

Adensoy

TWMND
N-type Half-cell
Bifacial Module (72)
72HD580-600W

www.adensoyicaret.com.tr



High Power Output
Low LCOE



Maximum Power
600W+



Commercial
Rooftop



Utility-scale
PV Plants

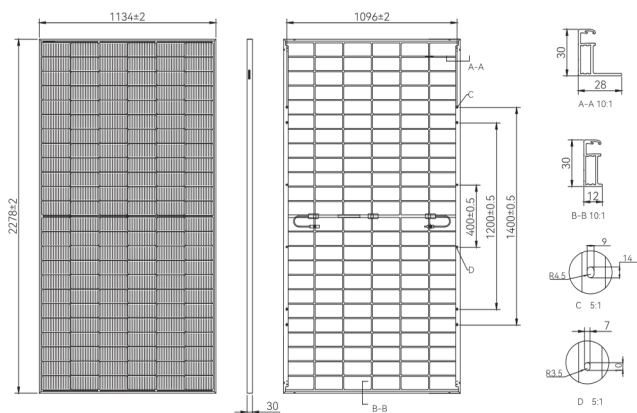
12
YEAR
Materials
Warranty

30
YEAR
Power
Warranty



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Drawing (Unit: mm)



Mechanical Parameters

Cells	TNC(N Type Monocrystalline Cell)
Cell Orientation	144[6×24]
Dimension	2278±2×1134±2×30mm
Weight	31.5kg
Front Glass	2.0mm AR coated heat strengthened glass
Rear Glass	2.0mm heat strengthened glass
Frame	Anodized aluminum alloy frame
Junction Box	IP68, 3 diodes
Output Cable	4.0mm ²
Cable Length	+400mm, -200mm or ±1400mm, length can be customized
Wind/Snow Load	2400Pa / 5400Pa
Packaging	36pcs per pallet, 720pcs per 40'HC

Electrical Characteristics (STC)

Modul type: TWMND-72HDXXX

Maximum Power: Pmax [W]	580	585	590	595	600
Open Circuit Voltage: Voc [V]	52.30	52.50	52.70	53.20	53.40
Short Circuit Current: Isc [A]	13.85	13.90	13.95	14.15	14.20
Voltage at Maximum Power: Vmp [V]	43.93	44.10	44.27	44.41	44.55
Current at Maximum Power: Imp [A]	13.21	13.27	13.33	13.40	13.47
Module Efficiency: η [%]	22.5	22.6	22.8	23.0	23.2

* STC: Irradiance 1000W/m², Cell Temperature 25°C, AM=1.5

Electrical Characteristics (NMOT)

Maximum Power: Pmax [W]	436.2	439.9	443.7	447.4	451.2
Open Circuit Voltage: Voc [V]	49.69	49.88	50.07	50.54	50.73
Short Circuit Current: Isc [A]	11.18	11.22	11.26	11.42	11.46
Voltage at Maximum Power: Vmp [V]	40.89	41.08	41.24	41.35	41.48
Current at Maximum Power: Imp [A]	10.67	10.71	10.76	10.82	10.88

* NMOT: Irradiance 800W/m², Ambient Temperature 20°C, AM=1.5, Wind Speed 1m/s

Electrical characteristics with different rear side power gain

5%	Maximum Power: Pmax [W]	609.0	614.3	619.5	624.8	630.0
	Module Efficiency: η [%]	23.6	23.8	24.0	24.2	24.4
15%	Maximum Power: Pmax [W]	667.0	672.8	678.5	684.3	690.0
	Module Efficiency: η [%]	25.8	26.0	26.3	26.5	26.7
25%	Maximum Power: Pmax [W]	725.0	731.3	737.5	743.8	750.0
	Module Efficiency: η [%]	28.1	28.3	28.5	28.8	29.0

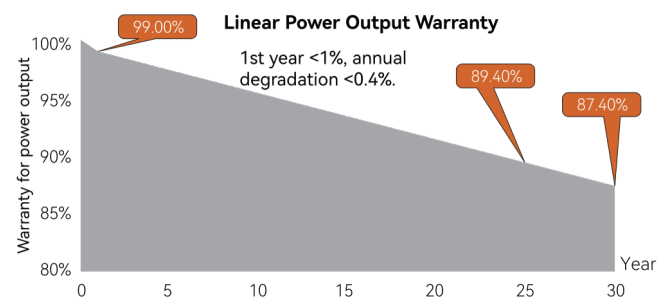
Temperature Rating

Temperature Coefficient of Pmax	-0.28%/°C
Temperature Coefficient of Voc	-0.24%/°C
Temperature Coefficient of Isc	+0.046%/°C
NMOT	45±2°C

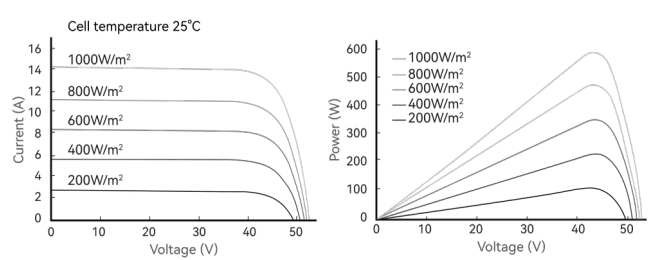
Operating Parameters

Operating Temperature	-40°C~+85°C
Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	30A
Power Output Tolerance	0~+3%
Bifaciality	80±5%

Warranty



I-V Curve



Certifications

Quality Management System and Product Certification

- ISO 9001: 2015/Quality management system
- ISO 14001: 2015/Environmental management system
- ISO 45001: 2018/Occupation health safety management system
- ISO 50001: 2018/Energy management system
- IEC 62941: 2019/Quality system for PV module manufacturing
- IEC 61215/61730, IEC 62804(PID), IEC 61701(Salt), IEC 62716 (Ammonia), IEC 60068-2-68(Sand)



Email: info@adensoyticaret.com.tr Website: www.adensoyticaret.com.tr Add: Unit1, No7, çirağan st, Beşiktaş Sq, İstanbul Turkey Tel: +905321117797

Statement: With technological process and product update, there may be deviation between the technical parameters of adensoyticaret's module products and the technical parameters contained in the specification, and adensoyticaret has the right to adjust the technical parameters at any time without notifying the customer. The final interpretation of the technical specification is vested in adensoyticaret. (Preview-20240703)