

# HYUNDAI HEAVY INDUSTRIES

## MULTI-PURPOSE PHOTOVOLTAIC MODULES

225Wp Multi-crystalline silicon photovoltaic module

**HiS-M225SG**

Hyundai Heavy Industries' photovoltaic modules offer industry-leading performance, durability and reliability for various electrical power requirements. Usual applications include grid connected systems, stand alone systems, power stations, pumps, beacons, and streetlights. HHI's modules are designed to withstand rigorous weather conditions.



### ELECTRICAL CHARACTERISTICS

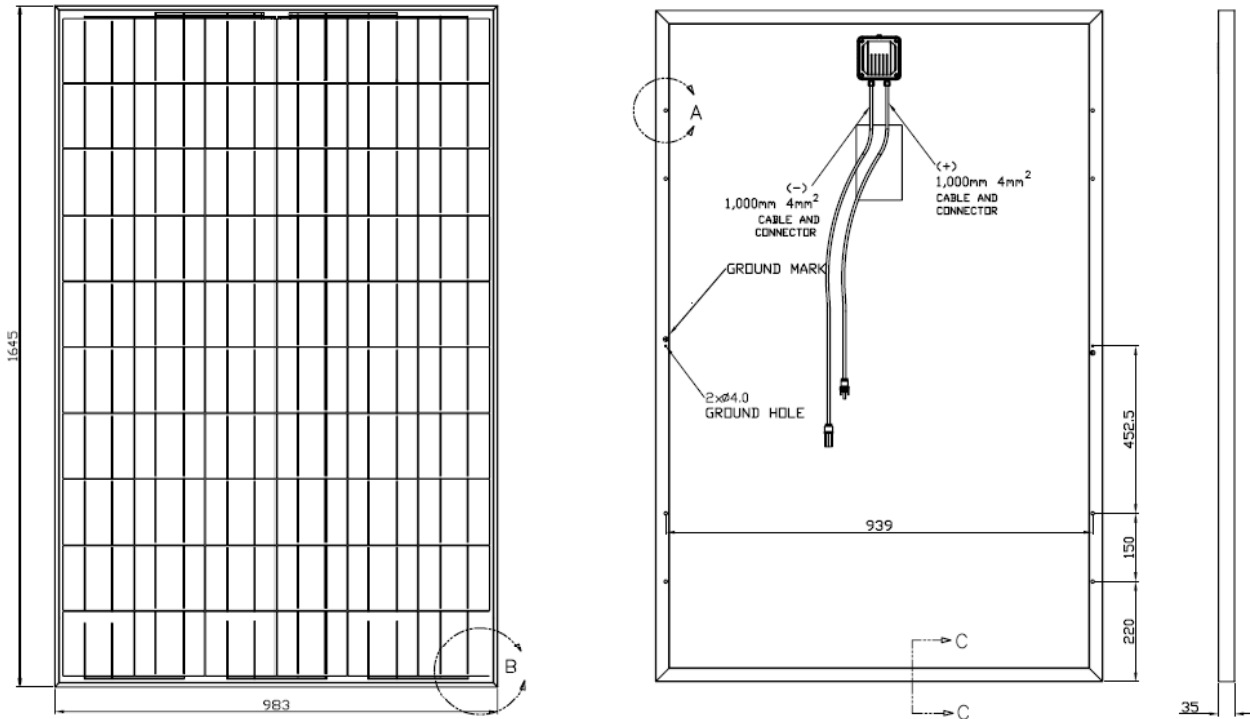
Maximum power (Pmax)	W	225
Warranted minimum power	W	216
Voltage at Pmax (Vpm)	V	29.2
Current at Pmax (Ipm)	A	7.68
Open circuit voltage (Voc)	V	37.1
Short circuit current (Isc)	A	8.29
Output tolerance	%	± 4
Maximum system voltage	Vdc	1000
No. of Cells & Connections	pcs	60 in series
Cell type	-	6", Multi-crystal silicon
Cell efficiency	%	15.5
Module efficiency	%	13.9
Temperature coefficient of Pmax	%/°C	- 0.44
“ Voc	%/°C	- 0.34
“ Isc	%/°C	+ 0.052

All data at STC(Standard Test Conditions). Above data may be changed without prior notice.

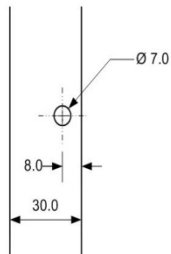
### MECHANICAL CHARACTERISTICS

Dimensions (W X L X H)	1645mm X 983mm X 35mm
Weight	Approx. 19.0kg
Solar cells	Connected 60 cells in series(for 6X10 matrix)
Output cables	4mm <sup>2</sup> cable with polarized weatherproof connectors, TÜV certified Length; (-) line→1.0m, (+) line→1.0m
Junction box	IP65, weatherproof, TÜV certified
Bypass diodes	3 diodes are installed to avoid power decreasing by shade
Construction	Front: high transmission low-iron tempered glass, 3.2mm Encapsulant: EVA Back Sheet: Weatherproof film
Frame	Clear anodized aluminum

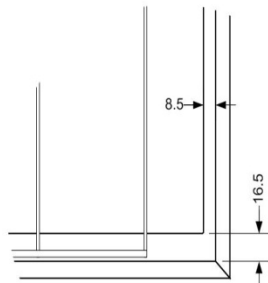
## MODULE DIAGRAM



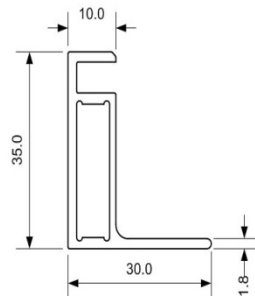
A detail



B detail



C - C section



### INSTALLATION SAFETY GUIDE

**ONLY** qualified personnel should install or perform maintenance.

**BE AWARE** of dangerous high DC voltage.

**DO NOT** damage or scratch the rear surface of the module

**DO NOT** handle or install modules when they are wet.