

# PVK320

## Photovoltaic kit



- **PVM210 irradiance meter**
- **AVO410 CATIV TRMS multimeter**
- **MC4 solar connectors to 4 mm standard plug test leads**
- **MC3 to MC4 adapter test leads**
- **PV kit storage pouch**

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### DESCRIPTION

When installing, commissioning and testing a photovoltaic installation additional instrumentation is required to accompany the usual electrician's test equipment such as the Megger MFT1730 and MFT1835 multifunction testers.

The Megger PVK320 photovoltaic kit offers this additional instrumentation in the form of a PVM210 irradiance meter, a CATIV 10 A dc AVO410 multimeter and a kit of specialist solar test leads.

To provide easy storage of the PV kit a zipped pouch is also included.

The PVK320 kit offers the solar / photovoltaic engineer the multimeter option of verifying, with the PVM210 irradiance meter, the stated short circuit current as provided by the manufacturer of the solar panel as required by published standards.

#### **PVM210 Irradiance meter**

The PVM210 is a pocket size instrument that has both solar detector and meter combined in one unit that permits single handed use, ideal for working at height and on sloping roofs.

The unit has a  $3\frac{3}{4}$  digit display and a maximum range of  $1999 \text{ W/m}^2$ . A hold function allows easy measurements of solar power.

#### **AVO410 CATIV multimeter**

The AVO410 multimeter features 1000 V dc / 750 V ac and 10 A ac / dc ranges. The meter has a CATIV 600 V safety rating and true RMS readings are possible on the ac ranges. Additional functions include resistance, frequency and capacitance.

The additional functions would also prove to be of use in other sections of the photovoltaic installation. The meter is supplied in a tough rubberised holster that provides an extra degree of protection.

#### **Specialist PV test leads**

In addition to the silicon multimeter test leads supplied with the AVO410 two pairs of specialist solar testleads are included in the PVK320. The first pair of leads comprise of 1.3 metre test leads terminated at each end with standard 4 mm plugs while the other ends are terminated with the typical MC4 type solar panel connector. Where panels are fitted that utilise MC3 connectors, a pair of MC3 to MC4 0.2 metre adapter leads is supplied for convenience.

## SPECIFICATIONS

### PVM210

|             |  |
|-------------|--|
| Display:    | 3¼ digit LCD   |
| Ranges:     | 1999 W/m <sup>2</sup> / 634 BTU/(ft <sup>2</sup> *h)                 |
| Accuracy:   | typically within ± 10 W/m <sup>2</sup> / ±3 BTU/(ft <sup>2</sup> *h) |
| Resolution: | 0.1 W/m <sup>2</sup> / 0.1 BTU/(ft <sup>2</sup> *h)                  |
| Dimensions: | 134 mm (H) x 48 mm (W) x 27 mm (D)                                   |
| Weight:     | approx. 90g  |
| Batteries:  | 2 x AAA, MN2400, LR03  |

### AVO410

|                  |                                    |
|------------------|------------------------------------|
| dc / ac volts:   | 1000 V dc / 750 V ac               |
| dc / ac current: | 10A dc / ac                        |
| Resistance:      | 60 MΩ                              |
| Frequency:       | 60 MHz                             |
| Capacitance:     | 6 mF                               |
| Dimensions:      | 82 mm (W) x 164 mm (H) x 44 mm (D) |
| Weight:          | 522g                               |
| Batteries:       | 9 V PP3, 6F22, NEDA                |

For full information on individual instruments and electrical specifications please refer to the appropriate datasheets on each instrument.

### PV test leads

|   |
|---|
| 1 pair 1.3 metre leads terminated with 4 mm plugs and MC4 solar connectors  |
| 1 pair 0.2 metre adapter leads terminated with MC4 and MC3 solar connectors |
| Maximum current: 19 A   |
| Maximum voltage: 1000 V   |
| Zipped pouch  |
| Dimensions: 230 mm (L) x 170 mm (W) x 70 mm (D)                             |

## ORDERING INFORMATION

| Item (Qty)                             | Cat. No. |
|--|----------|
| PVK320 Photovoltaic kit                | 1002-550 |
| consisting of:                         |          |
| PVM210 Irradiance meter                |          |
| AVO410 CATIV multimeter                |          |
| PV test leads (2 sets)                 |          |
| Zipped Pouch                           |          |
| <b>Included accessories</b>            |          |
| Batteries                              |          |
| PVM210 pouch                           |          |
| AVO410 standard test leads with probes |          |
| Calibration certificate (PVM210 only)  |          |

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**CERTIFICATION ISO**  
Registered to ISO 9001:2008 Cert. no. Q 09250  
Registered to ISO 14001:2004 Cert. no. EMS 61597

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