

MONO 190-210 Watt



Recommended For



Residential roof



Commercial roof



Mounted ground



Highest Cell Conversion Efficiency 19.00%

Through superior cell technology and leading manufacturing capability



Easy Installation and Handling

With perfect compatibility to industry standard inverters and mounting systems



Excellent Weak Light Performance

Excellent performance under low light environments



Withstand High Wind and Snow Loads

Entire module withstand strong wind-pressure(2400Pa) and snow load(5400Pa)



Authoritative PV Standards

Conform with PV standards: IEC61215, IEC61730, MCS and UL1703



QC System: ISO9001

Processes comply with ISO9001 ensures Zero Defect

Warranties

10 years

Manufacturing warranty

12 years

90% output power warranty

25 years

80% output power warranty



Qualifications & Certificates

CE, UL 1703, IEC 61215, IEC 61730, MCS, CEC Australia,
PV CYCLE, ISO 9001, ISO 14001, RoHS



Electrical Data at STC	TPS-M190	TPS-M195	TPS-M200	TPS-M205	TPS-M210
Maximum Power (Pmax)	190W	195W	200W	205W	210W
Power Tolerance	0 to 3%				
Efficiency of Cell	17.20%	17.60%	18.00%	18.40%	19.00%
Optimum Operation Current (Imp)	5.19A	5.30A	5.42A	5.51A	5.61A
Optimum Operation of Voltage (Vmp)	36.6V	36.8V	36.9V	37.2V	37.4V
Short Circuit Current (Isc)	5.56A	5.67A	5.80A	5.90A	5.99A
Open Circuit Voltage (Voc)	45.2V	45.4V	45.6V	45.9V	46.1V

Values at Standard Test Conditions STC (Air mass AM1.5, Irradiance 1000W/m², Cell Temperature 25°C)

Thermal Characteristic	
Nominal operating cell temperature (NOCT)	45±2°C
Temperature coefficient of Pmax	-0.40%/°C
Temperature coefficient of Voc	-0.29%/°C
Temperature coefficient of Isc	0.05%/°C

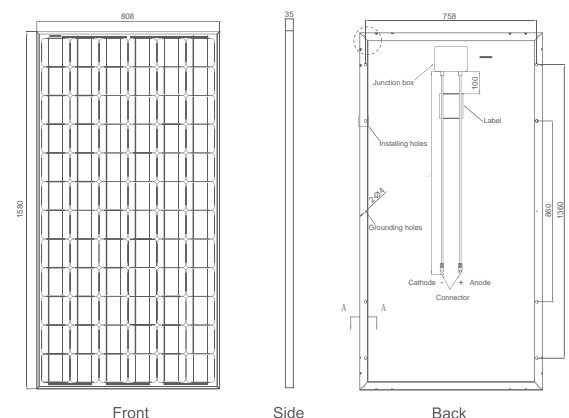
Operating Conditions	
Max. system voltage	1000VDC (IEC), 600VDC (UL)
Max. series fuse rating	10A
Operating temperature range	-40 to 85°C
Max. static load, front (e.g., snow and wind)	5400Pa
Max. static load, back (e.g., wind)	2400Pa
Max. hailstone impact (diameter/velocity)	25mm/23m/s

Construction Materials	
Front cover (material/type/thickness)	low-iron tempered glass/3.2mm
Cell (quantity/material/type/dimensions)	72/monocrystalline/125mm×125mm
Encapsulant (material)	ethylene vinyl acetate (EVA)
Frame (material/color/anodization color)	anodization aluminum alloy/silver/clear
Junction box (protection degree)	TUV certified/IP65
Cable (length/cross-sectional area)	900m/4.0mm ²
Plug connector (type/protection degree)	MC4/IP67
Number of bypass diodes	3 pieces

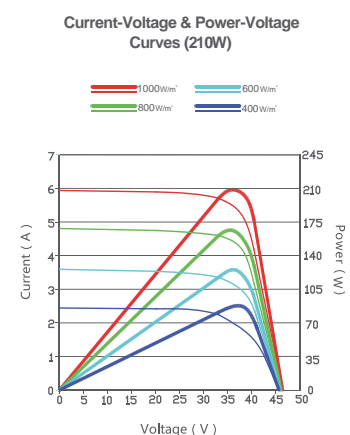
General Characteristics	
Dimensions (L/W/H)	1580mm×808mm×35mm
Weight	14±0.5kgs

Packaging Specifications			
Container	20'GP	40'GP	40'HQ
Number (modules×pallets)	28×12	28×28	31×28

Dimensions of Module



I-V Curves of Module



Distributor informations: