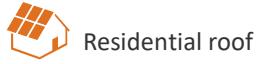
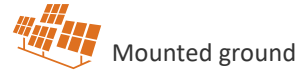


## Recommended For



Residential roof



Mounted ground



### Highest Cell Conversion Efficiency 19.30%

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,  
ISO 9001, ISO 14001, RoHS



# MONO 170-190 Watt <sup>PLUS</sup>

Electrical Data at STC	TPS-M170	TPS-M175	TPS-M180	TPS-M185	TPS-M190
Maximum Power (Pmax)	170W	175W	180W	185W	190W
Power Tolerance	0 to 5W				
Efficiency of Cell	17.50%	18.00%	18.50%	19.00%	19.30%
Optimum Operation Current (Imp)	8.91A	9.03A	9.24A	9.35A	9.46
Optimum Operation of Voltage (Vmp)	19.1V	19.4V	19.5V	19.8V	20.1V
Short Circuit Current (Isc)	9.50A	9.60A	9.70A	9.82A	9.92A
Open Circuit Voltage (Voc)	23.1V	23.5V	23.9V	24.2V	24.5V

Values at Standard Test Conditions STC (Air mass AM1.5, Irradiance 1000W/m<sup>2</sup>, 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), 1000VDC (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)	36/monocrystalline/156mm×156mm
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 <sup>2</sup>
Plug connector (type/protection degree)	MC4/IP67
Number of bypass diodes	2 pieces

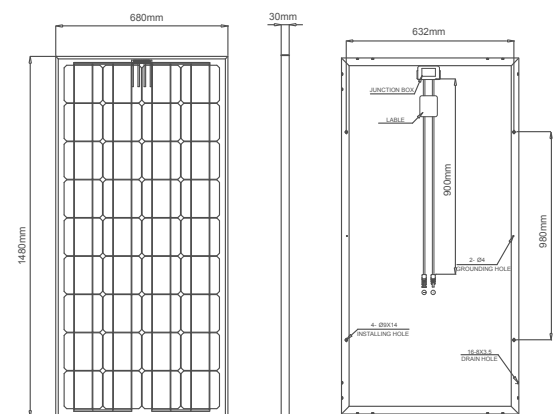
## General Characteristics

Dimensions (L/W/H)	1480mm×680mm×30mm
Weight	10±0.5kgs

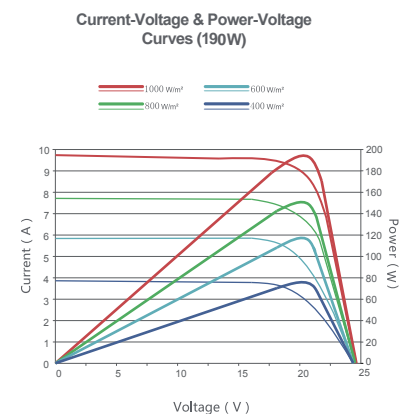
## Packaging Specifications

Container	20'GP	40'GP	40'HQ
Number (modules×pallets)	30×20	30×44	36×44

## Dimensions of Module



## I-V Curves of Module



Distributor informations: