TWxxx(35)D-2
Monocrystalline Silicon PV Module

Product Specification
(72 pcs Mono 125×125 mm Cells,With Tongling J-box1000 V System Voltage)

Typical Electrical Characteristics

Typical Type	Unit	Tw160 (35) D-2	Tw165 (35) D-2	Tw170 (35) D-2	Tw175 (35) D-2	Tw180 (35) D-2	Tw185 (35) D-2	Tw190 (35) D-2	Tw195 (35) D-2	Tw200 (35) D-2
Max-Power	P_m (W)	160	165	170	175	180	185	190	195	200
Power Tolerance	%	0 ~ +5w						0 ~ +5w		
Max-Power Voltage	V_m (V)	34.8	34.9	35.2	35.5	35.8	36.2	36.7	37.1	37.6
Max-Power Current	I_m (A)	4.60	4.73	4.83	4.93	5.03	5.12	5.17	5.26	5.32
Open-Circuit Voltage	V_{oc} (V)	42.9	43.3	43.7	43.9	44.4	44.8	44.9	45.0	45.2
Short-Circuit Current	I_{sc} (A)	4.92	5.02	5.12	5.24	5.32	5.42	5.54	5.68	5.78
Encapsulated Cell Efficiency	η_c (%)	14.50%	15.00%	15.50%	15.75%	16.25%	16.75%	17.25%	17.75%	18.25%
Module Efficiency	η_m (%)	12.53%	12.93%	13.32%	13.71%	14.10%	14.49%	14.88%	15.27%	15.67%
Test Condition		STC:AM=1.5, 1000W / m², Cells Temperature 25 ℃				STC:AM=1.5, 1000W / m², Cells Temperature 25 ℃				

CONSTRUCTION MATERIALS

Front cover (material/type/thickness)	Low iron tempered glass 3.2 mm
Cell (quantity/material/type/dimensions)	72 (6×12) / Multicrystalline / 125 mm×125 mm
Encapsulant (material)	EVA
Frame (material/color/anodization color)	Anodized aluminum alloy / sliver / clear
Junction box (protection degree)	Ip65 & IP67
Cable (length/cross-section area)	1100 mm / 4 mm²

MECHANICAL CHARACTERISTICS

Dimension(L×W×H)	1580 mm×808 mm×40 mm
Installation Hole Dimension	800 mm×758 mm
Weight	15.5 kg
Packing Configuration	23 pcs / carton
Quantity/Pallet	1 carton/pallet
Loading Capacity	644 pcs / 40 ft or 322 pcs / 20 ft

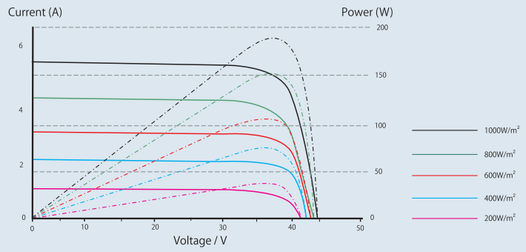
OPERATING CONDITIONS

Max. system voltage	Dc1000 V (TUV)
Max. series fuse rating	15 A
Limiting reverse current	Do not apply external voltages large than Voc of the module
Operating temperature range	-40 ℃~+85 ℃
Max. static load, front(snow & wind)	5400 Pa
Max. static load, back(wind)	2400 Pa
Max. hailstone impact(diameter/velocity)	25 mm / 23 m / s

CERTIFICATIONS

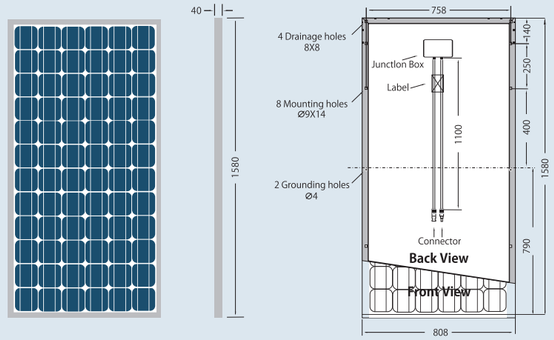
TÜV, Clean Energy Council, MCS, CE, ISO, PV CYCLE, OHSAS 18001, CQC

TW190(35)D-2 Module IV Curves



THERMAL CHARACTERISTICS

Nominal operating temperature	47±2 ℃
Temperature coefficient of Pmax	-0.44% / ℃
Temperature coefficient of Voc	-0.34% / ℃
Temperature coefficient of Isc	0.06% / ℃



WARRANTY

Manufacturing: 10 years

Power Output:

- Within the first one year, the output power shall not degrade more than 3%
- Within the first two years, the output shall not degrade more than 4%
- In the following 23 years, the average annual power degradation shall not exceed more than 0.6%

50+25
History + Quality assurance