

## PRO SOLAR-2A Digital T-RMS AC/DC Clamp Meter

### PRODUCT INTRODUCTION

The Metravi Pro Solar-2A is a handheld digital T-RMS Clamp Meter. It measures upto 1500V DC, which makes it ideal for high voltage applications, including Solar, PV, EV, Power, Motor, etc. applications.

#### It can measure:

- AC/PV DC Voltage
- AC/DC Current
- Resistance
- Capacitance
- Frequency
- Continuity
- Diode
- Temperature
- Hz%

#### This digital AC/DC Current True RMS Clamp meter also features:

- Auto Power OFF
- Data Hold
- Peak Hold
- Backlit LCD display


### FEATURES

#### Input Protection Limits

Function	Maximum Input
A AC, A DC	1200A DC / AC
PV DC, V AC	1500V DC / 1000V AC
Resistance, Capacitance, Frequency, Diode Test Temperature	600V DC / AC



### GENERAL SPECIFICATIONS

Clamp jaw opening	2" (52mm) approx.
Display	3-3/4 digits (4000 counts) backlit LCD Buzzer.
Continuity Check	Sounds at less than $(50 \pm 30) \Omega$
Diode Test	Test current of 0.9mA typical; Open circuit voltage approx 3.2V DC typical.
Low Battery Indication	"  +" is displayed.
Over-range Indication	"OL" is displayed.
Measurement Rate	3 times per second, nominal.
PEAK	Captures peaks > 1ms.
Temperature sensor	Type-K thermocouple.
Input Impedance	10M $\Omega$ (VDC and VAC).

## PRO SOLAR-2A Digital T-RMS AC/DC Clamp Meter

<b>Battery</b>	One 9 Volts (NEDA 1604) battery
<b>Operating Temperature</b>	41°F to 104°F (5°C to 40°C)
<b>Storage Temperature</b>	-4°F to 140°F (-20 to 60°C)
<b>Operating Humidity</b>	Max 80% up to 87°F (31°C) decreasing linearly to 50% at 104°F (40°C)
<b>Storage Humidity</b>	<80%
<b>Operating Altitude</b>	7000 ft. (2000 meters) maximum
<b>Auto Range</b>	
<b>Auto power OFF</b>	After approx. 15 minutes.
<b>Dimensions &amp; Weight</b>	270mm (H) x 107mm (W) x 50mm (D), 554 gms
<b>Safety</b>	For indoor use and in accordance with the requirements for double insulation to IEC1010-1 (2001): EN61010-1 (2001) Over voltage Category III 1000V and Category IV 600V, Pollution Degree 2.

### SPECIFICATIONS

#### PV DC Voltage

Range	Accuracy (% of reading + digits)	Resolution
400mV	± (1% + 10d)	0.01mV
4V	± (1% + 3d)	1mV
40V	± (1% + 3d)	10MV
400V	± (1% + 3d)	100MV
1500V	± (1% + 3d)	1V

Input Protection: 10MΩ

Over-range Protection: 1000VDC

#### AC Voltage T-RMS

Range	Accuracy (% of reading + digits)	Resolution
4V	± (1.2% + 5d)	1mV
40V	± (1.2% + 5d)	10MV
400V	± (1.2% + 5d)	100MV
1000V	± (1.2% + 5d)	1V

Input Protection: 10MΩ

Over-range Protection: 1000VAC T-RMS

Frequency Response: 50Hz ~ 400Hz

#### AC Current

Range	Accuracy (% of reading + digits)	Resolution
400A	± (3.0% + 3A)	100mA
1200A	± (3.5% + 6d)	1A

Over-range Protection: Maximum input 1200A

Frequency Response: 50Hz ~ 60Hz

#### DC Current

Range	Accuracy (% of reading + digits)	Resolution
400A	± (3.0% + 3A)	100mA
1200A	± (3.5% + 6d)	1A

Over-range Protection: Maximum input 1200A

## PRO SOLAR-2A Digital T-RMS AC/DC Clamp Meter

### Resistance

Range	Accuracy (% of reading + digits)	Resolution
400Ω	± (1.0% + 4d)	0.1Ω
4kΩ	± (1.5% + 4d)	1Ω
40kΩ	± (1.5% + 4d)	10Ω
400kΩ	± (1.5% + 4d)	100Ω
4MΩ	± (1.5% + 4d)	1kΩ
40MΩ	± (2.0% + 4d)	10kΩ

Over-range Protection: 600V rms

Frequency through test leads when meter is set to AC voltage

### Frequency (Auto-ranging)

Range	Accuracy (% of reading + digits)
10Hz to 100kHz	± 1.0% ±5 digits

Input Protection: 1000VAC

Sensitivity: >5V AC

Frequency through jaws when meter is set to AC current

### Frequency (Auto-ranging)

Range	Accuracy (% of reading + digits)
40Hz to 1kHz	± 1.0% ±5 digits

Maximum Input: 1200A

AC Sensitivity: >150A AC

### Duty Cycle

Range	Accuracy (% of reading + digits)	Resolution
(0.1% to 99.9%)	± (1.2% + 5d)	0.1%

Over-range Protection: 600V RMS

### Temperature

Range	Accuracy (% of reading + digits)	Resolution
(-20 to 100°C)	± (2.0% + 5°C)	1°C
(-4 to 1832°F)	± (3.0% + 9°F)	1°F

Sensor: K-type thermocouple with banana plugs

Over-range Protection: 600V RMS

### Peak of AC Current

Range	Accuracy (% of reading + digits)	Resolution
400A	± (4.0% + 5d)	100mA
1200A	± (4.0% + 5d)	1A

Frequency Response: 50Hz ~ 60Hz

### Capacitance

Range	Accuracy (% of reading + digits)	Resolution
40nF	± (5.0% + 20d)	1nF
400nF	± (3.5% + 10d)	10nF
4μF	± (5.0% + 10d)	100nF
40μF	± (5.0% + 10d)	1μF
400μF	± (5.0% + 10d)	10μF

Over-range Protection: 600V RMS

### Diode

Testing Condition	Reading
Forward DCA is approx. 0.9mA, backward Voltage is approx. 3.2V	Forward voltage drop of Diode

### Continuity

Testing Condition	Reading
Open voltage is approx. IV	Buzzer makes a long sound, while resistance is less than (50±30Ω)

Over-range Protection: 600V RMS

