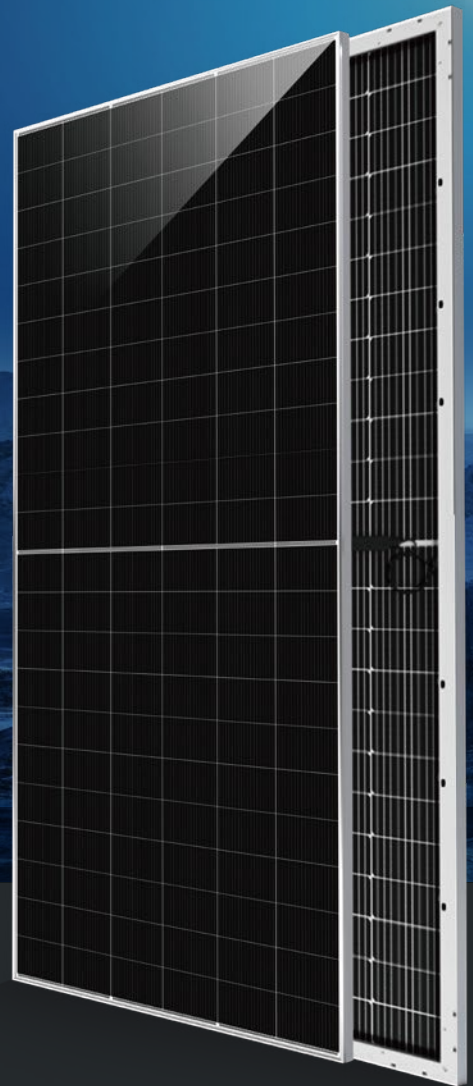




ALPS66D50-TP

690-720W

High Performance
N-type Dual Glass Bifacial Solar Module



30 LINEARITY POWER
AND
YEAR OUTPUT WARRANTY

25 EXCELLENT PRODUCTS
MATERIAL AND
YEAR PROCESS WARRANTY

KEY FEATURES



Reliable Quality

Manufactured with consistent quality and advanced technology across our global production facilities.



Exceptional Efficiency

Delivers superior energy yield even in low-light or high-temperature conditions.



Tested for Extreme Conditions

Certified under IEC 61215 and withstand 45 mm hail impact demonstrating reliability and strength.



N-Type with Low LID

Advanced N-type cells minimize Light-Induced Degradation (LID) for performance stability.



Industry-Leading Warranty

30-year performance and 25-year product coverage surpass industry norms.

COMPREHENSIVE CERTIFICATES



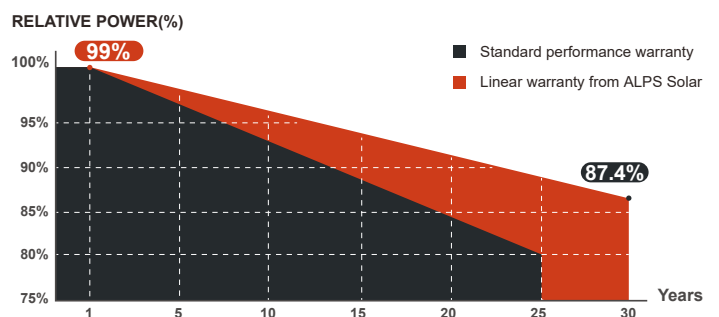
CALIFORNIA
ENERGY COMMISSION

IEC 61215, IEC 61730, UL 61730

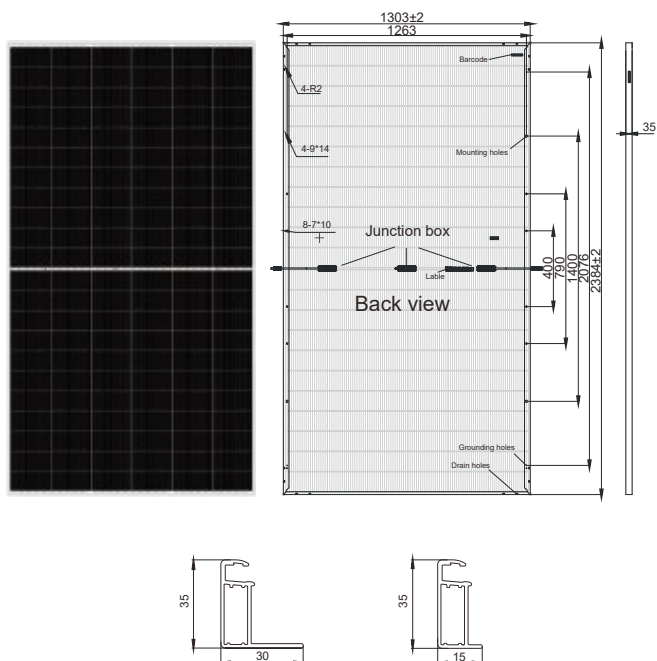
ISO 9001: 2015 / Quality Management System

ISO 45001: 2018 / Occupational Health and Safety

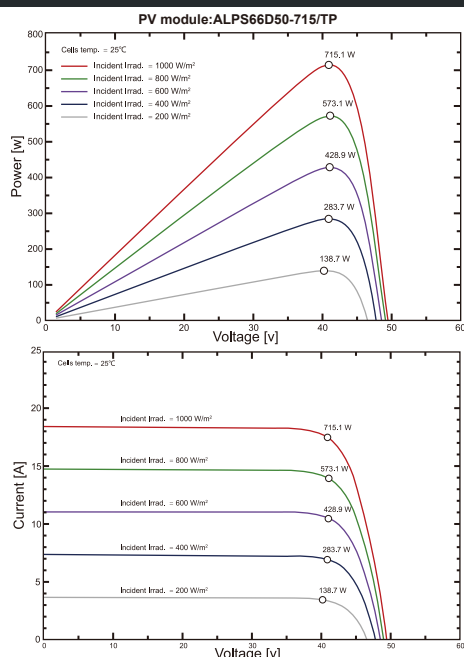
ALPS N-TYPE MODULE PERFORMANCE WARRANTY



ENGINEERING DRAWINGS



I-V CURVES



PACKING CONFIGURATION

Pieces per pallet	31 pcs
Pallet Dimension	1315 x 1095 x 2515 mm
Weight of packing	1235 kg / 2723 lb
Pieces per container	558 pcs
Size of container	40'HQ

ELECTRICAL CHARACTERISTICS (STC)

Power Level	690	695	700	705	710	715	720
Pmax (W)	690	695	700	705	710	715	720
Vmp (V)	40.00	40.25	40.50	40.75	41.00	41.25	41.50
Imp (A)	17.25	17.27	17.28	17.30	17.32	17.33	17.35
Voc (V)	47.90	48.20	48.50	48.80	49.10	49.40	49.70
Isc (A)	18.28	18.31	18.34	18.37	18.40	18.45	18.51
Module Efficiency (%)	22.21	22.37	22.53	22.70	23.86	23.02	23.18
Power Tolerance (W)	0~+3%						
Temperature Coefficient Pmax (%/°C)	-0.29						
Temperature Coefficient Isc (%/°C)	0.044						
Temperature Coefficient Voc (%/°C)	-0.25						

STC: Irradiance 1000 W/m², Cell Temperature 25°C, Air Mass AM1.5

BIFACIAL OUTPUT-BACKSIDE POWER GAIN

5%	Power Output (W)	725	730	735	740	746	751	756
	Module Efficiency (%)	23.32	23.49	23.66	24.83	24.00	24.17	24.34
10%	Power Output (W)	759	765	770	776	781	787	792
	Module Efficiency (%)	24.43	24.61	24.79	24.96	25.14	25.32	25.50
20%	Power Output (W)	828	834	840	846	852	858	864
	Module Efficiency (%)	26.66	26.85	27.04	27.23	27.43	27.62	27.81

WORKING CHARACTERISTICS (BNPI)

Pmax (W)	765	770	776	781	787	792	798
Vmp (V)	40.10	40.35	40.60	40.85	41.10	41.35	41.60
Imp (A)	19.07	19.08	19.10	19.12	19.14	19.16	19.18
Voc (V)	58.0	58.3	58.6	58.9	59.2	59.5	59.8
Isc (A)	19.78	19.81	19.84	19.87	19.90	19.95	20.01

BNPI: Front Irradiance 1000 W/m², Rear 135 W/m², Cell Temperature 25°C, AM=1.5

WORKING PARAMETERS

Maximum System Voltag	1500V DC (IEC)
Operational Temperature	-40~+85 °C
Maximum Series Fuse Rating	35 A
Maximum Static Load, Fron	5400 Pa
Maximum Static Load, Back	3750 Pa
NOCT	45±2 °C
Safety Class	Class A

MECHANICAL CHARACTERISTICS

Solar Cells	210 N-type
Number of Cells	132 pcs (6x22)
Module Dimensions	2384 x 1303 x 35 mm
Weight	38 kg / 83.8 lb
Cable Cross Section Size	4 mm² (IEC), 12 AWG (UL)
Junction box	IP68, 3 diodes
Connectors	Stäubli EVO2
Output Cable (accept customization)	(+) 1200 mm / (-) 1200 mm
Front Glass / Back Glass	2.0 mm / 2.0 mm

MAXIMUM RATINGS

Operating Temperature	-40~85 °C
Operating Humidity	5~85 %RH
Hail Impact Resistance	Withstands 45 mm hail at 31 m/s

Revised in July 2025 1st Edition*

CAUTION: All rights and explain reserved by Alps Solar Energy Inc.
Specifications included in this datasheet are subject to change without notice.
The specific content of the product warranty refers to Alps's latest warranty.