

Panel Voltmeter - Ammeter - Frequency meter

Direct or alternative current 94000CA

LOREME

- **Voltage input up to 800 Vrms (AC + DC) 94000uCA**
Two input ranges: 100V and 800V
- **Current input (AC and DC)**
94000iCA : direct input. Up to 10A
94000iCmV : mV input for shunt or Tio (current transformer)
- **Frequency measurement 94000-Hz**
- **1000 pts Led display for measurement**
Available in Red, Green, Yellow, Blue
- **Relay output option: 94000CA/R**
- **4-20mA analog output option**
- **Size 72 x 36 mm**
Compact depth



The 94000CA is a digital meter for voltage or current measurement designed for low-cost or small size applications. The optional relay allows to use it as a protection relay.

Description:

94000uCA (voltmeter)

- TRMS voltage measurement (100Vac+dc and 800 Vac+dc ranges)
- frequency range : 0...50...60Hz, option for 400 Hz
- compatible with wave train, phase angle variation
- configurable PT ratio for external potential transformer

94000iCA (ammeter)

- RMS current measurement (10A ac+dc direct input)
- frequency range: 0...50...60Hz, option for 400 Hz
- compatible with wave train, phase angle variation
- configurable CT ratio for external current transformer

94000-Hz (frequency meter)

- frequency measurement (100Vac and 800 Vac input ranges)
- measurable frequency range 1Hz to 450 Hz

Front face :

- 3 digits, 7 segments LED display (1000 pts), 14 mm height
- 2 push buttons for device configuration:
external Transformer ratio, threshold setting, ...
- LED indicator for alarm status

Relay output: (option 94000CA/R)

- 1 free potential changeover contact
usable in alarm, protection ,
- Threshold, direction of alarm, delay adjustable with push buttons in front face.

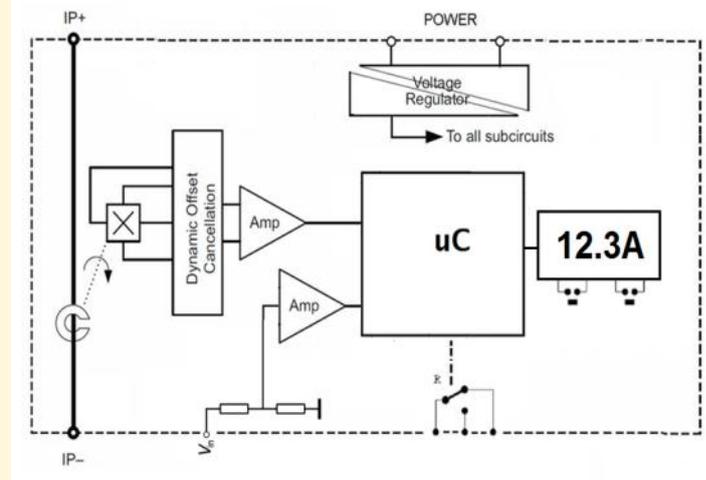
Analog output: (94000CA/S)

- One 4-20mA isolated output. Available only on the model with isolated current sensor input, for the retransmission of measure (configurable output range).

Feature:

- DIN panel case : 72 x 36 mm
- Pluggable screw terminal blocks (2.5 mm²)
- Universal power supply AC and DC
- Galvanic isolation input / power supply / relay
- Conformal coating
- Protection rating IP54 (front face without buttons)

Synoptic:



Version and order code:

[Request a quote](#)

- 94000uCA** AC+DC voltmeter (100V and 800V, 50-60Hz)
- 94000iCA** AC+DC ammeter, direct input, 10A max
- 94000iCmV** ammeter, mV input for shunt (AC+DC)
or Tio : split core current transformer (AC only)
- 94000-Hz** Panel frequency meter

- option:** /R: 1 threshold relay
/S: 4-20mA analog output (Only for 94000iCA model)
- **400Hz** for measure on networks up to 440Hz
option /R and /S are not cumulative.

INPUT		
TYPE	RANGE	ACCURACY
94000uCA		
AC voltage (direct input)	800 V	0.3% +/-1 digit
DC voltage (direct input)	800 V	0.3% +/-1 digit
Input impedance	800Kohms	
Measurement Threshold	10 V	
Power consumption	0.8 W	
AC voltage (direct input)	100 V	0.3% +/-1 digit
DC voltage (direct input)	150 V	0.3% +/-1 digit
Input impedance	100Kohms	
Measurement Threshold	1.5 V	
Power consumption	0.1 W	
Overload	1.5 x Un for 3 seconds	
94000iCA		
AC current (direct input)	10A	+/- 0.6 %
Overload	6 x In for 3 sec	
Measurement Threshold	2% of input range	
94000iCmV		
AC voltage (direct input)	2000mV	+/-0.2%
Overload	6 x Un for 3sec	
Measurement Threshold	1% of input range	
94000-Hz		
Frequency (for all inputs)	1Hz....440 Hz	+/-0.2% +/-1 digit
response time: standard	1000ms (measure integration) configurable from 0.01 to 60s	

RELAY	
Switching power:	2A / 250 V, 60VA
changeover contact isolation:	1500 Vac
Analog output	
Current:	4...20mA +/-10µA
admissible load:	0...350 Ohms
POWER SUPPLY	
Universal, not polarized, available in 3 versions	
20....70Vac/dc	
85....265Vac/dc	
11Vdc....30Vdc.	
consumption < 1.5 VA	
ENVIRONMENT	
Operating Temperature	-10 to 60°C
Storage Temperature	-20 to +85 °C
Thermal drift (% of the full scale)	< 0.02% / °C
Humidity :	85 % (not condensed)
Protection rating :	IP54
Weight :	95 g
Dielectric strength	1500 Vrms continuous
	Input/Power/Output-Relay
MTBF (MIL HDBK 217F)	> 3 000 000 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: panel cut-out : 68.5 x 32.5mm

