

# Solar Test Kit

## ENSURING SAFETY AND EFFICIENCY

Photovoltaic (PV) systems are a rapidly growing segment of the electrical industry. Arrays are being installed around the world to help derive clean, pure energy from the sun and combat greenhouse gas emissions, while reducing our collective dependence on fossil fuel. To meet the increasing needs of technicians in the industry who install this equipment, proper tools, like those found in Megger's Solar Test Kit, are essential in testing and maintaining these systems.

**PVM210  
Irradiance Sensor**

**TC3231  
Thermal Camera**

**DCM1500S Digital  
Clamp Meter**

**MIT2500 Insulation  
Resistance Tester (IR)**



**DCM1500S  
Digital Clamp Meter**

- The DCM1500S multi-function tester measures the voltage output of PV modules to verify the performance of a PV array as well as provides solar technicians the ability to test higher voltages and current values with greater flexibility using a single tool.
- Performing these tests and measuring the intensity of the sunlight striking the arrays is key in knowing if the system is working properly. This measurement is critical when validating the performance of a PV system.



**PVM210  
Irradiance Sensor**

- The PVM210 is a handheld tool that quickly measures the irradiance or intensity of the sunlight striking an array.
- The ability to measure the amount of current a PV module can produce is directly proportional to the irradiance striking the array. Measuring solar irradiance provides knowledge in making important decisions regarding future energy yield, efficiency, performance and maintenance.



**MIT2500 Insulation  
Resistance Tester (IR)**

- The MIT2500 helps perform insulation resistance testing during startup and maintenance to verify the integrity of conductors in a photovoltaic array. It can be used in residential, commercial, industrial rooftops, and large-scale ground mount solar applications.
- Periodic testing of solar PV system electrical cabling and components helps determine system health, identify potential issues, ensure safe system operation, as well as reduce the risk of fire due to electrical faults.
- The only handheld IR tester with integrated guard terminal, that provides a return path for surface leakage current that can lead to an error in the insulation resistance measurement.



**TC3231  
Thermal Camera**

- The TC3231 is a thermal camera that allows users to quickly and safely assess PV modules, junction boxes, combiner boxes and electrical connections for abnormal heat with a scan.
- The camera is used to locate bad cells, wiring or diodes. Cells are connected in series. When one cell in the series is bad, no current passes through that entire series resulting in no electricity. If an array is wired improperly or fails, it may not deliver the appropriate voltage and fail to power up electrical units or charge the battery bank fully. If a diode goes bad, users will notice a drop in output.

The details herein are for informational purposes only and constitute no pledge and no legally binding declaration.