

NIKKO MBB SERIES

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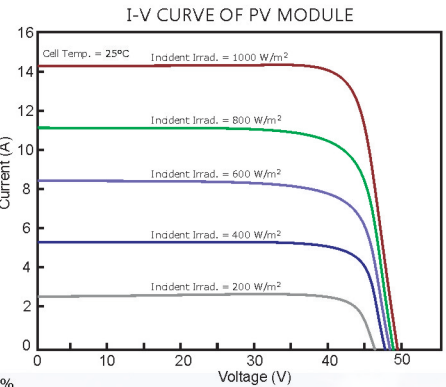


PV MODULES WITH X-FACTOR

520 – 555W Mono PERC Crystalline -72 x 2 Half Cut Cells

ELECTRICAL PARAMETERS AT STC

Model	ALP24L 520WM	ALP24L 525WM	ALP24L 530WM	ALP24L 535WM	ALP24L 540WM	ALP24L 545WM	ALP24L 550WM	ALP24L 555WM
Peak Power [Pmax(Wp)] (0 ~ +4.99 Wp)	520	525	530	535	540	545	550	555
Max. Power Voltage (Vmp) [V]	41.07	41.23	41.38	41.52	41.65	41.79	41.91	42.04
Max. Power Current (Imp) [A]	12.67	12.74	12.81	12.89	12.97	13.05	13.13	13.21
Open Circuit Voltage (Voc) [V]	48.98	49.15	49.31	49.46	49.61	49.75	49.88	49.99
Short Circuit Current (Isc) [A]	13.53	13.60	13.67	13.75	13.83	13.91	13.99	14.07
Module Efficiency (%)	20.10	20.29	20.49	20.68	20.87	21.07	21.26	21.45
Maximum System Voltage (V DC)	1500	1500	1500	1500	1500	1500	1500	1500

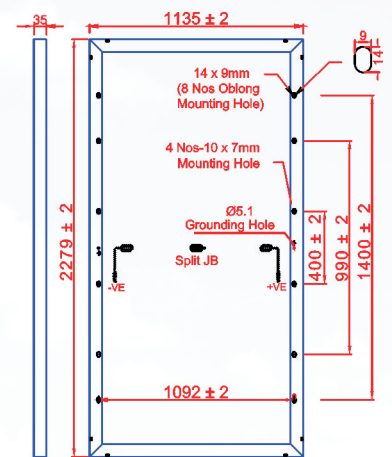


* STC: Irradiance 1000W/m2, Cell Temperature 25°C, AM1.5 . All other parameters have a tolerance of +/-5%, Measurement Uncertainty +/-3%

MECHANICAL SPECIFICATIONS

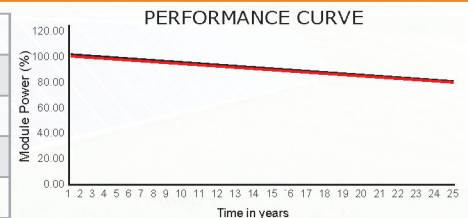
Dimensions (L x W x H)	2279 mm x 1135 mm x 35 mm
Weight	28.5 Kgs
Junction Box	Split JB, IP67/68 Rated with 3 Bypass Diodes
Cable & Connectors	Solar Cable 4.0 mm ² , 300 mm (MC4 Compatible) or Customized Length
Application Class	Class A (Safety Class II)
Superstrate	High Transmission, AR Coated Tempered Glass
Solar Cells	Mono PERC Crystalline – MBB [144 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

DIMENSION OF PV MODULE (Unit : mm)



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	620 Pieces (20 Pallets)

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

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

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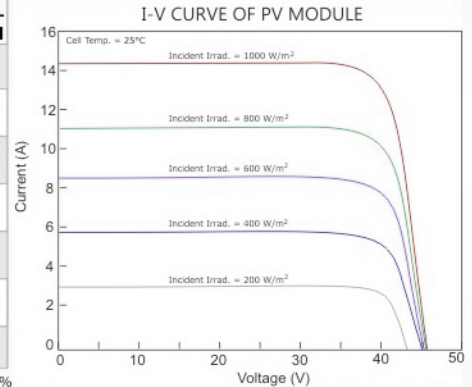
PV MODULES WITH X-FACTOR

480 – 515W Mono PERC Crystalline - 66 x 2 Half Cut Cells



ELECTRICAL PARAMETERS AT STC

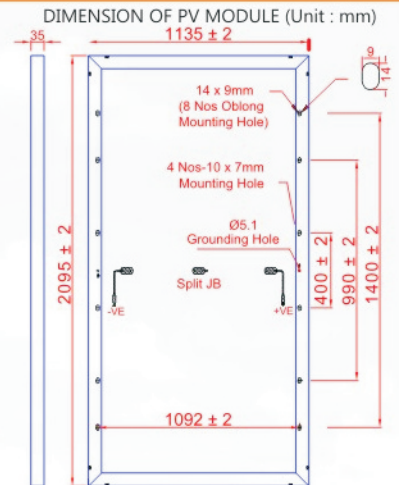
Model	ALP22L 480WM	ALP22L 485WM	ALP22L 490WM	ALP22L 495WM	ALP22L 500WM	ALP22L 505WM	ALP22L 510WM	ALP22L 515WM
Peak Power [Pmax(Wp)] (0 ~ +4.99 Wp)	480	485	490	495	500	505	510	515
Max. Power Voltage (Vmp) [V]	37.02	37.23	37.44	37.66	37.83	38.04	38.27	38.46
Max. Power Current (Imp) [A]	12.97	13.03	13.09	13.15	13.22	13.28	13.33	13.40
Open Circuit Voltage (Voc) [V]	44.53	44.74	44.91	45.13	45.32	45.53	45.71	45.92
Short Circuit Current (Isc) [A]	13.58	13.65	13.73	13.80	13.87	13.93	13.99	14.04
Module Efficiency (%)	20.18	20.39	20.60	20.81	21.02	21.23	21.44	21.65
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)	2095 mm x 1135 mm x 35 mm
Weight	26 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 [132 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

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PACKAGING CONFIGURATION

Container Size	40' HC
Modules per Pallet	31 Pieces
Modules per Container	682 Pieces (22 Pallets)

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Industrial Area, Kasna, Greater Noida – 201306,
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PV MODULES WITH X-FACTOR

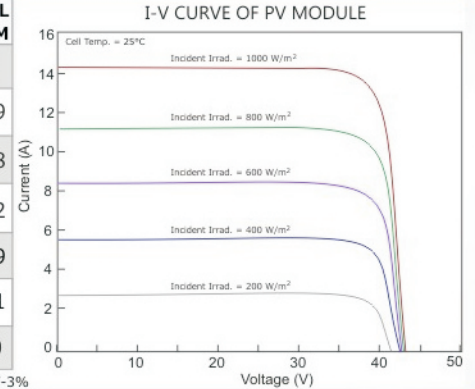
440 – 475W Mono PERC Crystalline - 60 x 2 Half Cut Cells



ELECTRICAL PARAMETERS AT STC

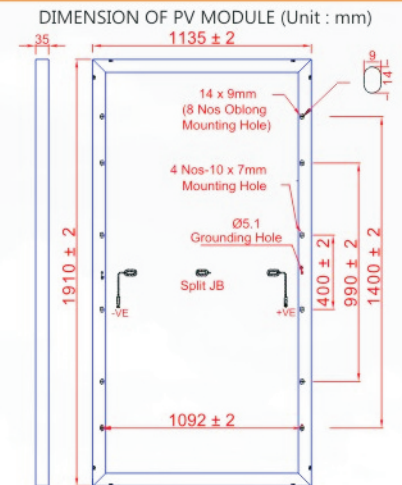
Model	ALP20L 440WM	ALP20L 445WM	ALP20L 450WM	ALP20L 455WM	ALP20L 460WM	ALP20L 465WM	ALP20L 470WM	ALP20L 475WM
Peak Power [Pmax(Wp)] (0 ~ +4.99 Wp)	440	445	450	455	460	465	470	475
Max. Power Voltage (Vmp) [V]	33.84	34.05	34.24	34.41	34.57	34.72	34.86	34.99
Max. Power Current (Imp) [A]	13.01	13.07	13.15	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 (%)	20.29	20.52	20.75	20.98	21.21	21.45	21.68	21.91
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%



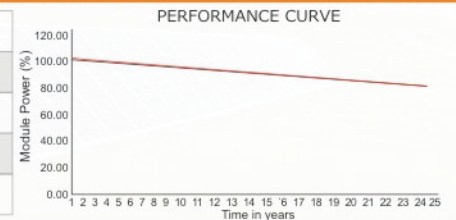
MECHANICAL SPECIFICATIONS

Dimensions (L x W x H)	1910 mm x 1135 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

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PACKAGING CONFIGURATION

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

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