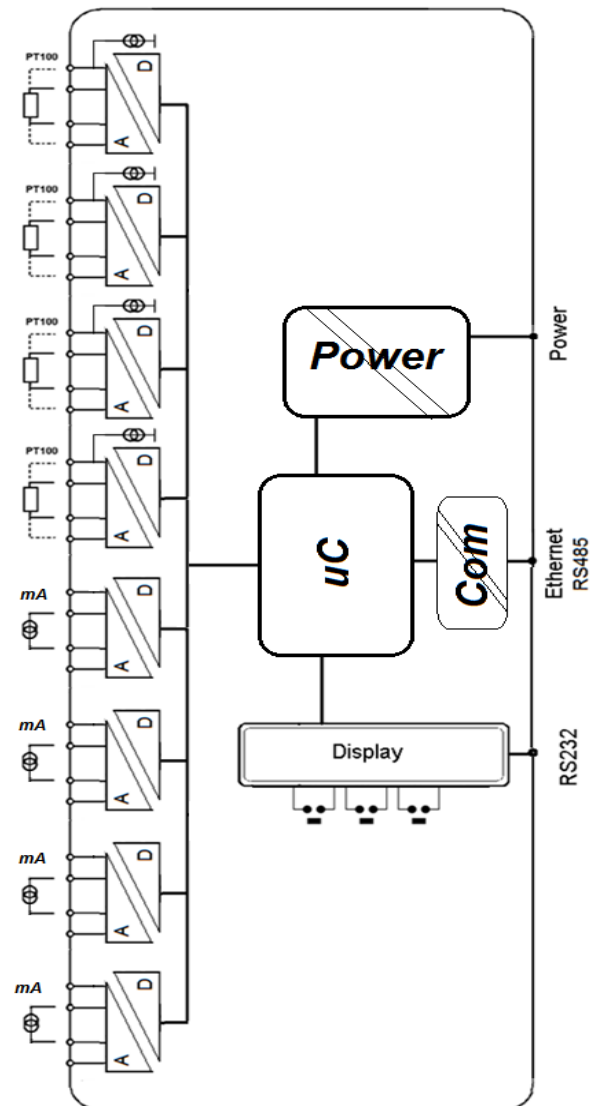
Realization:

- DIN standard modular housing (6 modules, 107 mm).
- Mounting on DIN rail (symmetrical).
- Connection on spring terminal block (max section 1 mm²).
- Conformal coating.
- Protection degree: IP20.
- Total galvanic isolation.

Configuration:

The device can be configured via the front panel or via the serial RS232 link (under the front cover). USB to 3 points plug cable supplied separately. Firmware update can be made via this serial link.

Synoptic



Version and order code: [Request a quote](#)

CML106/CMTCP : 4 temperature PT100 4 wires inputs
4 current 4...20mA inputs
Ethernet Modbus-TCP link

CML106/CMTCP-20ppm : Version with low drift and specific burn-in test procedure + calibration and burn-in certificate.

INPUT

(24 bits ADC , useful resolution: 16 bits , 20 ppm max reference)

TYPE	RANGE	ACCURACY
Pt100 4 wires excitation current : 1.5 mA typical, 2 mA max	0°C200 °C	< +/- 0.04°C@20°C
Current	4.....20 mA	< +/- 2 µA @20°C
Input impedance	50 ohms	

Scanning time (measure of all channels) 1000 ms

COMMUNICATION

Modbus-TCP over Ethernet 10/100 T base (RJ 45 connection)

POWER SUPPLY

Universal: (2 versions: Standard and non-polarized low voltage.)
 standard : 20.....265Vac & 20.....300Vdc
 low voltage : 9 Vdc.....to.....30Vdc
 consumption < 4 VA

RECOMMENDED OPERATING CONDITIONS

Operating temperature	-10 to 60 °C
Storage temperature	-20 to 85 °C
Effect	< 50ppm / °C
"Low drift" version	< 20ppm / °C
Relative humidity	85 % not condensed
Weight	~500 g
Protection	IP20
Dielectric strength:	
Power / Communication, Inputs	2500 Vrms continuously
Inputs / Inputs	500 Vrms continuously
Inputs / Communication	500 Vrms continuously
Insulation resistance	> 1 Gohms @ 500Vdc
MTBF (MIL HDBK 217F)	> 500 000 Hrs @ 25°C
Lifetime	> 130 000 Hrs @ 30°C

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:

