

N-type TOPCon

ASP650T-78BDG

630-650W

Bifacial Module with Double Glass

23.30%
Max. Efficiency



N-Type 182*182mm Cell

Adopting the 182*182mm N-Type TOPCon cells with the highest efficiency.



Bifacial with Double-Glass

Module adopts 182*182mm half cells, bifacial module provide an additional 5%~25% output.



Load Capacity

Mechanical load tests including wind load 2400Pa and snow load 5400Pa done by TUV.



PID Protection

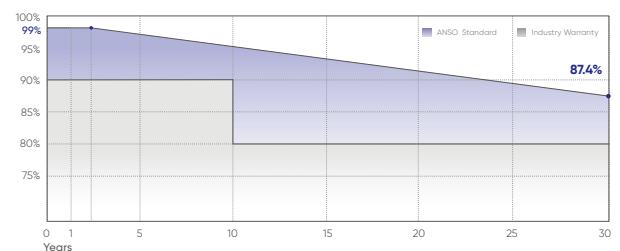
Ensure the attenuation probability caused by PID phenomenon is minimized.



Harsh Environmental Adaptability

Strict salt spray and ammonia corrosion test by TUV.

Power Warranty



15 Years
Product Warranty

30 Years
Linear Power Warranty

Quality Management System

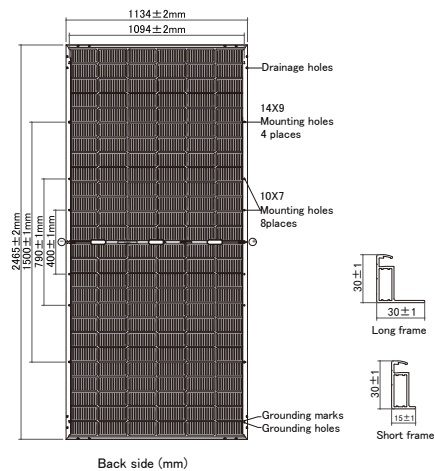
IEC61215/61730, IEC62804(PID), IEC61701(Salt).
IEC62716 (Ammonia), IEC60068-2-68(Sand).
ISO 9001:2015/quality management system.
ISO 14001:2015/environmental management system.
ISO 45001:2018/occupation health safety management system.
ISO 50001:2011/energy management system.
IEC TS 62941-2016/PV industry quality management system.

ASP630-650W

Mechanical Characteristics

Weight	33.5kg
Dimensions	2465×1134×30mm
Cell Dimensions	182×182mm
Cell Amount	78×2 pcs
Maximum System Voltage	1500V
Junction Box	IP68
Glass Thickness	(F) 2.0mm, Anti-Reflection Coating (B) 2.0mm, Heat Strengthened Glass
Frame	Aluminum Alloy
Cable	4mm², 300mm in length, length can be customized / UV resistant
Connector	MC4 Compatible
Bifaciality	80±5%
Packing	36pcs/pallet, 576pcs/40'HQ Container

Drawings



Electrical Parameters(STC*)

Module Type: ASP650T-78BDG	630	635	640	645	650
Maximum Power (Pmax/W)	630	635	640	645	650
Open Circuit Voltage (Voc/V)	57.30	57.50	57.70	57.90	58.10
Short Circuit Current (Isc/A)	14.04	14.09	14.14	14.19	14.24
Voltage at Maximum Power (Vmp/V)	47.48	47.67	47.86	48.05	48.24
Current at Maximum Power (Imp/A)	13.29	13.34	13.39	13.44	13.49
Module Efficiency (%)	22.50	22.70	22.90	23.10	23.30

*STC: Irradiance 1000W/m², cell temperature 25°C, AM=1.5. Tolerance of Pmax is within ±3%.

Electrical Parameters(NMOT*)

Maximum Power (Pmax/W)	474	478	482	485	489
Open Circuit Voltage (Voc/V)	53.95	54.14	54.33	54.52	54.71
Short Circuit Current (Isc/A)	11.38	11.42	11.46	11.50	11.54
Voltage at Maximum Power (Vmp/V)	44.40	44.58	44.75	44.93	45.11
Current at Maximum Power (Imp/A)	10.68	10.72	10.76	10.80	10.84

**NMOT: Under Nominal Module Operating Temperature (NMOT), irradiance of 800W/m², spectrum AM 1.5, ambient temperature 20°C, wind speed 1m/s.

Electrical Parameters(At 10% Bifacial Power Output)

Output Power (Pmax/W)	696	702	707	713	717
Open Circuit Voltage (Voc/V)	57.31	57.51	57.71	57.91	58.06
Short Circuit Current (Isc/A)	15.45	15.51	15.56	15.62	15.64
Voltage at Maximum Power (Vmp/V)	47.54	47.73	47.92	48.11	48.19
Current at Maximum Power (Imp/A)	14.67	14.72	14.78	14.83	14.87

Temperature Characteristics

NMOT	41±3°C
Temp. Coefficient of Voc	-0.25%/°C
Temp. Coefficient of Isc	+0.046%/°C
Temp. Coefficient of Pmax	-0.30%/°C

Maximum Rating

Output Tolerance	0~+5W
Operating Temperature	-40°C~+85°C
Wind Load/Snow Load	2400Pa/5400Pa
Fuse Current	30A

Characteristics(ASP650T-78BDG)

