



TWMND-78HD600-620W

N-type Half-cell Bifacial Module (78)

PRODUCT FEATURES



High Power Output
Low LCOE



Maximum Power
620W+



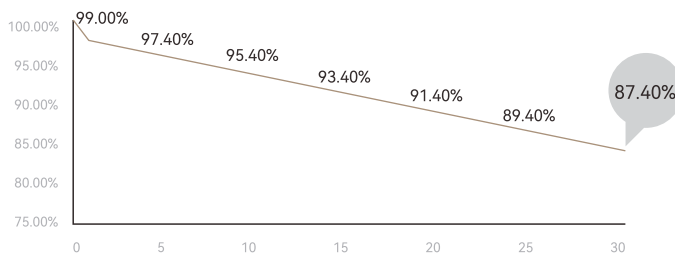
High
Reliability



Low
LID

POWER WARRANTY

1st year <1%, 0.4% power degradation per year from 2 to 30 years



12-year Warranty for Materials



30-year Warranty for Linear Power Output

MANAGEMENT SYSTEM AND PRODUCT CERTIFICATION

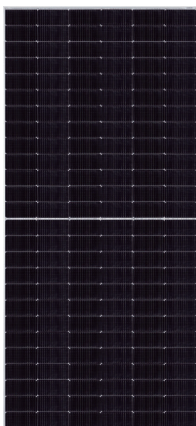
ISO9001: 2015/Quality Management System

ISO14001: 2015/Environment Management System

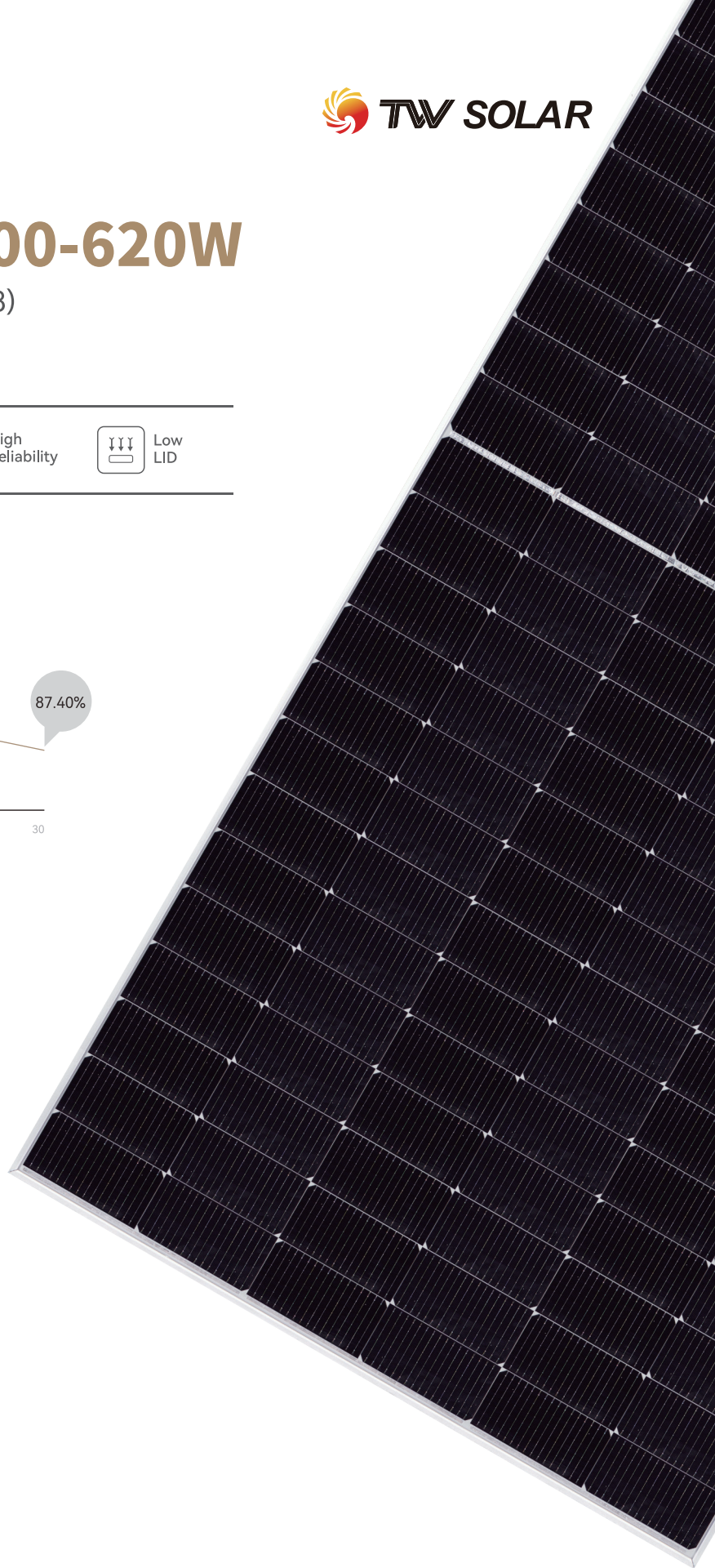
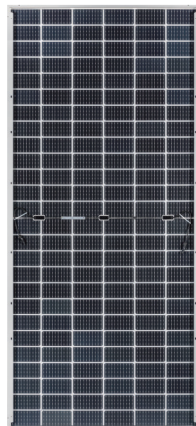
ISO45001: 2018/Occupational Health and Safety Management System



Front



Rear



Electrical Characteristics (STC)

Module Type: TWMND-78HDXXX					
Maximum Power: Pmax [W]	600	605	610	615	620
Open Circuit Voltage: Voc [V]	54.8	55	55.2	55.4	55.6
Short Circuit Current: Isc [A]	14.02	14.06	14.1	14.14	14.18
Voltage at Maximum Power: Vmp [V]	45.6	45.78	45.98	46.18	46.38
Current at Maximum Power: Imp [A]	13.16	13.22	13.27	13.32	13.37
Module Efficiency: η [%]	21.5	21.6	21.8	22.0	22.2
STC: Irradiance 1000W/m ² , Cell Temperature 25°C, Air Mass1.5, Measuring Tolerance: \pm 3%					

Electrical Characteristics (NMOT)

Maximum Power: Pmax [W]	451.2	454.9	458.7	462.4	466.2
Open Circuit Voltage: Voc [V]	51.73	52.24	52.43	52.62	52.81
Short Circuit Current: Isc [A]	11.3	11.4	11.4	11.5	11.5
Voltage at Maximum Power: Vmp [V]	42.9	42.9	43.0	43.0	43.1
Current at Maximum Power: Imp [A]	10.52	10.59	10.66	10.72	10.79
NMOT: Irradiance 800W/m ² , Ambient Temperature 20°C, Air Mass1.5, Wind Speed 1m/s					

Electrical characteristics with different rear side power gain

5%	Maximum Power: Pmax[W]	630.0	635.3	640.5	645.8	651.0
	Module Efficiency: η [%]	22.5	22.7	22.9	23.1	23.3
15%	Maximum Power: Pmax[W]	690.0	695.8	701.5	707.3	713.0
	Module Efficiency: η [%]	24.7	24.9	25.1	25.3	25.5
25%	Maximum Power: Pmax[W]	750.0	756.3	762.5	768.8	775.0
	Module Efficiency: η [%]	26.8	27.1	27.3	27.5	27.7

Temperature Ratings

Temperature Coefficient (Pmax)	-0.30%/°C
Temperature Coefficient (Voc)	-0.25%/°C
Temperature Coefficient (Isc)	0.046%/°C
NMOT	45 \pm 2°C

Mechanical Parameters

Cells	TNC
Cell Orientation	156[6X26]
Dimension	2465 \pm 2 X1134 \pm 2X35mm
Weight	34.6kg
Front Glass	2.0mm high transmittance, AR coated tempered glass
Rear Glass	2.0mm high transmittance, coated tempered glass
Frame	Anodized aluminum alloy frame
Junction Box	IP68, 3 diodes
Output Cable	4.0mm ²
Cable Length	+400mm, -200mm, length can be customized
Wind/Snow Load	2400Pa/5400Pa
Packaging	31pcs per pallet, 496pcs per 40HC

Operating Parameters

Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	30A
Power Output Tolerance	0~+5W
Maximum Bifaciality	80 \pm 5%

Drawings (Unit: mm)

