

**• 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 with 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)  
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 mm<sup>2</sup>).
- 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.

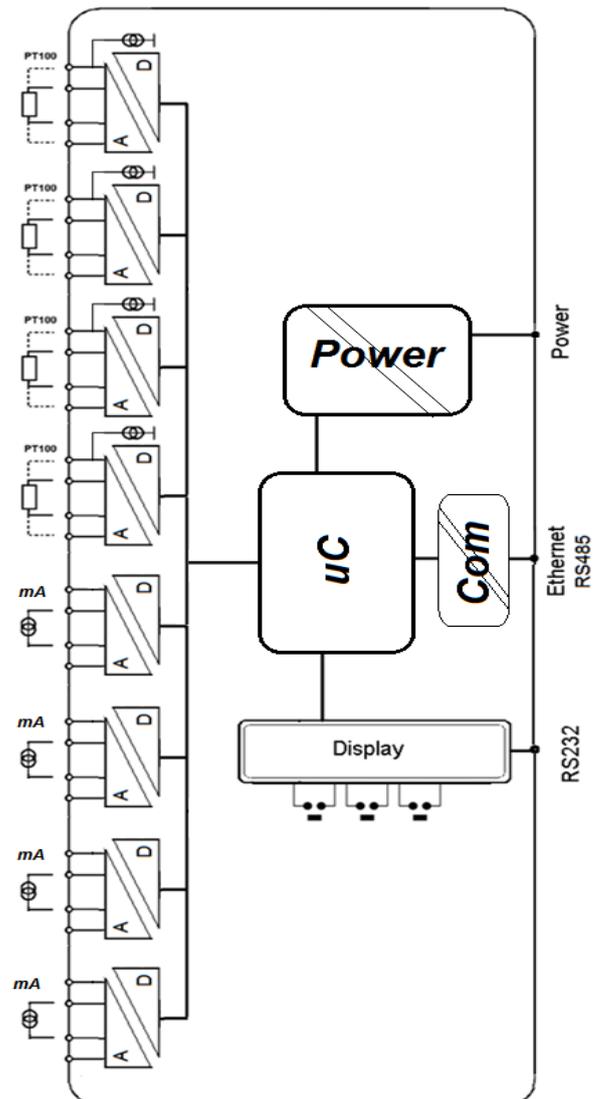
**Version and order code:**

[Request a quote](#)

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

**CML106/CMTCP-20ppm :** Low drift version  
with specific burn-in test procedure  
+ calibration and burn-in certificate.

**Synoptic**



**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°C .....200 °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:**

