

ALPS54D35-TP

415-440W

Highperformance TOPCon
Double glass bifacial solar module

Made in EU

Production and development according to the highest quality standards.

Highly profitable

More energy yield over the same area even on cloudy or hot days.

Extremely durable

Outstanding cell stability and high breakage resistance thanks to patented SmartWire Connection Technology.

Consistently sustainable

Regional value creation, made without lead and PFAS, produced using 100% renewable energy.

Guaranteed reliability

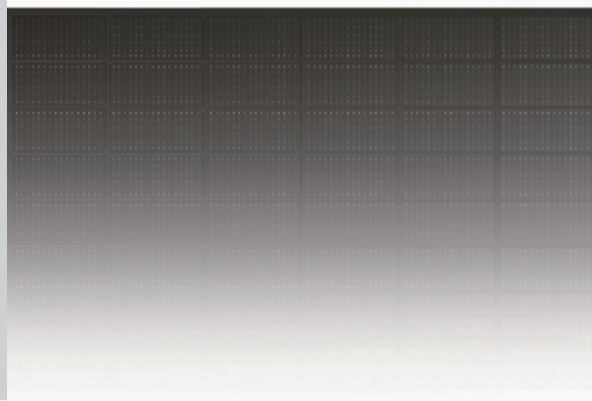
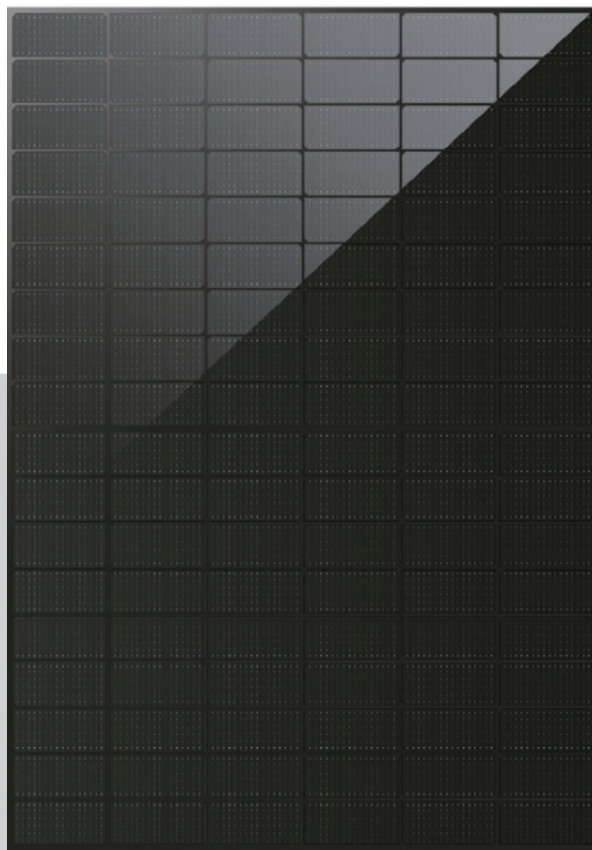
Industry-leading 25-year product and performance warranty.

Extremely aesthetic

Elegant Swiss design suitable for all roof shapes and sophisticated architecture.

Extremely practical

Convenient handling, maximum layout flexibility and maximum system performance thanks to compact format.

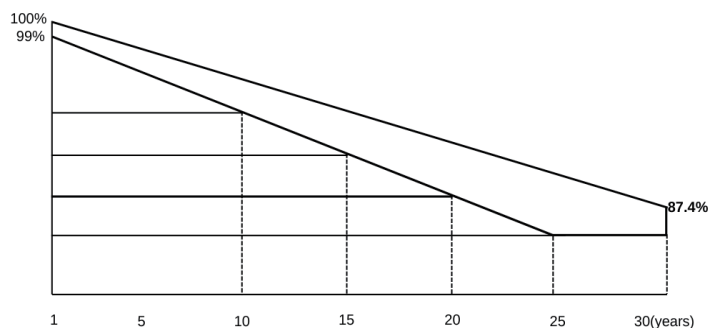


30
YEAR

Linearity power and output warranty

25
YEAR

Excellent products material and process warranty



Reduction within 0.4% per annum on average.

Certificates

IEC 61215, IEC 61730

ISO 9001: Quality Management System

ISO 14001: Environmental Management System

ISO 45001: Occupational Health And Safety Management System

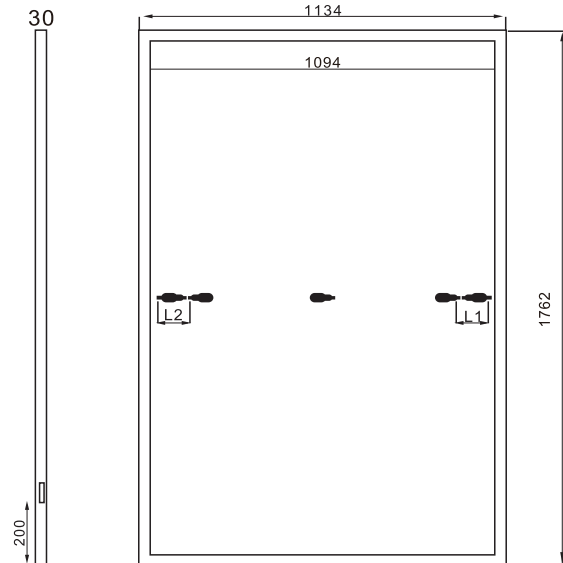
Apls54D35-TP 415-440W

MECHANICAL PROPERTIES

Cell type	Monocrystalline-TOPCon
Component weight	22kg
Component Size	1762x1134x30mm
Number of Cells	108(6x18)
Cable cross-sectional area	4mm ²
Junction Box	IP68, 3 diodes
Connector	MC4 EVO2
Packaging information	36 pieces per pallet 936pcs per 40 HC

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	Alps54D35 -415/TP	Alps54D35 -420/TP	Alps54D35 -425/TP	Alps54D35 -430/TP	Alps54D35 -435/TP	Alps54D35 -440/TP
Maximum power (W)	415	420	425	430	435	440
Voltage at maximum power point (VMPV)	31.75	31.95	32.15	32.35	32.55	32.75
Current at maximum power point (IMP/A)	13.07	13.15	13.22	13.29	13.36	13.44
Open circuit voltage (VOCN)	36.95	37.15	37.35	37.55	37.75	37.95
Short circuit current (ISC/A)	13.81	13.88	13.94	14.01	14.08	14.15
Component efficiency [%]	21.25%	21.51%	21.76%	22.02%	22.28%	22.53%
Power tolerance (W)	0~+5					
Standard test environment	Irradiance 1000W/m ² , cell temperature 25°C, spectrum AM 1.5					

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

BIFACIAL OUTPUT - BACKSIDE POWER GAIN

Model	Alps54D35 -415/TP	Alps54D35 -420/TP	Alps54D35 -425/TP	Alps54D35 -430/TP	Alps54D35 -435/TP	Alps54D35 -440/TP
5% Power Output	436	441	446	452	457	462
Module Efficiency	22.31%	22.58%	22.85%	23.12%	23.39%	23.66%
10% Power Output	457	462	468	473	479	484
Module Efficiency	23.38%	23.66%	23.94%	24.22%	24.50%	24.79%
20% Power Output	498	504	510	516	522	528
Module Efficiency	25.50%	25.81%	26.12%	26.42%	26.73%	27.04%