

# Solar clamp meter



- **2000 V DC**
- TRMS 1500 V AC
- 1500 A AC/DC
- Smart Hold
- Auto ranging
- MIN/MAX Hold
- Inrush Current
- Megger Link app compatible
- CAT IV 600 V / CAT III 1000 V
- Data logger
- PV test leads with MC4PV plugs

### **DESCRIPTION**

Measuring up to 2000 V DC and 1500 V AC (using the PVHV Leads), as well as 1500A AC or DC, the DCM1500S is ideal for use in the installation, maintenance, monitoring and testing of photovoltaic systems as well standard AC or DC electrical equipment.

The meter is supplied with both standard 4mm leads as well as the new PVHV1 (4 mm) and PVHV2 (MC4PV) HV lead sets. It has a large clear backlit display and an automatic torch in the jaw to assist use in poorly lit areas.

Using the free Megger Link App, the measurement value can be remotely monitored on a smart device using the built-in Bluetooth®. This will give a live trend graph and offer the ability to sample and log the values for later analysis.

The smart data-hold expands the standard hold function by giving the operator an audible warning if the "held" reading increases by 50 counts or above. Min/Max hold provides the ability to measure the maximum and minimum values over a period of time, with each value selectable in turn.

Other features include a High Frequency Rejection Filter, inrush current measurement, internal data logging, a non-contact volt seek mode and manual DC Amp zeroing

In addition to voltage and current measurement the DCM1500S has the ability to measure Resistance, Diode, Capacitance, temperature and Frequency.

The DCM1500S is safety rated to IEC 61010-1 and IEC/ EN61010-2-033 CAT IV 600 V, and CAT III 1000 V

#### **APPLICATION**

The DCM1500S is designed to be used on electrical systems and equipment, including Solar/Photovoltaic installations where, there is a need to measure current, volts, resistance and frequency. It is therefore intended for use while installing, maintaining, fault-finding or monitoring those systems.

The tactile barrier below the jaws of the instrument ensures a safe working distance for the operator's hand when measuring current on live uninsulated conductors, although additional personal protection must still be used.

The Smart Hold allows increases in measurements to be monitored with an audible tone

The Max/Min and In-rush modes enable maximum load currents from equipment to be identified such as start-up currents to motors and heaters.





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The DC current measurement can also be used in applications including battery monitoring, automotive, charging and load circuits, electric vehicle servicing, lift maintenance, UPS commissioning, servicing and maintenance, electro-plating plants and welding equipment servicing as well as domestic power generation from solar panels and wind-turbines.

#### **ADDITIONAL FEATURES**

- 6,000 counts digital display
- Large white LED backlit display
- True RMS reading on ACA/ACV
- AC/DC μA Range
- Resistance, Diode, Capacitance & Frequency measurement

- °C/°F temperature function
- Inrush current
- DCA ZERO
- Torch light on trigger push
- Data Logging up to 1000 records
- Manual save mode
- Auto Power off
- DC mV Range

### DC mV

Range	OL Reading	Resolution	Accuracy
600.0 mV	660.0 mV	0.1 mV	± (0.7% + 5D)

### **DC Voltage**

Range	OL Reading	Resolution	Accuracy
600.0 V	660.0 V	0.1 V	± (0.7% + 2D)
1000 V	1100 V	1 V	

### **AC Voltage**

Range	OL Reading	Resolution	Accuracy
600.0 V	660.0 V	0.1 V	± (1.0% + 5D)
1000 V	1100 V	1 V	

### PV DC Voltage (using PVHV1 or PVHV2 lead set)

Range	OL Reading	Resolution	Accuracy
600.0 V	660.0 V	0.1 V	± (2.0% + 5D)
2000 V	2200 V	1 V	

### PV AC Voltage (using PVHV1 or PVHV2 lead set)

Range	OL Reading	Resolution	Accuracy
600.0 V	660.0 V	0.1 V	± (2.0% + 5D)
1500 V	1600 V	1 V	

## AC/DC μA

Range	OL Reading	Resolution	Accuracy
400.0 μΑ	440.0 μΑ	0.1 μΑ	± (1.0% + 3D)
4000 μΑ	4400 μΑ	1 μΑ	





# **Solar clamp meter**

### **AC/DC Current**

Range	OL Reading	Resolution	Accuracy
60.00 A	66.00 A	0.01 A	
600.0 A	660.0 A	0.1 A	± (2.0% + 5D)
1500 A	1550 A	1 A	

## **Frequency**

Range	OL Reading	Resolution	Accuracy
100.00 Hz	100.00 Hz	0.01 Hz	
1000.0 Hz	1000.0 Hz	0.1 Hz	± (0.3% + 3D)
10.000 kHz	10.000 kHz	0.001 kHz	

#### Resistance

Range	OL Reading	Resolution	Accuracy
600.0 Ω	660.0 Ω	0.1 Ω	± (0.9% + 5D)
6.000 kΩ	6.600 kΩ	0.001 kΩ	
60.00 kΩ	66.00 kΩ	0.01 kΩ	± (0.9% + 2D)
600.0 kΩ	660.0 kΩ	0.1 kΩ	

## Continuity

Built-in buzzer sounds when measured resistance is less than  $20\Omega$  and the sound is off when measured resistance is more than  $200~\Omega$ , between  $20~\Omega$  to  $200~\Omega$  the buzzer may be either on or off.

### Diode

Range	OL Reading	Resolution	Accuracy
1.500 V	1.550 V	0.001 V	± (0.9% + 2D)

### Capacitance

Range	OL Reading	Resolution	Accuracy
100.0 μF	110.0 μF	0.1 μF	. (1 00/ . 3D)
1000 μF	1100 µF	1 μF	± (1.9% + 2D)

### VoltSeek

**Voltage Range of High** 

 $80 \text{ V} \sim 1000 \text{ V}$  (At the top edge of the jaw)

**Voltage Range of Low** 

160 V ~ 1000 V (At the top edge of the jaw)

**Sensitivity:** 

Sensitivity:

### **Temperature**

Range	OL Reading	Resolution	Accuracy
-40.0 °C – 400.0 °C	440.0 °C	0.1 °C	± (1% + 20D)
-40.0 °F – 752.0 °F	824.0 °F	0.1 °F	± (1% + 36D)



# **Solar clamp meter**

VoltSeek

**Voltage Range of High** 

Sensitivity:

**Voltage Range of Low** 

Sensitivity:

80 V  $\sim$  1000 V (At the top edge of the jaw)

160 V  $\sim$  1000 V (At the top edge of the jaw)

**Temperature** 

The accuracy does not include the accuracy of the thermocouple probe. Accuracy specification assumes surrounding temperature stable to  $\pm 1$  °C. For surrounding temperature changes of  $\pm 2$  °C rated accuracy applies after 2 hours.

Item (qty) DCM1500S	Part No: 1013-357
DCM 4mm Lead Set (Inc. Probes and Crocodile Clips)	1013-358
TP100 K-Type Thermocouple Probe	1013-364
PVHV1 Lead (4mm Plugs)	1013-362
PVHV2 Lead (MC4PV Plugs)	1013-363
Hard Carry Case	

