

# PRECISION PICO/NANO AMPERE SOURCE ANALYZER (A.C./D.C.)

**Introduction:** Precision pico/nano ampere meter range of meter/indicator are available in 8 different regular models apart from tailor made solutions virtually covering all industrial and research applications meeting all electrical, thermal, mechanical, and environmental specifications. These indicators are first choice for online monitoring of pico ampere meter/nano ampere meter at generation, transmission/distribution, defense, electrical/mechanical m/c testing instrument, industrial electronics, railway, and avionics and solid state physical application and many research and development activities. These meters are compatible to any standard or hall/shunt/thermocouple sensor and display with very high degree of accuracy/repeatability/reliability and are available in different constructional material like ceramic-coated MS, poly carbonate cabinets.

**Benefits:** Low burden/higher accuracy/0.1 pico amp resolution.

- 5-1/2/6-1/2 digit display /Consistent performance over large temperature/humidity range (70°C and 80 % RH)
- Scaled directly in Pico/nano ampere with repeatable accuracy.
- Auto/manual zero offset without drift.
- Auto drift tracking
- RS-32 interface/high sample rate – 2000 sample/second.
- Feed back current measurement technique.



**MPAM-00099.9**

**NANO AMPERE METER -**



**MAPM- 00999.9**

**Range<99999.9 nano-amps PICO-AMPERE METER**



**Pico ampere/nano volt meter (dual)**

**Range< 99999.9 Pico-ampere**

**General electrical/mechanical specifications:**

**ELECTROMETER D.C./A.C. Range<999999 nano volt meter / 999999 pico amperemeter**

Model	Range 10 <sup>-9</sup> /10 <sup>-12</sup> /10 <sup>-15</sup> Ampere	Pulse/D.C./Pulse Frequency Range	Burdon	Accuracy Restricted to Resolution level	Resolution Quantified/ optional	Voltage/current source Volt/current/optional As demanded	INTERFACE
MICHVEM-9999990101	05.0/01.0 -999999nA Upto 1.0 amps	0-50K.Hz	< 100 micro-volts	99.99999%	5 nV/5nA	015 VOLTS/001.0 A	RS-232/USB
MICHVEM-9999990401	05.0/01.0 -999999nA Upto 1.0 amps	0-50 k.Hz	< 100 micro volts	99.99999%	5 nV/5nA	040 VOLTS/001.0 A	RS-232/USB
MICHVEM-9999990102	10.0/05.0 -999999pA Upto 1.0 amps	0-50K.Hz	< 100 micro volts	99.99999%	5 nV/5pA	015 VOLTS/001.0 A	RS-232/USB
MICHVEM-9999990402	10.0/05.0 -999999pA Upto 1.0 amps	0-50 k.Hz	< 100 micro volts	99.99999%	5 nV/5pA	040 VOLTS/001.0 A	RS-232/USB
MICHVEM-9999991002	10.0/05.0 -999999pA Upto 1.0 amps	0-50k.Hz	< 100 micro volts	99.99999%	5 nV/5pA	100 VOLTS/001.0 A	RS-232/USB
MICHVEM-9999992002	10.0/05.0 -999999fA Upto 1.0 amps	0-50 k.Hz	< 100 micro volts	99.99999%	5 nV/5pA	200 VOLTS/001.0 A	RS-232/USB
MICHVEM-9999992003	10.0/05.0 -999999 fA Upto 1.0 amps	0-50 k.Hz	< 100 micro volts	99.99999%	5 nV/5fA	200 VOLTS/010.0m A	RS-232/USB

Operating voltage: 220 volt A.C. (50-20,000 Hz).

**Mesasurement range:**

**Current :** 10<sup>-11</sup>-10<sup>-07</sup> in multiple of x10 ,upto 1.0 amps least count- 1.0 pico ampere with options

**Source range:**

**Current :** 10<sup>-11</sup>-10<sup>-07</sup> in multiple of x10 ,upto 1.0 amps least count- 1.0 pico ampere with options

Input capacitance: 10 nF

Response time: 2000 sample/sec

Source current range : 10 nano volts-10.0 mili volt/10.0 mili volt-100.0 volts **AC/DC (optional)**

Burden: less than 100 micro volt/full scale current

Accuracy: 0.5/1.0/2.0 % reading

Repeatability: 100 of reading

Resolution: 1/10 of least significant bit

Linearity adjustment: upto 100 nano volt

Input imedence: 100 mega ohm (<1000 nano volt), 1000 mega ohm (<1000 mili volt)

Filtering: low pass

Offset: variable upto 10,000 nano ampere (manual/auto)

CMMR: >80 db at 50-60 Hz

Isolation: > 100 giga ohm

Connector: BNC-9 pinx2 and BNC-25 pinx2

Size: 5X8X8 inches/rack mounted or portable

Interface: RS-232

**NOTES: The numeral after product code indicates the (nano volts) range and last digit corresponds to size of panel (5x5x8, 8x8x12)**

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