

New and improved  
Higher efficiency

# Romag

Photovoltaic Systems



Black frame array



## Romag SMT6 (60)P PV Modules

### Romag SMT6 Series Polycrystalline Modules

Suitable for a wide range of projects, Romag's SMT6 Series PV modules come in a choice of white or black Tedlar and encompass Romag's extensive glass processing experience to produce high quality photovoltaic modules using the latest materials.

Available in various output options, the modules offer a flexible and cost effective PV option for retrofit, new build and stand alone applications.

The modules utilise 156mm square high efficiency polycrystalline cells and are certified to IEC 61215 Edition 2 and IEC 61730 and are MCS approved.

Boasting outputs from 235Wp to 245Wp and a positive tolerance of 3%, the SMT6 Series features textured low iron glass as the outer component of the laminate to reduce reflection which increases light transmission to the cells and improves efficiency. Bypass diodes are also used to minimise potential power loss caused by shading. The PV cells are connected in series and are encapsulated in EVA and bonded to the glass sheet. A final layer of Tedlar is laminated to the rear of the module to complete the weather protection.

### Why chose Romag PV Modules?

- **Made in UK • Low carbon footprint**
- **'In House' glass processing meaning improved service and quality control**
- **MCS certified and BSI Kitemark**
- **Black or unframed variants**

- Available as 'PV Kits'

### Key features

- **High efficiency photovoltaic modules made of polycrystalline silicon solar cells 156mm square**
- **Module efficiency up to 14.9%**
- **Positive tolerance of 3%**
- **10 year product guarantee**
- **10 year performance guarantee for 90% of original measured power output**
- **25 year performance guarantee for 80% of original measured potential power output**
- **3 bypass diodes to minimise power loss caused by shading**
- **Acid etched cells for especially high current yields**
- **Choice of black or white Tedlar with black anodised aluminium frames**
- **Output: connection cable with locking connector**
- **Lead free components used throughout**

### Maintenance

Romag SMT6 Series PV modules are passive with no moving parts to wear out and if installed at an angle of over 20° are self cleaning in most locations. We do however, recommend an inspection of the modules at least once a year and any dirt build up should be cleaned off.

**PowerGLAZ**  
ENERGY IN GLASS

## Romag SMT6 (60)P Electrical Characteristics

Parameter	245	240	235	Wp
<b>Vmpp</b>	<b>30.35</b>	<b>29.85</b>	<b>29.47</b>	<b>V</b>
<b>Imp</b>	<b>8.08</b>	<b>8.03</b>	<b>7.96</b>	<b>A</b>
<b>Voc</b>	<b>37.59</b>	<b>37.45</b>	<b>37.32</b>	<b>V</b>
<b>Isc</b>	<b>8.54</b>	<b>8.51</b>	<b>8.45</b>	<b>A</b>
<b>FF</b>	<b>76.42</b>	<b>74.75</b>	<b>74.41</b>	<b>%</b>
<b>Efficiency</b>	<b>15.2</b>	<b>14.9</b>	<b>14.6</b>	<b>%</b>

### Temperature Characteristics

Coefficients: Power - 0.45%/°C Voltage - 0.35%/°C

Current 0.05%/°C

Module Weight: 21 Kg

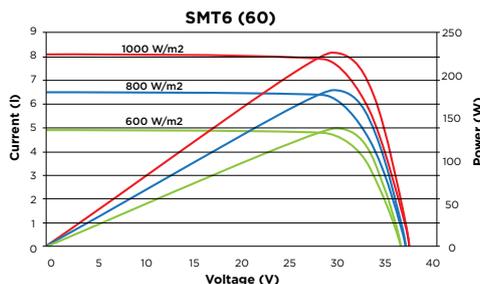
### Important features

- Suitable for use in systems up to 1000V DC
- Maximum applied load to front surface of 5400 Pa
- Manufactured in our ISO 9001: 2008 certified factory
- Factory regularly audited by BSI, TUV SuD, ICIM and IPSOL
- Repetitive cycling between -40°C and +80°C at 80% relative humidity
- Simulated impact of 25mm hail at terminal velocity
- 3000V DC frame/cell string isolation test
- Bypass diodes to counteract shading effects

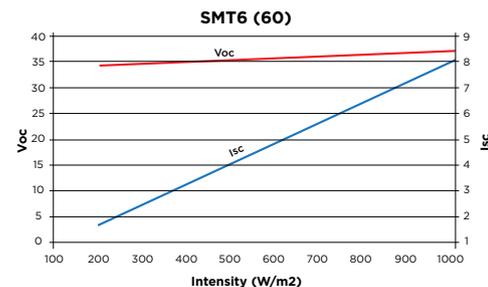
### Romag PV kits

To make life easier for installers and clients, we also offer a range of standard PV kits. There are eight kits ranging from 1.2kW to 4.0kW which fit nicely into the highest UK 'Feed-in Tariff' for retrofit PV installations. The kits include all components required for installation including Romag SMT6 Series Modules, mounting rails, matched inverter, isolator switches, all packed on a single pallet and ready for installation.

Characteristic IV/Power Curves against Incident Radiation (at 25°C)



Characteristic Curves: Isc, Voc vs Radiation Intensity



### Current range

Romag SMT6 (60)P PV modules are suitable for the smallest domestic on roof or ground mounted systems, social housing projects, large scale on roof commercial installations and large ground solar fields. In fact the Romag range is ideal for any grid connected installation and our current range provides module outputs from 235Wp to 245Wp.

We constantly strive to provide the best possible range of products to meet dynamic market needs and are constantly reviewing our range in line with customer demand.

### Certification

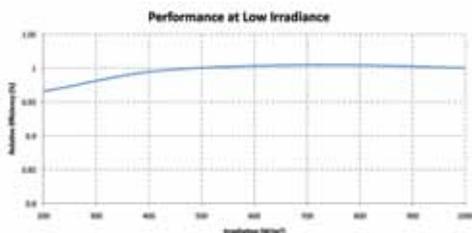
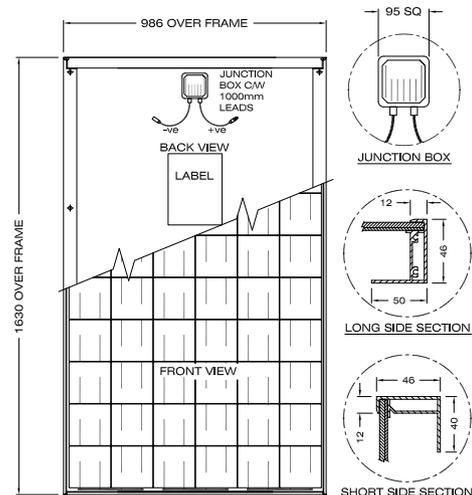
Our SMT6 Series modules were the world's first PV modules to be certified under the Microgeneration Certification Scheme (MCS) accredited by the highly respected BSI certification body. Maintaining this certification involves consistent and on-going attention to detail during manufacture and we are regularly audited by BSI to ensure that these standards are upheld.

### Quality

Romag's processes are also certified by BSI to the latest Quality Standard BSEN ISO 9001:2008

### Safety

SMT6 Series modules are certified by ICIM in Italy in accordance with IEC 61215 Edition 2 and IEC 61730.



Also in the range: PP6 (60)M

The information provided in this publication, including product warranty and performance specification, is subject to change without notice and should not be used as the definitive source of information for final system design. Further technical and warranty information can be found on our website ([www.romag.co.uk](http://www.romag.co.uk)) or by contacting our technical department.



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