

NIKKO MBB MONO PERC CRYSTALLINE

PV MODULES 265Wp - 555Wp

KEY FEATURES

- MBB Half-Cut Mono PERC Cell Technology.
- Reduced LCOE (Levelized Cost of Electricity) with increased ROI.
- Controlled temperature coefficient for high efficiency.
- Excellent power generation under shaded environments.
- Nikko [Sunshine in Japanese] series is cutting edge Japanese inspired PV technology.

10
YEARS

90%
POWER OUTPUT
GENERATION

25
YEARS

80%
POWER OUTPUT
GENERATION

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CERTIFICATIONS



IEC 61215, IEC 61730

UL 61730

ISO 9001:2015 | QUALITY MANAGEMENT

ISO 14001:2015 | ENVIRONMENTAL MANAGEMENT

ISO 45001:2018 | OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT



NSE-EMERGE: ALPEXSOLAR

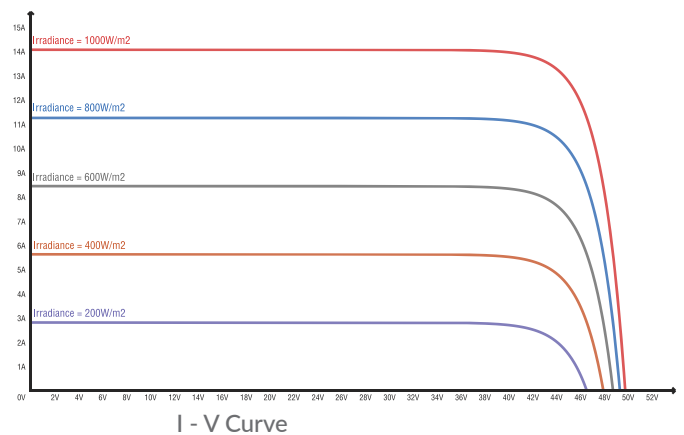
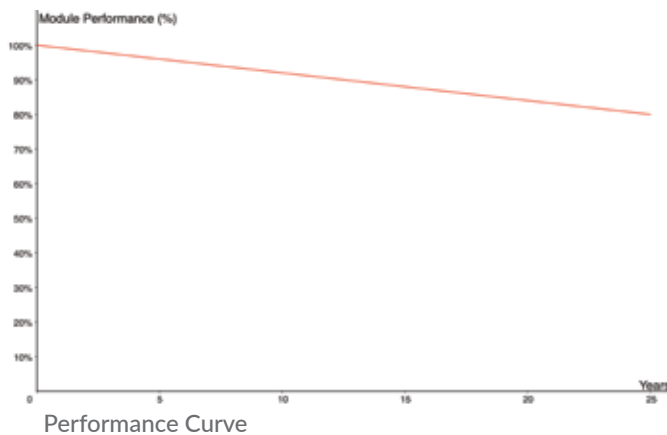
alpexsolar.com

ELECTRICAL PARAMETERS AT STC

Model	ALP24L 520WM[-T]	ALP24L 525WM[-T]	ALP24L 530WM[-T]	ALP24L 535WM[-T]	ALP24L 540WM[-T]	ALP24L 545WM[-T]	ALP24L 550WM[-T]	ALP24L 555WM[-T]
Peak Power (Pmax) [W] <small>(0~ +4.99 wp)</small>	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 (%)	20.13	20.32	20.52	20.71	20.90	21.10	21.29	21.48
Maximum System Voltage (V DC)	1500	1500	1500	1500	1500	1500	1500	1500

*STC: 25°C CELL TEMPERATURE | 1000W/M2 IRRADIANCE | AM1.5 SPECTRUM

RATING TOLERANCE AT STC (VOC / ISC)(%) : ±5 / ±5 | MEASUREMENT UNCERTAINTY: ±3% *[-T] MODELS REFER TO TRANSPARENT BACKSHEET



THERMAL CHARACTERISTICS & 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

PACKAGING CONFIGURATION

Container Size	: 40' HC
Modules/Pallet	: 31 Pieces
Modules/Container	: 620 Pieces (20 Pallets)

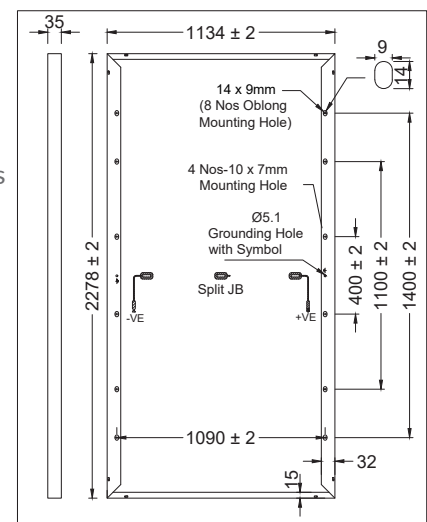
WARRANTY

PRODUCT WARRANTY : 10 Years

PERFORMANCE WARRANTY: Linear Power Warranty for 25 years with 1% degradation for 1st year

MECHANICAL SPECIFICATIONS

Dimensions (L x W x H)	: 2278 mm X 1134 mm X 35 mm
Weight	: 28.5 Kg
Junction Box	: IP 68, Split Junction Box with Individual Bypass Diodes
Cable & Connectors	: 4.0mm ² Solar Cable, 300mm, MC4 Compatible/Connectors
Application Class	: Class A (Safety Class II)
Superstrate	: 3.2mm High Transmission, Low Iron, ARC Tempered Glass
Cell Technology	: MonoPERC Crystalline 182x91mm - MBB 144 Cells
Cell Encapsulation	: EVA / EPE / POE
Substrate	: White / Black / Transparent Backsheet
Frame	: Silver / Black Anodized Aluminium
Mechanical Load Test	: 5400 Pa (Snow load), 2400 Pa (Wind load)
Max. Series Fuse Rating	: 25 A



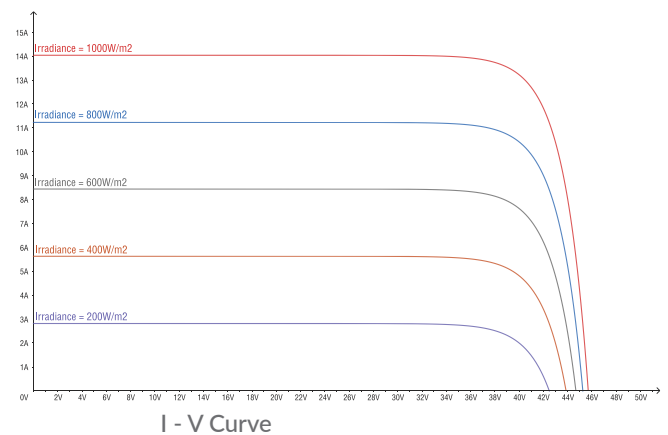
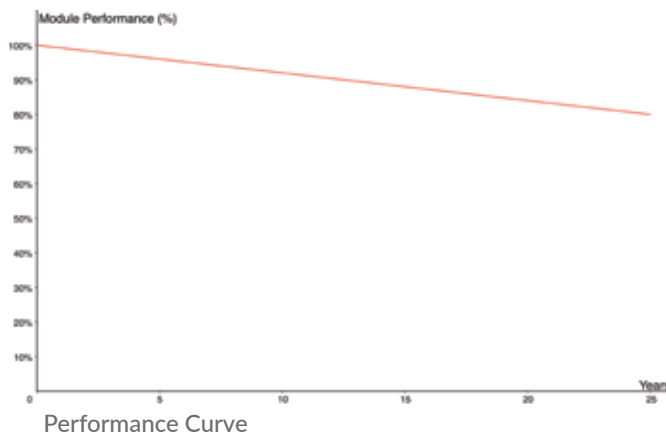
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ELECTRICAL PARAMETER AT STC

Model	ALP22L 480WM[-T]	ALP22L 485WM[-T]	ALP22L 490WM[-T]	ALP22L 495WM[-T]	ALP22L 500WM[-T]	ALP22L 505WM[-T]	ALP22L 510WM[-T]	ALP22L 515WM[-T]
Peak Power (Pmax) [W] <small>(0~+4.99 wp)</small>	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 (%)	20.21	20.42	20.64	20.85	21.06	21.27	21.48	21.69
Maximum System Voltage (V DC)	1500	1500	1500	1500	1500	1500	1500	1500

*STC: 25°C CELL TEMPERATURE | 1000W/M2 IRRADIANCE | AM1.5 SPECTRUM

RATING TOLERANCE AT STC (VOC / ISC)(%) : ±5 / ± 5 | MEASUREMENT UNCERTAINTY: ±3% *[-T] MODELS REFER TO TRANSPARENT BACKSHEET



THERMAL CHARACTERISTICS & 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

PACKAGING CONFIGURATION

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

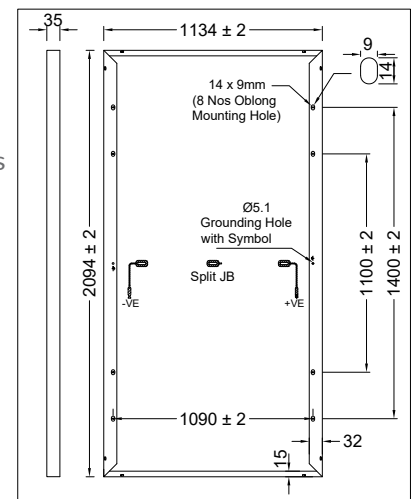
WARRANTY

PRODUCT WARRANTY : 10 Years

PERFORMANCE WARRANTY: Linear Power Warranty for 25 years with 1% degradation for 1st year

MECHANICAL SPECIFICATIONS

Dimensions (L x W x H)	: 2094 mm X 1134 mm X 35 mm
Weight	: 26 Kg
Junction Box	: IP 68, Split Junction Box with Individual Bypass Diodes
Cable & Connectors	: 4.0mm ² Solar Cable, 300mm, MC4 Compatible/Connectors
Application Class	: Class A (Safety Class II)
Superstrate	: 3.2mm High Transmission, Low Iron, ARC Tempered Glass
Cell Technology	: MonoPERC Crystalline 182x91mm - MBB 132 Cells
Cell Encapsulation	: EVA / EPE / POE
Substrate	: White / Black / Transparent Backsheet
Frame	: Silver / Black Anodized Aluminium
Mechanical Load Test	: 5400 Pa (Snow load), 2400 Pa (Wind load)
Max. Series Fuse Rating	: 25 A



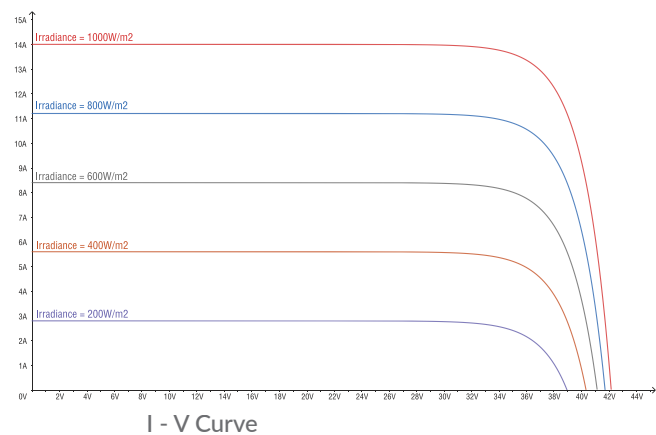
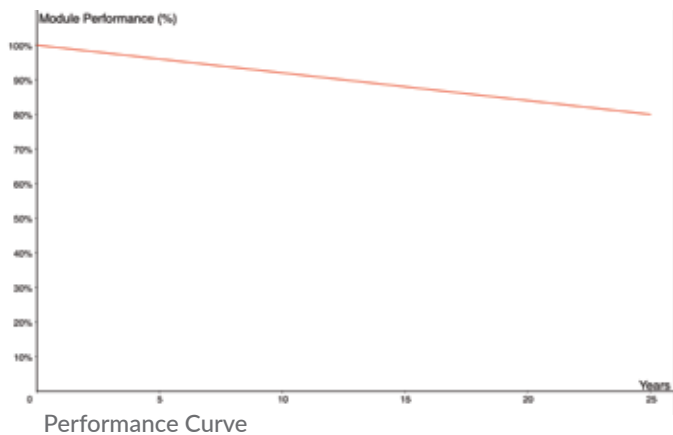
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ELECTRICAL PARAMETER AT STC

Model	ALP20L 440WM[-T]	ALP20L 445WM[-T]	ALP20L 450WM[-T]	ALP20L 455WM[-T]	ALP20L 460WM[-T]	ALP20L 465WM[-T]	ALP20L 470WM[-T]
Peak Power (Pmax) [W] <small>(0~ +4.99 wp)</small>	440	445	450	455	460	465	470
Max. Power Voltage (Vmp) [V]	33.84	34.05	34.24	34.41	34.57	34.72	34.86
Max. Power Current (Imp) [A]	13.01	13.07	13.15	13.23	13.31	13.40	13.49
Open Circuit Voltage (Voc) (V)	41.30	41.52	41.72	41.90	42.07	42.23	42.38
Short Circuit Current (Isc) [A]	13.61	13.66	13.73	13.80	13.87	13.94	14.01
Module Efficiency (%)	20.29	20.52	20.75	20.99	21.22	21.45	21.68
Maximum System Voltage (V DC)	1500	1500	1500	1500	1500	1500	1500

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RATING TOLERANCE AT STC (VOC / ISC)(%) : ±5 / ±5 | MEASUREMENT UNCERTAINTY: ±3% *[-T] MODELS REFER TO TRANSPARENT BACKSHEET



THERMAL CHARACTERISTICS & 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

PACKAGING CONFIGURATION

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

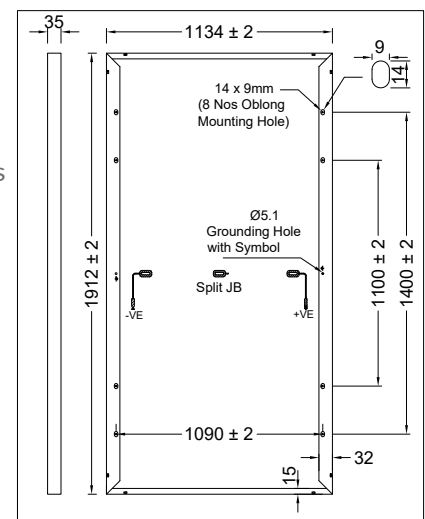
WARRANTY

PRODUCT WARRANTY : 10 Years

PERFORMANCE WARRANTY: Linear Power Warranty for 25 years with 1% degradation for 1st year

MECHANICAL SPECIFICATIONS

Dimensions (L x W x H)	: 1912 mm X 1134 mm X 35 mm
Weight	: 24 Kg
Junction Box	: IP 68, Split Junction Box with Individual Bypass Diodes
Cable & Connectors	: 4.0mm ² Solar Cable, 300mm, MC4 Compatible/Connectors
Application Class	: Class A (Safety Class II)
Superstrate	: 3.2mm High Transmission, Low Iron, ARC Tempered Glass
Cell Technology	: MonoPERC Crystalline 182x91mm - MBB 120 Cells
Cell Encapsulation	: EVA / EPE / POE
Substrate	: White / Black / Transparent Backsheet
Frame	: Silver / Black Anodized Aluminium
Mechanical Load Test	: 5400 Pa (Snow load), 2400 Pa (Wind load)
Max. Series Fuse Rating	: 25 A



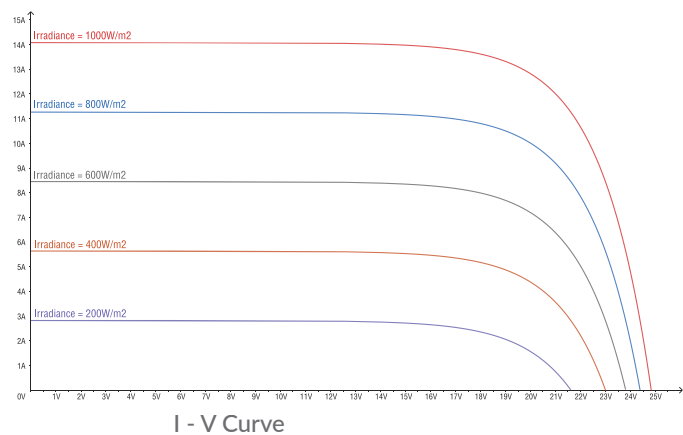
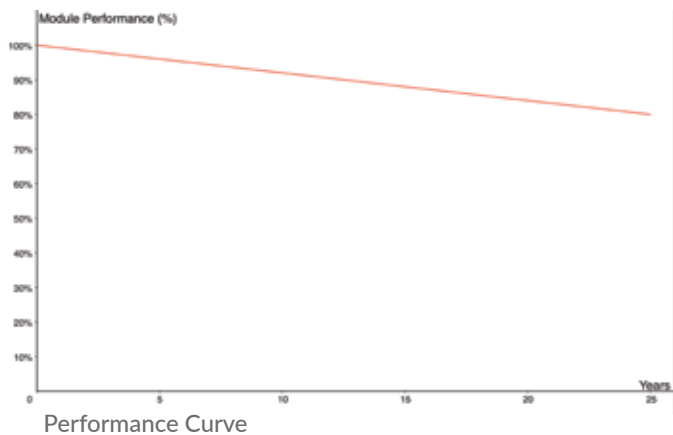
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ELECTRICAL PARAMETER AT STC

Model	ALP12L 265WM[-T]	ALP12L 270WM[-T]	ALP12L 275WM[-T]	ALP12L 280WM[-T]
Peak Power (Pmax) [W] <small>(0~+4.99 wp)</small>	265	270	275	280
Max. Power Voltage (Vmp) [V]	20.69	20.83	20.95	21.12
Max. Power Current (Imp) [A]	12.82	12.97	13.13	13.26
Open Circuit Voltage (Voc) (V)	24.65	24.80	24.94	25.04
Short Circuit Current (Isc) [A]	13.67	13.83	13.99	14.08
Module Efficiency (%)	19.95	20.33	20.70	21.08
Maximum System Voltage (V DC)	1500	1500	1500	1500

*STC: 25°C CELL TEMPERATURE | 1000W/M2 IRRADIANCE | AM1.5 SPECTRUM

RATING TOLERANCE AT STC (VOC / ISC)(%) : ±5 / ±5 | MEASUREMENT UNCERTAINTY: ±3% *[-T] MODELS REFER TO TRANSPARENT BACKSHEET



THERMAL CHARACTERISTICS & 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

PACKAGING CONFIGURATION

Container Size	: 40' HC
Modules/Pallet	: 31 Pieces
Modules/Container	: 806 Pieces (26 Pallets)

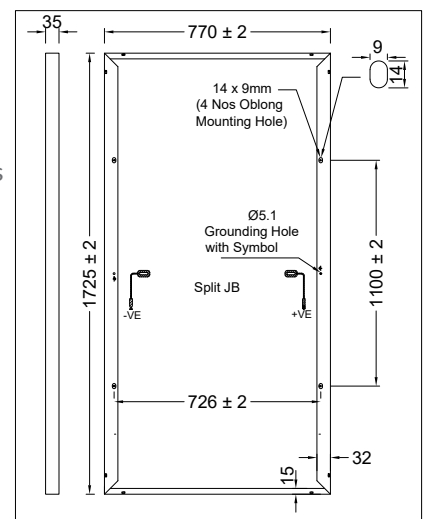
WARRANTY

PRODUCT WARRANTY : 10 Years

PERFORMANCE WARRANTY: Linear Power Warranty for 25 years with 1% degradation for 1st year

MECHANICAL SPECIFICATIONS

Dimensions (L x W x H)	: 1725 mm X 770 mm X 35 mm
Weight	: 14.6 Kg
Junction Box	: IP 68, Split Junction Box with Individual Bypass Diodes
Cable & Connectors	: 4.0mm ² Solar Cable, 300mm, MC4 Compatible/Connectors
Application Class	: Class A (Safety Class II)
Superstrate	: 3.2mm High Transmission, Low Iron, ARC Tempered Glass
Cell Technology	: MonoPERC Crystalline 182x91mm - MBB 72 Cells
Cell Encapsulation	: EVA / EPE / POE
Substrate	: White / Black / Transparent Backsheet
Frame	: Silver / Black Anodized Aluminium
Mechanical Load Test	: 5400 Pa (Snow load), 2400 Pa (Wind load)
Max. Series Fuse Rating	: 25 A



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