



TWMPD-66HS490-510W

P-type Half-cell Monofacial Module (66)

PRODUCT FEATURES



High Power Output
Low LCOE



Maximum Power
510W+



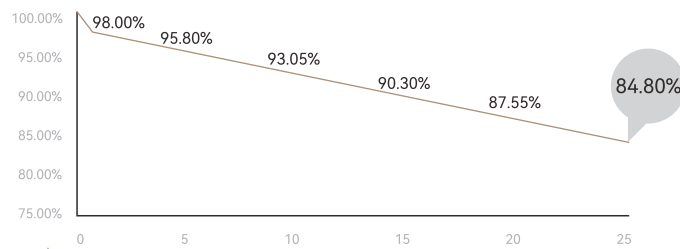
High
Reliability



Low
LID

POWER WARRANTY

1st year <2%, 0.55% power degradation per year from 2 to 25 years



12-year Warranty for Materials



25-year Warranty for Linear Power Output

MANAGEMENT SYSTEM AND PRODUCT CERTIFICATION

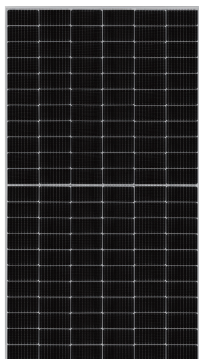
ISO9001: 2015/Quality Management System

ISO14001: 2015/Environment Management System

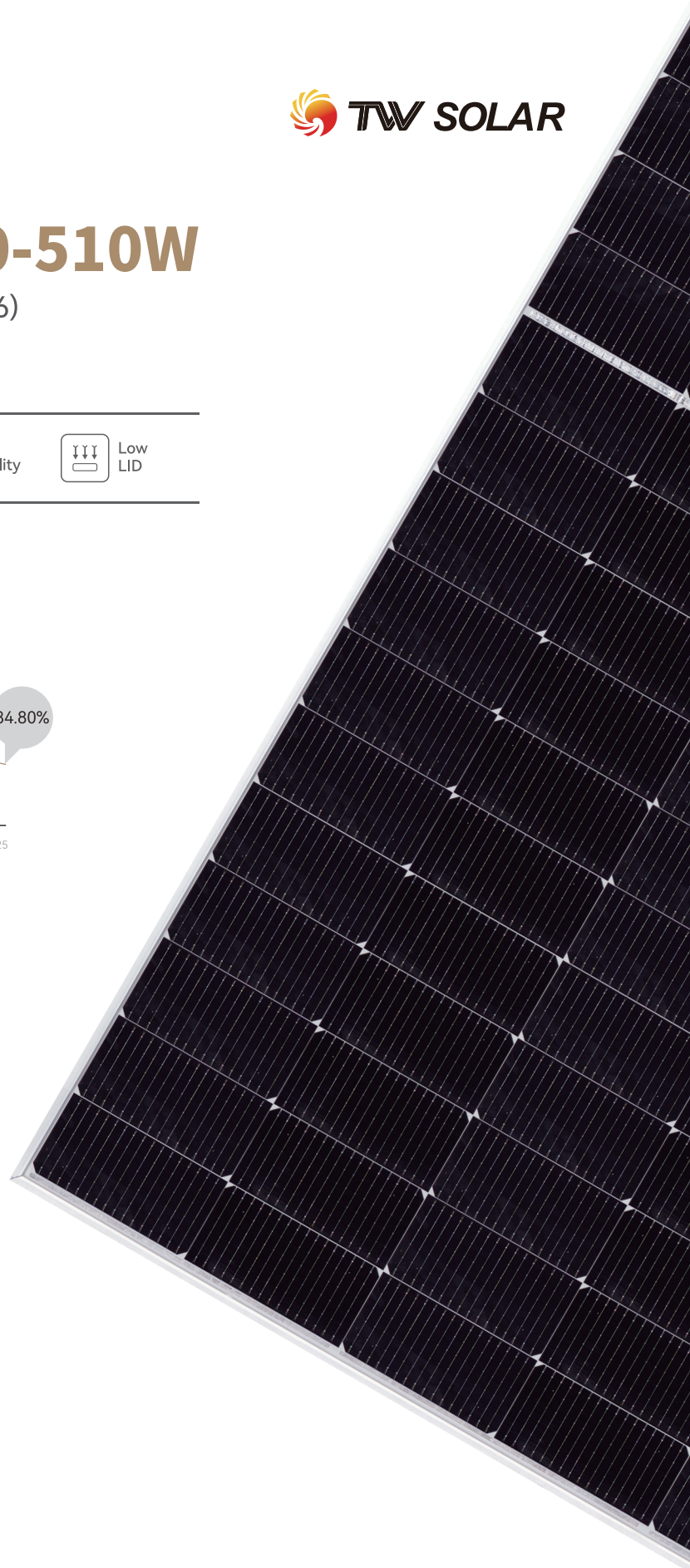
ISO45001: 2018/Occupational Health and Safety Management System



Front



Rear



Electrical Characteristics (STC)

Module Type: TWMPD-66HSXXX

Maximum Power: Pmax [W]	490	495	500	505	510
Open Circuit Voltage: Voc [V]	45.25	45.45	45.65	45.85	46.05
Short Circuit Current: Isc [A]	13.80	13.85	13.90	13.95	14.00
Voltage at Maximum Power: Vmp [V]	37.23	37.39	37.55	37.71	37.87
Current at Maximum Power: Imp [A]	13.16	13.24	13.32	13.39	13.47
Module Efficiency: η [%]	20.6	20.8	21.0	21.3	21.5

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass1.5, Measuring Tolerance: $\pm 3\%$

Electrical Characteristics (NMOT)

Maximum Power: Pmax [W]	370.8	374.6	378.4	382.2	386.0
Open Circuit Voltage: Voc [V]	42.92	43.14	43.35	43.57	43.80
Short Circuit Current: Isc [A]	10.89	10.92	10.95	10.98	11.02
Voltage at Maximum Power: Vmp [V]	35.55	35.78	36.00	36.23	36.45
Current at Maximum Power: Imp [A]	10.42	10.47	10.51	10.55	10.58

NMOT: Irradiance 800W/m², Ambient Temperature 20°C, Air Mass1.5, Wind Speed 1m/s

Mechanical Parameters

Cells	TPC
Cell Orientation	132[6X22]
Dimension	2093 \pm 2 X1134 \pm 2X35mm
Weight	25.4kg
Front Glass	3.2mm high transmittance, AR coated tempered glass
Backsheet	White
Frame	Anodized aluminum alloy frame
Junction Box	IP68, 3 diodes
Output Cable	4.0mm ²
Cable Length	+1200mm, -1200mm, length can be customized
Wind/Snow Load	2400Pa/5400Pa
Packaging	31pcs per pallet, 682pcs per 40'HC

Operating Parameters

Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	25A
Power Output Tolerance	0~+5W

Temperature Ratings

Temperature Coefficient (Pmax)	-0.34%/°C
Temperature Coefficient (Voc)	-0.27%/°C
Temperature Coefficient (Isc)	+0.045%/°C
NMOT	45 \pm 2°C

Drawings (Unit: mm)

