

## REFERENCE REGULATIONS

Modules DG6M48 FL and DG6M54 FL conform to all standards requested by regulation IEC 6125 ed. 2 "Crystalline Silicon Terrestrial Photovoltaic Modules - Design and Qualification Type Approval" and have been manufactured in accordance with all safety practices adopted by the E.U.

## REQUIREMENTS

Modules DG6M48 FL and DG6M54 FL are produced below:  
48 or 54 square photovoltaic cells of multicrystalline silicon 156\*156mm

Ethylene/Vinil/Acetate (EVA) transparent encapsulant  
Front made of tempered glass with a low iron content of 4mm thickness and an anti reflective layer

Back sheet in white tedlar film with an anty - humidity characteristics

Frame in anodized aluminium  
IP65 junction box with 3 by-pass diodes pre-installed

## MECHANICAL DESIGN

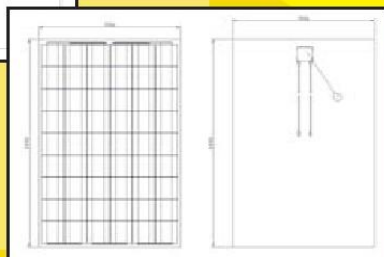
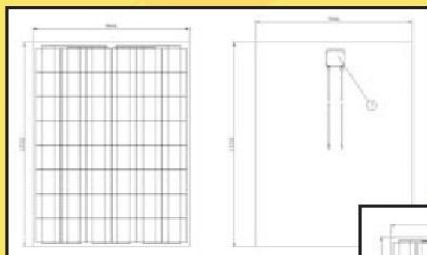
The design of modules DG6M48 FL and DG6M54 FL makes it suitable for external long term use / operation. These modules are suitable for BIPV systems. The cells are connect in series. The terminals are soldered using a chemical compound Sn,Pb,Ag

## INSULATION

The module when subject to the test of insulation, as described within the International Regulation IEC 61215 ed. 2 does not show any problem of insulation. The module is also certified IEC 61730 (Module Safety Qualification).

## MECHANICAL PERFORMANCE

The module is highly resistant if subjected to front side load, torsion or struck. The positive outcome of the test to determine the gel content, guarantees the complete polymerisation of EVA encapsulant.



IEC 61215 Ed. 2 and IEC 61730 certified

Power rating is guaranteed at 90% for 12 years  
80% for 25 years

DGEnergy modules have a 10 years warranty against manufacturing and material defects



**D.G. Energy S.r.l.**  
C.da Gidora  
Zona Industriale  
87040 Luzzi (CS) - ITALIA  
Tel: +39 (0)984 541918  
Fax: +39 (0)984 654564  
E-mail: info@dgenergy.it  
Web: www.dgenergy.it

## DG6M48FL/180-185 - DG6M54FL/200-205-210

ELECTRICAL PERFORMANCE (@STC - 1000 W/mq - 25° - 1,5 AM) and MECHANICAL DATA  
Under Standard Test Conditions:

Type of module		DG6M48FL/ 180	DG6M48/ 185	DG6M54FL/ 200	DG6M54/ 205	DG6M54FL/ 210
Peak Power	<b>P<sub>max</sub></b>	180,00	185	200	205	210
Open circuit voltage	<b>V<sub>oc</sub></b>	29,50	29,66	33,04	33,15	33,53
Voltage at maximum Power	<b>V<sub>mp</sub></b>	24,24	24,40	27,18	27,43	27,60
Short Circuit Current	<b>I<sub>sc</sub></b>	7,97	8,10	7,90	8,03	8,10
Peak Power Current	<b>I<sub>mp</sub></b>	7,43	7,60	7,36	7,50	7,62
Fill Factor	<b>%</b>	76,60	77,19	76,64	77,28	77,44
Dimensions	<b>mm</b>	1332*986*5	1332*986*5	1490*986*5	1490*986*5	1490*986*5
Weight	<b>Kg</b>	17	17	19	19	19
Efficiency	<b>%</b>	13,80	14,10	13,70	14,00	14,40

Temperature Coefficients:  
I<sub>sc</sub>: 0,05% / °C - V<sub>oc</sub>: -0,34% / °C  
Power: -0,43% / °C - NOCT: 47 °C

Maximum Power: ± 3%  
Maximum System Voltage: 1000 V / DC



Specifications and data may change without prior notice due to product development