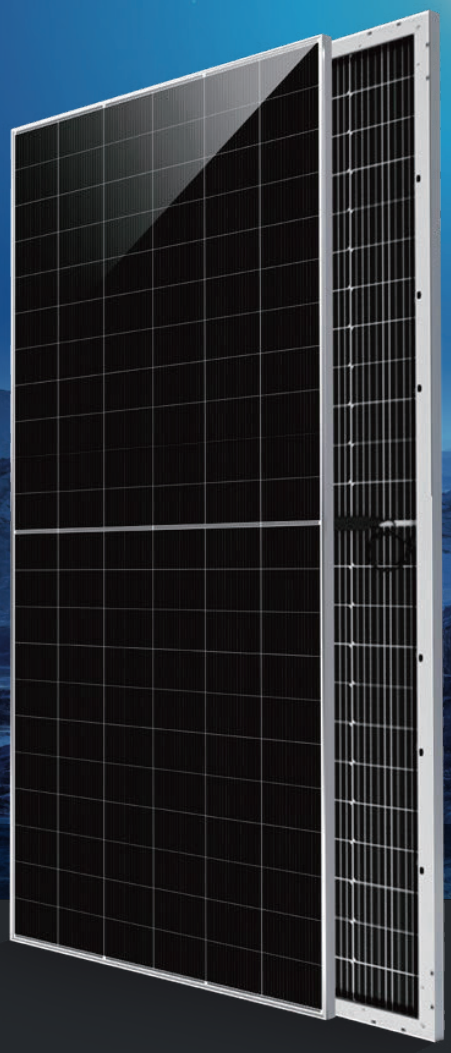
ALPS SOLAR

ALPS66D5D-TP

690-720W

High Performance
N-type Dual Glass Bifacial Solar Module



30 YEAR LINEARITY POWER AND OUTPUT WARRANTY

25 YEAR EXCELLENT PRODUCTS MATERIAL AND PROCESS WARRANTY

KEY FEATURES

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

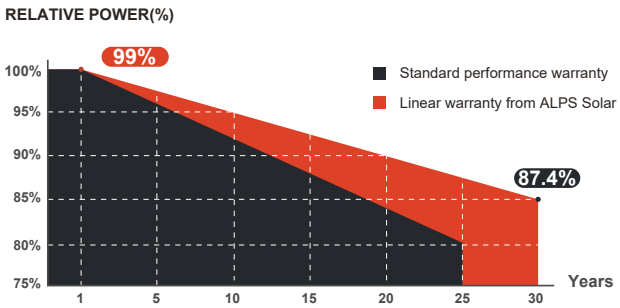
Exceptional Efficiency
Delivers superior energy yield even in low-light or high-temperature conditions.

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.

ALPS N-TYPE MODULE PERFORMANCE WARRANTY



COMPREHENSIVE CERTIFICATES

IEC 61215, IEC 61730, UL 61730, UL 61215
IEC 62716 (Ammonia Corrosion)
IEC 61701 (Salt Mist Corrosion)
IEC 60068 (Sand and Dust)
IEC 62804 (PID Resistance)
IEC 62759 (Transportation Testing)
IEC 62941 (Quality System for PV Module Manufacturing)
LID, LeTID, DH 2000, TC 400, HF 30, UV 60
Wind Test
Hail Impact Test (45mm / 55mm)

Registro ENEA

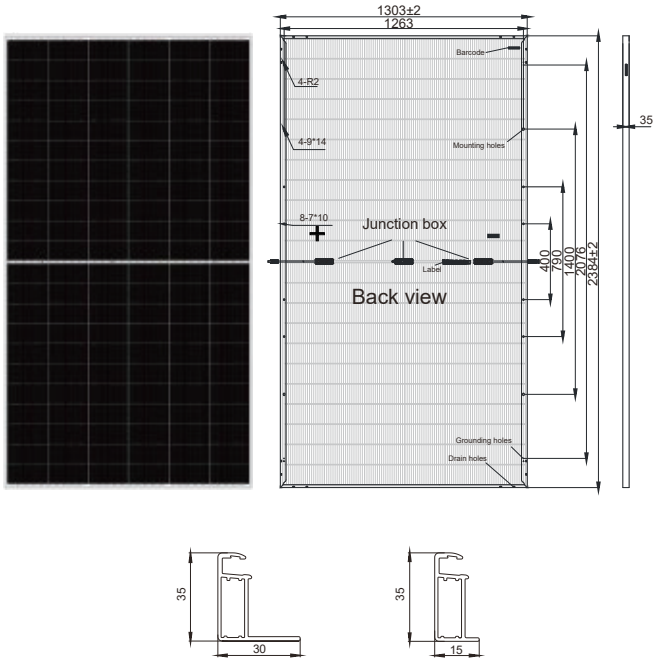
ALPS SOLAR

ALPS66D50-TP 690-720W

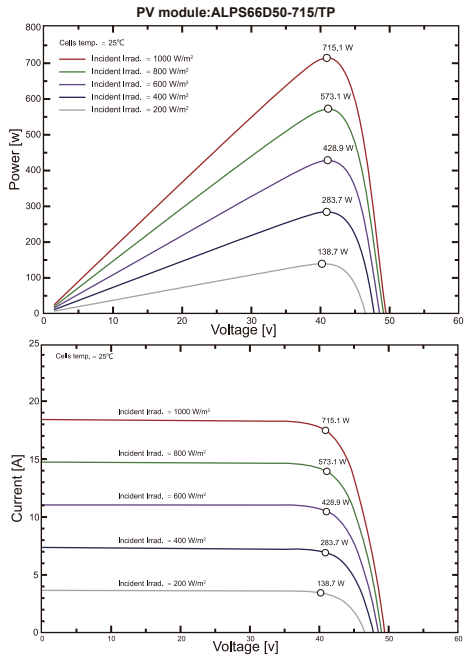
N-type Technology PV Bifacial Module

MADE IN ROMANIA AND PHILIPPINES

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	22.86	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*

ALPS SOLAR

ALPS Solar Energy Inc.
1255 Treat Blvd, Suite 300
Walnut Creek, CA 94597
USA
www.alpssolarenergy.com
info@alpssolarenergy.com