

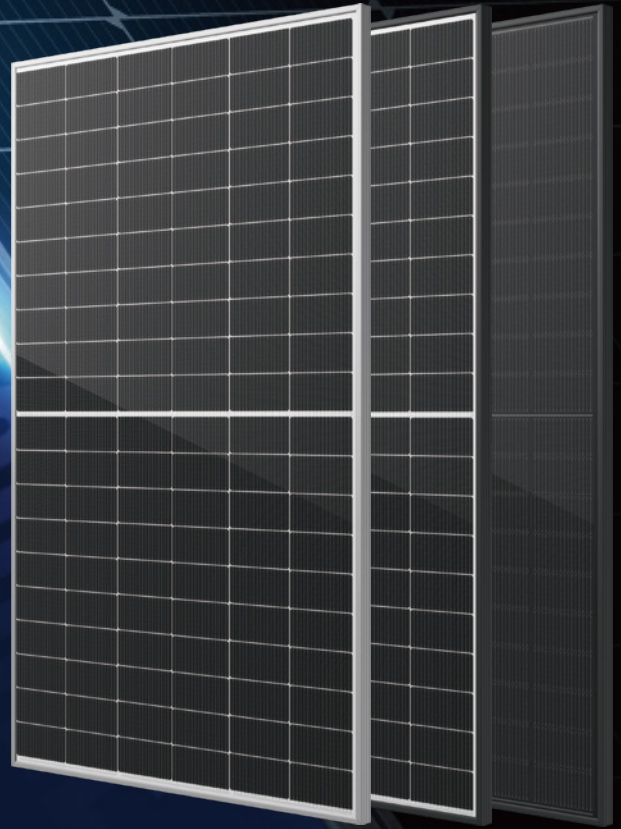
N-type TOPCon

ASP490T-60BDG

470-490W

Bifacial Module with Double Glass

22.63%
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

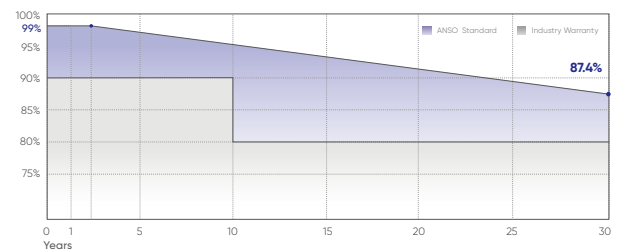
Ensure the attenuation probability caused by PID phenomenon is minimized.



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

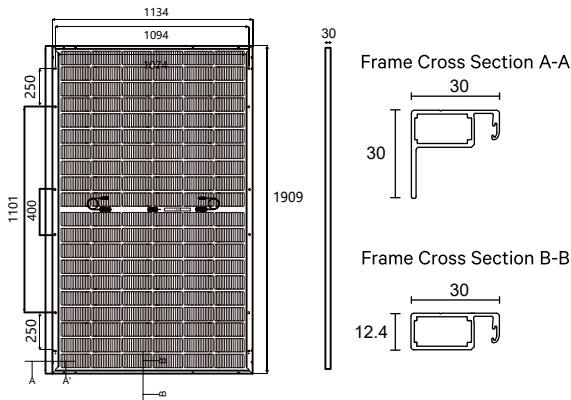
IEC61215/61730, IEC62804(PID), IEC61701(Salt).
IEC62716 (Ammonia), IEC60068-2-68(Sand).
ISO 9001:2015/quality management system.
ISO 14001:2015/environmental management system.
ISO 45001:2018/occupation health safety management system.
ISO 50001:2011/energy management system.
IEC TS 62941-2016/PV industry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

ASP470-490W

Mechanical Characteristics

Weight	26.5 kg
Dimensions	1909×1134×30mm
Cell Dimensions	182×182mm
Cell Amount	60×2 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, 864pcs/40'HQ Container

Drawings



Electrical Parameters(STC*)

Module Type: ASP490T-60BDG	470	475	480	485	490
Maximum Power (Pmax/W)	470	475	480	485	490
Open Circuit Voltage (Voc/V)	42.60	42.75	42.90	43.05	43.20
Short Circuit Current (Isc/A)	13.97	14.04	14.12	14.18	14.26
Voltage at Maximum Power (Vmp/V)	35.03	35.19	35.32	35.48	35.64
Current at Maximum Power (Imp/A)	13.42	13.50	13.59	13.67	13.75
Module Efficiency (%)	21.71	21.94	22.17	22.40	22.63

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

Electrical Parameters(NMOT*)

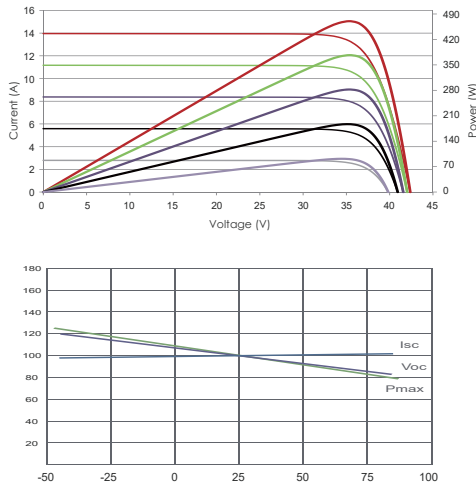
Maximum Power (Pmax/W)	354	358	361	365	369
Open Circuit Voltage (Voc/V)	40.45	40.60	40.75	40.90	41.05
Short Circuit Current (Isc/A)	11.27	11.33	11.36	11.43	11.46
Voltage at Maximum Power (Vmp/V)	32.66	32.82	32.97	33.12	33.28
Current at Maximum Power (Imp/A)	10.84	10.91	10.95	11.02	11.09

**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)	517	523	528	534	539
Open Circuit Voltage (Voc/V)	42.60	42.75	42.90	43.05	43.20
Short Circuit Current (Isc/A)	15.46	15.56	15.63	15.71	15.79
Voltage at Maximum Power (Vmp/V)	35.03	35.17	35.34	35.48	35.63
Current at Maximum Power (Imp/A)	14.76	14.87	14.94	15.05	15.13

Characteristics(ASP490T-60BDG)



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	25A