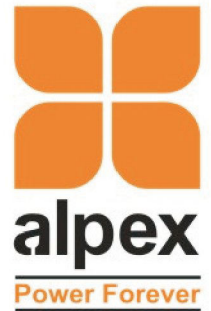


NIKKO MBB SERIES

日光

PV MODULES WITH X-FACTOR

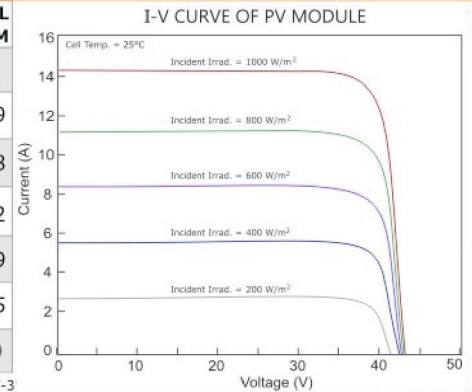
440 – 475W Mono PERC Crystalline - 60 x 2 Half Cut Cells



ELECTRICAL PARAMETERS AT STC

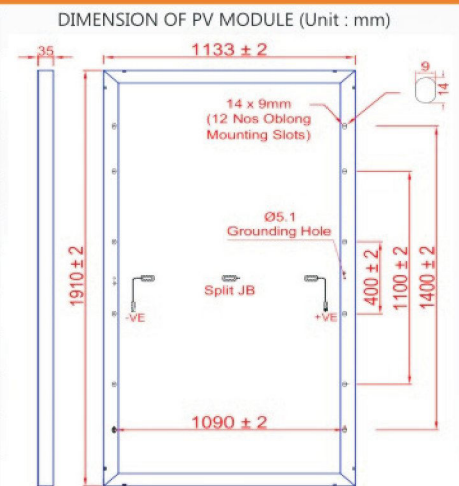
Model	ALP20L 440WM	ALP20L 445WM	ALP20L 450WM	ALP20L 455WM	ALP20L 460WM	ALP20L 465WM	ALP20L 470WM	ALP20L 475WM
Peak Power [Pmax(Wp)] (0 ~ +4.99 Wp)	440	445	450	455	460	465	470	475
Max. Power Voltage (Vmp) [V]	33.84	34.05	34.24	34.41	34.57	34.72	34.86	34.99
Max. Power Current (Imp) [A]	13.01	13.07	13.15	13.23	13.31	13.40	13.49	13.58
Open Circuit Voltage (Voc) [V]	41.30	41.52	41.72	41.90	42.07	42.23	42.38	42.52
Short Circuit Current (Isc) [A]	13.61	13.66	13.73	13.80	13.87	13.94	14.01	14.09
Module Efficiency (%)	20.33	20.56	20.79	21.02	21.25	21.48	21.71	21.95
Maximum System Voltage (V DC)	1500	1500	1500	1500	1500	1500	1500	1500

* STC: Irradiance 1000W/m², Cell Temperature 25°C, AM1.5. All other parameters have a tolerance of +/-5%, Measurement Uncertainty +/-3



MECHANICAL SPECIFICATIONS

Dimensions (L x W x H)	1910 mm x 1133 mm x 35 mm
Weight	24 Kgs
Junction Box	Split JB, IP67/68 Rated with 3 Bypass Diodes
Cable & Connectors	Solar Cable 4.0 mm ² , 300 mm (MC4 Compatible) or Customized Length
Application Class	Class A (Safety class II)
Superstrate	High Transmission, AR Coated Tempered Glass
Solar Cells	Mono PERC Crystalline – MBB [120 pcs Half Cut]
Cell Encapsulation	EVA (Ethylene Vinyl Acetate)
Back Sheet	Multilayered Back Sheet
Frame	Anodized Aluminium Frame
Mechanical Load test	5400 Pa (Snow Load), 2400 Pa (Wind Load)
Max. Series Fuses Rating	25A



TEMPERATURE COEFFICIENTS (TC) AND PERMISSIBLE OPERATING CONDITIONS

NOCT	45°C ±2°C
Coefficient of Power (Pmax)	-0.35%/°C
Coefficient of Voltage (Voc)	-0.27%/°C
Coefficient of Current (Isc)	0.045%/°C
Temperature Range	-40°C to +85°C



WARRANTY AND CERTIFICATIONS

Performance*	Power output of 90% at the end of 10 Years and 80% at the end 25 Years
Approvals and Certificates	ALMM / IEC / BIS

* Refer to Alpex Modules Warranty Document

PACKAGING CONFIGURATION

Container Size	40' HC
Modules per Pallet	31 Pieces
Modules per Container	744 Pieces (24 Pallets)

Alpex Solar Private Limited (ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018 Certified Company)

Head Office / Sales Office :
B-79, Shivalik Enclave, Near Malviya Nagar,
New Delhi – 110017 (India)
Tel : +91 11 42576121

Factory :
Plot No.-I-25 & I-26, Site-5, Surajpur
Industrial Area, Kasna, Greater Noida – 201306,
District: Gautam Budh Nagar, Uttar Pradesh, (India)

Toll Free: 1800 11 2573
Email: info@alpexonline.com
Website: www.alpexsolar.com

Delhi | Jaipur | Kolkata | Ludhiana | Mumbai | Patna | Tirupur | Seoul | Sydney