



HG-190S/195S/
200S/205S



HIMIN CLEAN ENERGY HOLDINGS CO.,LTD. Monocrystalline photovoltaic module



MONOCRYSTALLINE SILICON PHOTOVOLTAIC MODULE WITH 190W~205W POWER

Himin Clean Energy Holdings Co., Ltd, as the main holder of the fourth International Solar City Congress (Dezhou city, 2010) and the constructor of China Solar Valley, has concentrated on solar energy research since 1995.
Himin's HG-190S~205S photovoltaic module is designed for large electrical power requirements, this module has super durability to withstand rigorous operating conditions and is suitable for grid connected systems.

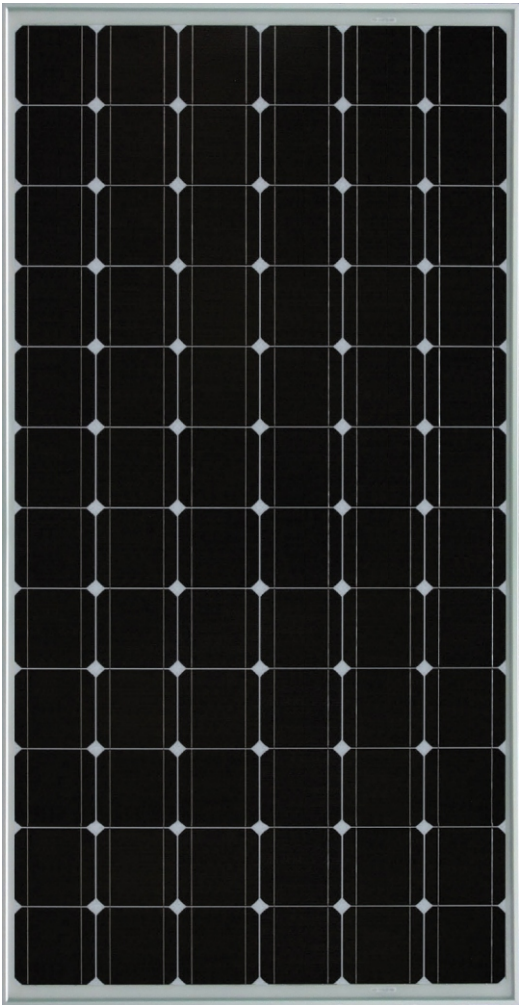
Quality & Reliability

Robust, corrosion resistant aluminum frames independently tested to withstand wind loads of up to 2400Pa and snow loads of up to 5400Pa ensuring a stable mechanical life.
Module independently tested to ensure conformance with certification and regulatory standards.
Manufacturing factory certified by ISO9001 and ISO14001.

Guarantees and certifications

Product warranty	5 years
Performance guarantee	Guaranteed output of 90% for 10 years and 80% for 25 years
Approvals and certificates	TUV:IEC 61215 Edition II, IEC 61730 I and II,MCS

In the absence of confirmation by specification sheets,Himin takes no responsibility for any defects that any occur in equipment using any Himin products shown in catalogs,data books,etc.
Contact Himin in order to obtain the latest specification sheets, before using any Himin products.
Specifications are subject to change without notice.



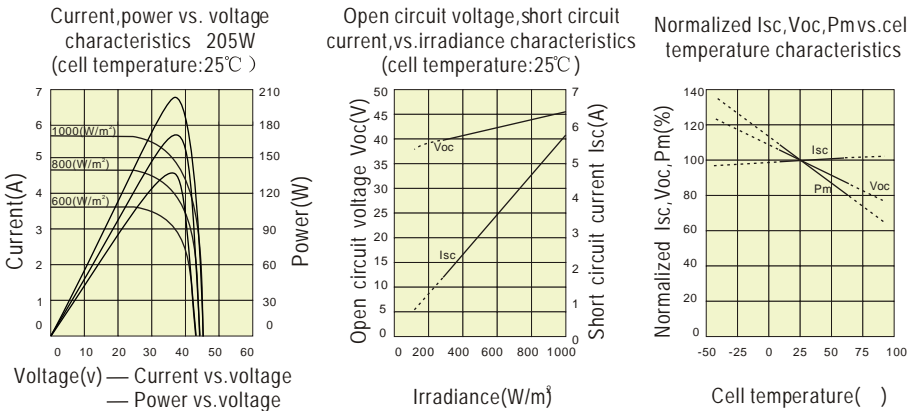
Specifications HG-190S~205S

Cell	Monocrystalline silicon solar cells, 125mm square
Number of cells and connections	72 in series
Application	DC 24V system
Maximum system voltage	DC 1,000V
Series fuse rating	10A
Nominal power	190W~205W
Dimensions	1580×808×50/35mm
Weight	16.2/14.8Kg
Type of output terminal	Lead wire with connectors
Junction box	3 bypass diodes

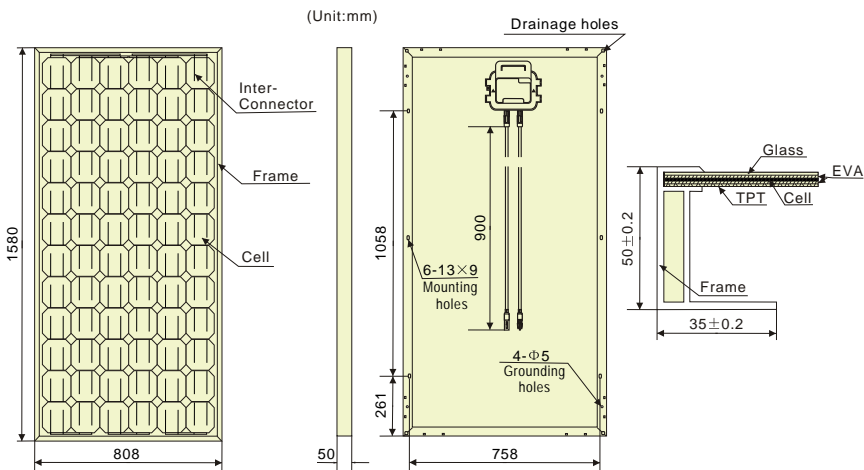
Electro-optical characteristics

Parameters	Symbol	HG-190S	HG-195S	HG-200S	HG-205S
Open circuit voltage	Voc	44.6V	44.9V	45.1V	45.9V
Maximum power voltage	Vmp	36.9V	37.4V	37.7V	38.3V
Short circuit current	Isc	5.57A	5.62A	5.65A	5.73A
Maximum power current	Imp	5.15A	5.21A	5.31A	5.35A
Maximum power	Pm	190W	195W	200W	205W
Encapsulated solar cell efficiency	η_c	17.0%	17.4%	17.8%	18.4%
Module efficiency	η_m	14.9%	15.3%	15.7%	16.1%
Power output tolerance		±3%	±3%	±3%	±3%

Characteristics



Outline dimensions



Packaging Specifications

Number of modules per pallet	48/64
Number of pallets per 40' container	14
Packaging box dimensions (L / W / H)	2260×825×2200mm
Box weight	825/1000Kg

Conditions

Standard test conditions (STC)

Irradiance: 1,000W/m²

AM1.5

Module temperature: 25°C

Temperature coefficients

Parameters	Rating
Operating temperature	-40 to +85°C
Storage temperature	-40 to +85°C
αP_m	-0.460%/K
αI_{sc}	+0.024%/K
αV_{oc}	-0.356%/K
NOCT	46 ± 2/ °C

Mechanical specification

Cable	Solar cable , 900mm length 4mm ² prefabricated with plugs (male/female)
Front glass	Transparent toughened safety glass, 3.2mm
Cell encapsulation	EVA(Ethylene-Vinyl-Acetate), 0.5mm
Backside	Composite film
Frame	Anodised aluminium cavity frame
Maximum surface load	(screwless) with drainage holes Entire module certified to withstand high wind loads (2400Pa) snow loads (5400Pa)
Hail resistance	Maximum diameter of 25mm with impact speed 83km/h