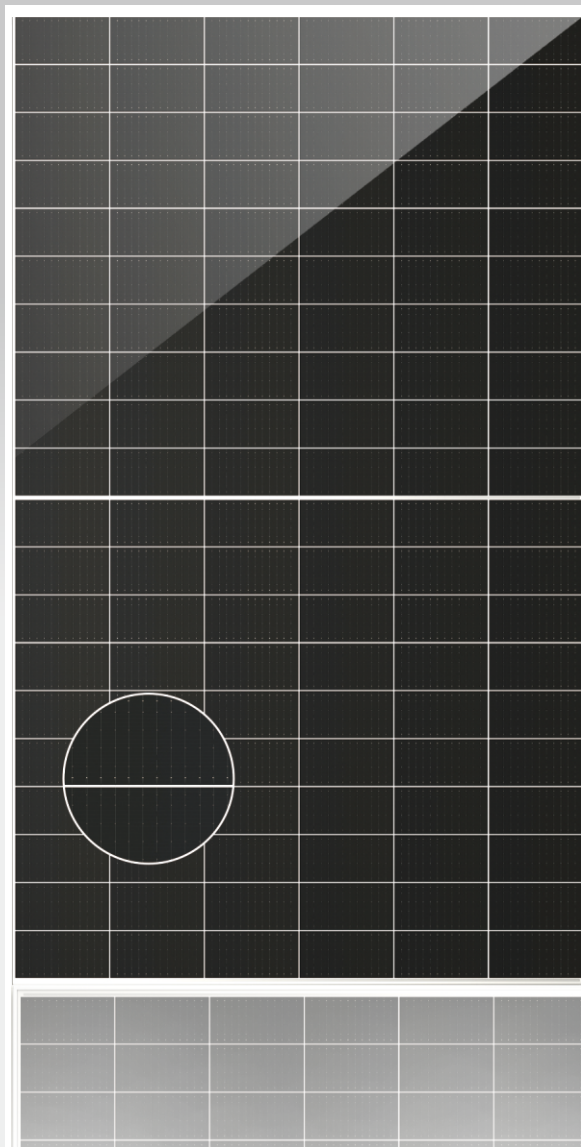


Apls1Pro

410-435W

N type TOPCon module

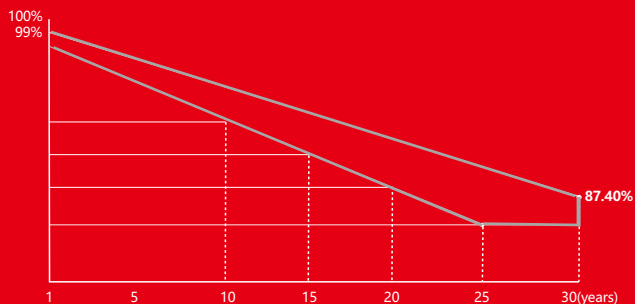
- Using the latest TOPCon 16BB silicon cells, the output power reaches 435W with a conversion efficiency reaching 22.28%.
- The same area of higher power, light weight, easy to install
- Ultra-low attenuation rate, first year attenuation $\leq 1\%$, 2-30 years linear attenuation $\leq 0.4\%$
- Fully automatic production line with full quality inspection to ensure product assurance
- Components are resisting wind loads of 2400pa and snow loads of 5400pa



30 YEAR 30 YEAR LINEARITY POWER OUTPUT WARRANTY

15 YEAR 15 YEARS OF EXCELLENT PRODUCTS MATERIAL AND PROCESS WARRANTY

30 YEAR EXCESS LINEAR POWER OUTPUT WARRANTY



The power attenuation shall not exceed 1% in the first year and 0.4% in the following years.

COMPLETE QUALITY MANAGEMENT SYSTEM AND PRODUCT CERTIFICATION



IEC 61215, IEC 61730
ISO 9001:Quality Management System
ISO 14001:Environmental Management System
ISO 45001:Occupational Health And Safety Management System

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Apls1Pro 410-435W

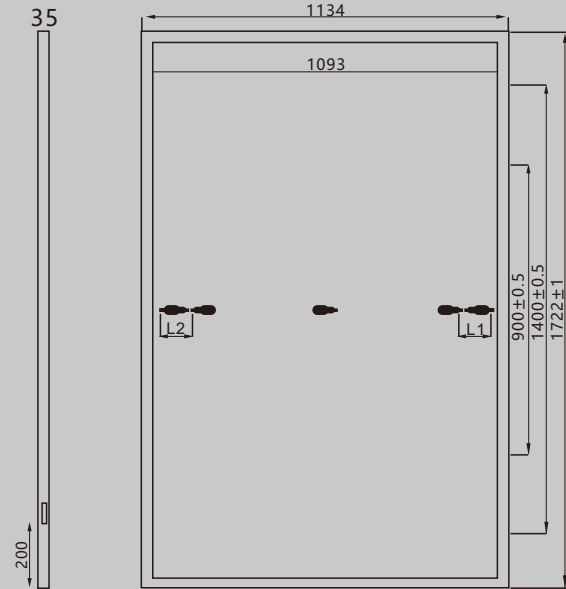
Maximum efficiency	Power tolerance	Highest component conversion efficiency	First year attenuation	Decay over the years
435W	0~ +5W	22.28%	≤1.0%	≤0.4%

MECHANICAL PROPERTIES

Battery type	N-TYPE TOPCon
Component weight	21kg
Component Size	1722x1134x35mm
Number of Cells	108(6x18)
Cable cross-sectional area	4mm ²
Junction Box	IP68, 3 diodes
Connector	MC4 compatible connector
Packaging information	31/36 pieces per pallet

WORKING PARAMETERS

Maximum system voltage	1500V (TUV)
Operating temperature	-40°C~+85°C
Maximum fuse current rating	25A
Maximum static load, front	5400pa
Maximum static load,back side	2400pa
nominal battery operating temperature	45+2°C
Application Level	classA



TEMPERATURE CHARACTERISTICS

Power	-0.350%/°C
Open circuit voltage	-0.274%/°C
Short-circuit current	-0.044%/°C

ELECTRICAL PERFORMANCE PARAMETERS UNDER STC

Model	Apls1Pro -410	Apls1Pro -415	Apls1Pro -420	Apls1Pro -425	Apls1Pro -430	Apls1Pro -435
Maximum power (W)	410	415	420	425	430	435
Voltage at maximum power point (VMPV)	31.65	31.83	32.05	32.25	32.45	32.65
Current at maximum power point (IMP/A)	12.95	13.03	13.10	13.18	13.25	13.32
Open circuit voltage (VOCN)	37.53	37.78	38.03	38.28	38.53	38.78
Short circuit current (ISC/A)	13.90	13.94	13.99	14.04	14.09	14.13
Component efficiency [%]	21.00%	21.25%	21.51%	21.76%	22.02%	22.28%
Power tolerance (W)	0~+5					
Standard test environment	Irradiance 1000W/m ² ,cell temperature 25°Cspectrum AM1.5					

Note: Due to continuous innovation, esearch and product upgrading, the parameters in this specification are not just a component,but can only be used for comparison between different types.

ELECTRICAL PERFORMANCE PARAMETERS UNDER NOCT

Model	Apls1Pro -410	Apls1Pro -415	Apls1Pro -420	Apls1Pro -425	Apls1Pro -430	Apls1Pro -435
Maximum power (W)	305	309	312	316	320	324
Voltage at maximum power point (Vmp)[V]	29.31	29.61	29.91	30.22	30.52	30.83
Current at maximum power point (Imp)[A]	10.41	10.43	10.45	10.46	10.48	10.50
Open circuit voltage (Voc)[V]	35.16	35.36	35.56	35.76	35.96	36.17
Short circuit current (Isc)[A]	11.55	11.61	11.67	11.75	11.83	11.91
Nominal cell operating temperature(NOCT)	Irradiance 800W/m ³ , ambient temperature 20 C, spectrum AM1.5G, wind speed 1m/s					