

# MINIATURE CURRENT TRANSMITTER DIRECT CURRENT

CAL25CC

LOREME

- **DC Current input:**  
from 1A to 10 Adc (or +/- 1A to +/- 10A)
- **Hall effect Technology:**  
through-hole or terminal blocks design for input
- **Current or Voltage Output:**  
Unipolar or bipolar: 0 .. 4 .. 20mA, +/-20mA, +/-10V, ...  
isolated from power supply
- **Direct shunt replacement:**  
isolated mV output (no heat dissipation)
- **Low size:**  
17mm width
- **Wide range of power supply:**  
4.5...18Vdc, 18...36Vdc, 9...36Vdc, 18...75Vdc, ...



The CAL25CC transducer sensor allows direct current measurement, replacing favorably shunts, reducing insertion losses and providing a formatted output signal (4..20mA, 0...10 V).

## Application:

domain: solar farm, wind power, batteries

- Defective solar panels detection
- Panels output power measurement
- Panels orientation regulation
- Battery Monitoring

## Description:

- **Inputs (all scale available on request):**

- Direct Current: unipolar or bipolar  
Minimum range: 1 Adc  
Maximum range: 10 Adc

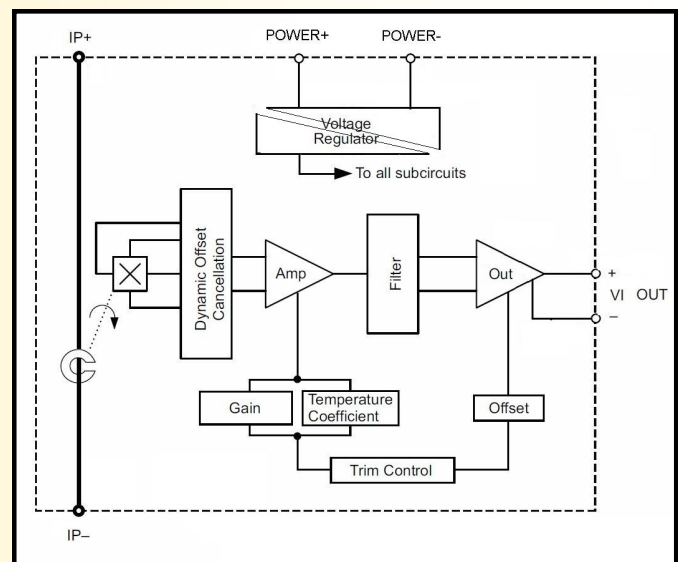
- **Output signal:**

- Unipolar or bipolar voltage or current
- Output voltage, all range up to 10V max (+/-10V)  
(possibility of mV output for direct shunt substitution with isolation)
- Current output: 0 ... 4 .... 20mA (+/- 20mA)

## Feature:

- Plastic profile for symmetrical DIN rail mounting.  
Protection rating IP20
- Screw terminal blocks connection  
(2.5mm<sup>2</sup> max for wire section)
- Green LED for indication of supply voltage.
- Trimmer for offset and span adjustment.
- Power supply protected against reverse polarity.
- Conformal coating.

## Synoptic



Version and order code:

[Request a quote](#)

**CAL25CC** Measure input on 25mm<sup>2</sup> terminal block (100A max)

Standard power supply : 18Vdc 36Vdc (default supply range)

Low voltage : 4.5Vdc.....18Vdc option: **-LWi**

extended standard : 9Vdc.....36Vdc option: **-Wi**

High voltage : 18Vdc.....75Vdc option: **-HWi**

other supply voltage on request

**INPUT**

TYPE	RANGE
Current	+/- 1Adc... +/- 10Adc
Input impedance	~ 200 uOhms
Accuracy	+/- 0.7 % of full scale
Standard response time	< 50 ms
In option, bandwidth up to 1000KHz (-3 dB)	
Admissible overcurrent	6 x rated current max

**OUTPUT**

TYPE	SCALE
Current	0 ... 4 ... 20 mA +/- 20mA
Load	0 .....500 Ohms
Voltage (volts) output impedance	0 ..1...5....10 V or +/- 10V 500 Ohms for 10V
Voltage (mV)	0...50...100mV +/- 100 mV (Other output range on request)

**POWER SUPPLY**

Standard: 18 to 36 Vdc, Consumption: <1.5 VA  
Reverse polarity protected.  
(All possible nominal voltage from 5Vdc to 300 Vdc or Vac)

**ENVIRONMENT**

Operating temperature:	- 25 °C ....+ 65 °C
Storage temperature:	- 40 °C ....+85 °C
drift:	~ 0.015% / °C
Humidity	85% non condensed
Weight	~ 150 gr.
Protection rating	IP20
Dielectric Strength:	(Input / Power supply / Output) 2000 Vrms continuous (3500 Vrms / 1 min)
Dielectric Strength:	(Power supply / Output) 500 Vrms continuous
MTBF (MIL HDBK 217F)	> 1 200 000 Hrs @ 25°C
Life time	> 200 000 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:**

