

Panel Voltmeter - Ammeter - Frequency meter 94000CA

LOREME

- **Voltage input up to 800 Vrms**
Two input ranges: 100V and 800V
- **Current input (AC and DC)**
94000iCA : direct input. Up to 10A
94000iCmV : mV input for shunt
- **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
- frequency range : 50...60Hz
- compatible with wave train, phase angle variation
- configurable PT ratio for external potential transformer

94000iCA (ammeter)

- RMS current measurement (10A direct input)
- frequency range: 50...60Hz
- 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.

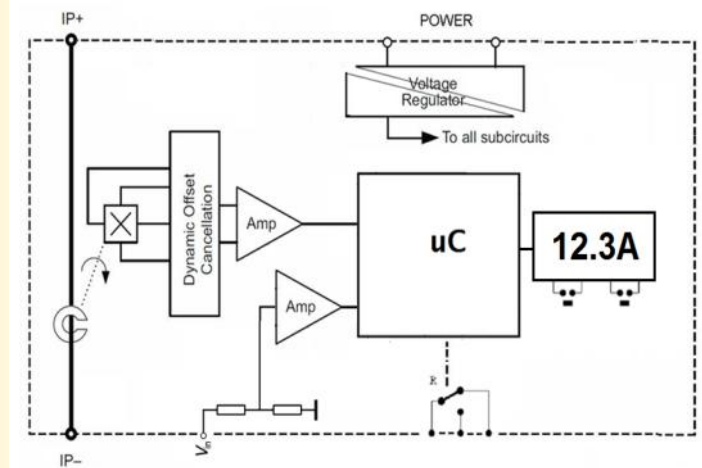
Analog output: (94000CA/S)

- 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:

94000uCA AC+DC voltmeter
94000iCA AC+DC ammeter
94000iCmV ammeter, mV input for shunt

94000-Hz Panel frequency meter

option: /R: 1 threshold relay
/S: 4-20mA analog output (Only for 94000iCA model)
option /R and /S are not cumulative.

INPUT			RELAY	
TYPE	RANGE	ACCURACY	Switching power: 2A / 250 V, 60VA changeover contact isolation: 1500 Vac	
94000uCA				
AC voltage (direct input)	800 V	0.5% +/-1digit	Analog output	
DC voltage (direct input)	800 V	0.5% +/-1digit	Current: 4...20mA +/-10µA	
Input impedance	800Kohms		admissible load: 0...350 Ohms	
Measurement Threshold	10 V		POWER SUPPLY	
Power consumption	0.8 W		Universal, not polarized, available in 3 versions	
AC voltage (direct input)	100 V	0.5% +/-1digit	20....70Vac/dc	
DC voltage (direct input)	150 V	0.5% +/-1digit	85....265Vac/dc	
Input impedance	100Kohms		11Vdc....30Vdc.	
Measurement Threshold	1.5 V		consumption < 1.5 VA	
Power consumption	0.1 W		ENVIRONMENT	
Overload	1.5 x Un for 3 seconds		Operating Temperature -10 to 60°C	
94000iCA			Storage Temperature -20 to +85 °C	
AC current (direct input)	10A	+/- 0.6 %	Thermal drift (% of the full scale) < 0.02% / °C	
Overload	6 x In for 3 sec		Humidity : 85 % (not condensed)	
Measurement Threshold	2% of input range		Protection rating : IP54	
94000iCmV			Weight : 95 g	
AC voltage (direct input)	2000mV	+/-0.2%	Dielectric strength 1500 Vrms continuous	
Overload	6 x Un for 3sec		Input/Power/Output-Relay	
Measurement Threshold	1% of input range		MTBF (MIL HDBK 217F) > 3 000 000 Hrs @ 25°C	
94000-Hz			Life time > 200 000 Hrs @ 30°C	
Frequency (for all inputs)	1Hz....440 Hz	+/-0.2% +/-1 digit	Electromagnetic compatibility 2014/30/UE / Low Voltage Directive 2014/35/UE	
response time: standard	1000ms (measure integration) configurable from 0.01 to 60s		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 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
			EN 55011	
			group 1 class A	
			CE	

WIRING AND OUTLINE DIMENSIONS:

panel cut-out : 68.5 x 32.5mm

