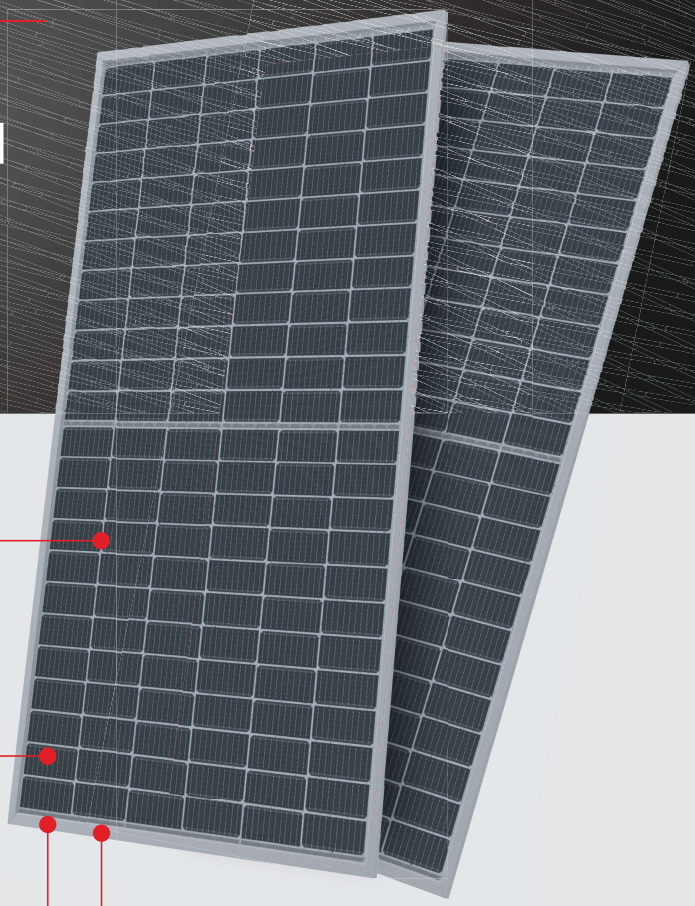
Bi-Facial Module

AMPS
American Made Power Solution

AMPS-550P-144SW
144 PCS HALF-CUT Bi-Facial
530W-550W

Domestic Content Available



High Purity Monocrystalline Material

- Top Class Module Efficiency
- Better Performance Under Cold & Hot Weather
- Outstanding Degradation Prevention

High Transmittance, Low Iron Solar Glass

- Enhanced module efficiency
- Further reduces light absorption and reflection loss
- Great durability and better mechanical strength

Weatherproof Edge Sealants

- Prevents water ingress and provides humidity resistance
- Dust & dirt protection and stronger chemical Resistance
- Better shock absorption and great UV Resistance.

Ultradurable Aluminum Frame

- Enhanced mechanical stability
- Impact and environmental resistance
- Wide mounting compatibility and easy accessibility

25 Years Product Warranty,
25 Years Linear Power Warranty,
0.5% Annual Degradation over Year 2 – Year 25

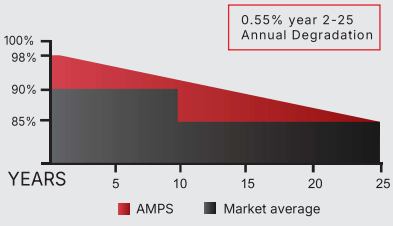
ISO 9001:2015

c UL us LISTED

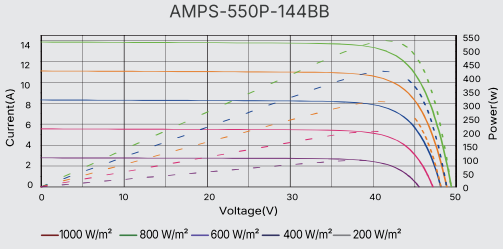
Domestic Content

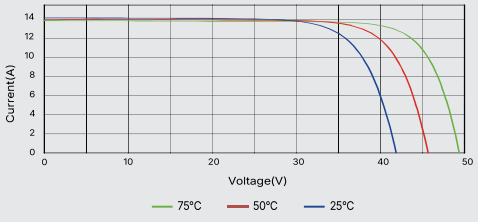
Up to 17.4% (Subject to Project Requirements)
Frame | Encapsulant | Junction Box | Bus Ribbons

Linear Power WARRANTY



IV CURVES





ELECTRICAL PARAMETERS

Module Type	AMPS-530P-144SW		AMPS-535P-144SW		AMPS-540P-144SW		AMPS-545P-144SW		AMPS-550P-144SW	
Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power - Pmax (W)	530	395	535	398	540	402	545	406	550	410
Maximum Power Volateg - Vmpp (V)	41032	38.6	41.48	38.7	41.64	38.8	41.80	39.0	41.96	39.1
Maximum Power Current - Impp (A)	12.83	10.24	12.90	10.30	12.97	10.36	13.04	10.41	13.11	10.47
Open Circuit Voltage - Voc (V)	49.32	46.4	49.46	46.5	49.60	46.7	49.76	46.8	49.92	47.0
Short Circuit Current - Isc (A)	13.72	11.06	13.79	11.12	13.86	11.17	13.93	11.23	14.00	11.28
Module Efficiency	20.50%		20.70%		20.90%		21.10%		21.30%	

BIFACIAL REARSIDE POWER GAIN

Module	Bifaciality: 70±5%				
Maximum Power	Pmax Gain	Voc/V	Isc/A	Vmp/V	Imp/A
578W	5%	49.92	14.70	41.96	13.77
605W	10%	49.92	15.40	41.96	14.42
633W	15%	49.92	16.10	41.96	15.08
660W	20%	49.92	16.80	41.96	15.73
688W	25%	49.92	17.50	41.96	16.39

Bifacial gain: the additional gain from the rear side compared to the power of the front side at the standard test condition. It depends on mounting (structure, height, tilt angle, etc.) and albedo of the ground.

MECHANICAL CHARACTERISTICS

Dimensions	2279x1134x35mm (LxWxH)
Weight	28kg
Frame	Silver anodized aluminum alloy
Glass	3.2mm coated tempered glass
Cell Encapsulation	EVA (Ethylene-Vinyl-Acetate)
Back Sheet	Transparent
Solar Cells	144(6x24) Monocrystalline (182mmx91mm)
Junction Box	IP68, 3 bypass diodes
Cable & Connector	Length 1400mm, 1x4mm²/MC4 Compatible

TEMPERATURE CHARACTERISTICS

NMOT	43°C (±2°C)
Temperature Coefficient of Pmax	-0.35%/°C
Temperature Coefficient of Isc	-0.048%/°C
Temperature Coefficient of Voc	0.26%/°C

MAXIMUM RATINGS

Maximum System Voltage (V)	1500
Series Fuse Rating (A)	25

PACKAGING

Pallet Dimensions	2304x1130x1247mm
Pallet Quantity	36 Modules
Truck (53') Quantity	648 Modules

SYSTEM DESIGN

Temperature Range	-40°C to +85°C
Mechanical Load Front	5,400 Pa
Mechanical Load Back	2,400 Pa
Safety Protection Class	Class II

ENGINEERING DRAWINGS