

NIKKŌ 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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IEC 61215, IEC 61730
UL 61215, UL 61730
IS 14286, IS/IEC 61730
ISO 9001:2015 | QUALITY MANAGEMENT
ISO 14001:2015 | ENVIRONMENTAL MANAGEMENT
ISO 45001:2018 | OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT



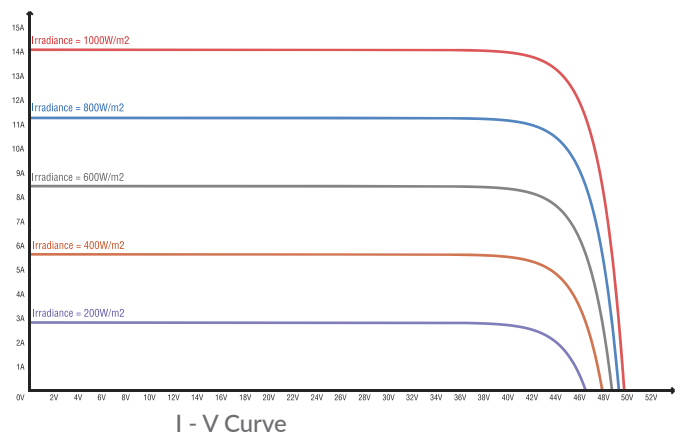
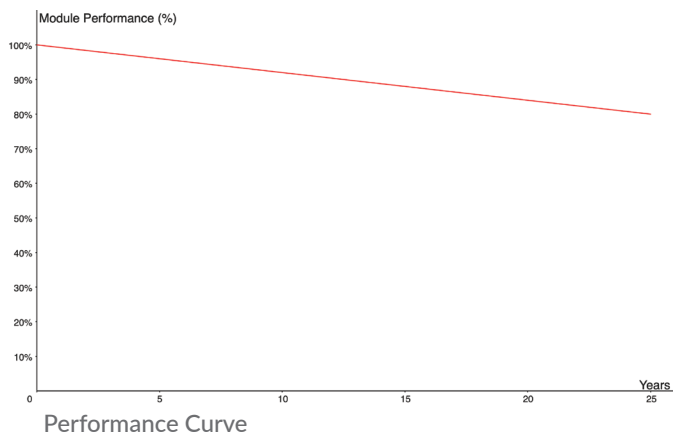
NSE-EMERGE: ALPEXSOLAR

alpexsolar.com

ELECTRICAL PARAMETERS AT STC

Model	ALP24L 520WM	ALP24L 525WM	ALP24L 530WM	ALP24L 535WM	ALP24L 540WM	ALP24L 545WM	ALP24L 550WM	ALP24L 555WM
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 Voltage (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 | AM1.5G SPECTRUM
 **RATING TOLERANCE AT STC (PMPP / VOC / ISC)(%) : 0-3/±5/±5 | ELECTRICAL MEASUREMENT UNCERTAINTY: ±3%



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)

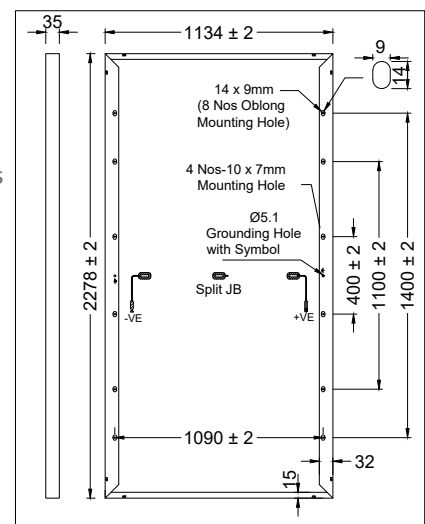
WARRANTY

PRODUCT WARRANTY : 10 YEARS

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

MECHANICAL SPECIFICATIONS

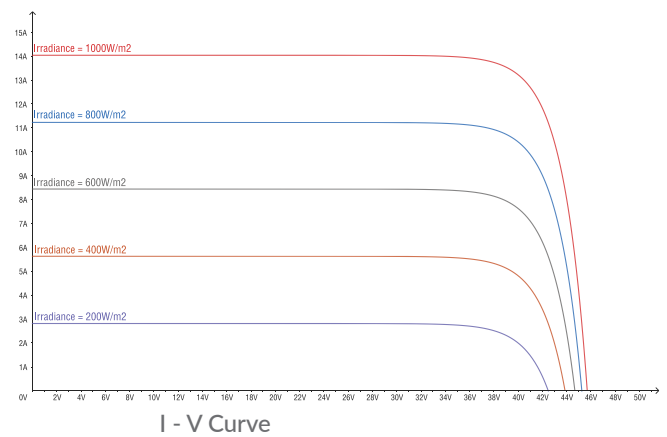
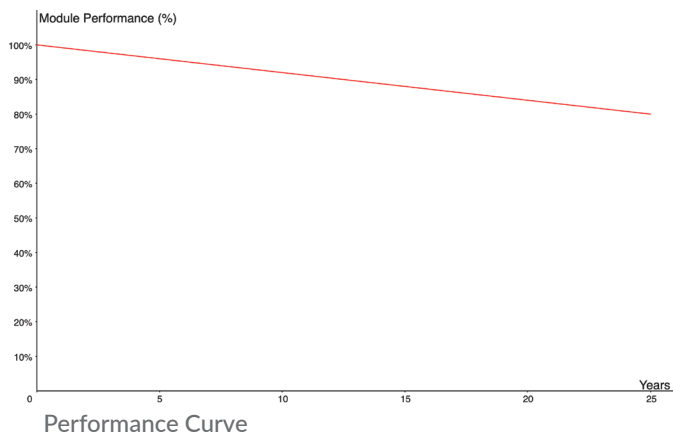
Dimensions (L x W x H)	: 2278 mm X 1134 mm X 35 mm
Weight	: 28.5 Kg
Junction Box	: IP 68, Split Junction Box with Individual Bypass Diodes
Cable & Connectors	: 4.0mm ² Solar Cable, 300mm, MC4 Compatible/Connectors
Application Class	: Class A (Safety Class II)
Superstrate	: 3.2mm High Transmission, Low 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



ELECTRICAL PARAMETER AT STC

Model	ALP24L 480WM	ALP24L 485WM	ALP24L 490WM	ALP24L 495WM	ALP24L 500WM	ALP24L 505WM	ALP24L 510WM	ALP24L 515WM
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 Voltage (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 | AM1.5G SPECTRUM
 **RATING TOLERANCE AT STC (PMPP / VOC / ISC)(%) : 0-3 / 5 / 5 | ELECTRICAL MEASUREMENT UNCERTAINTY: 3%



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)

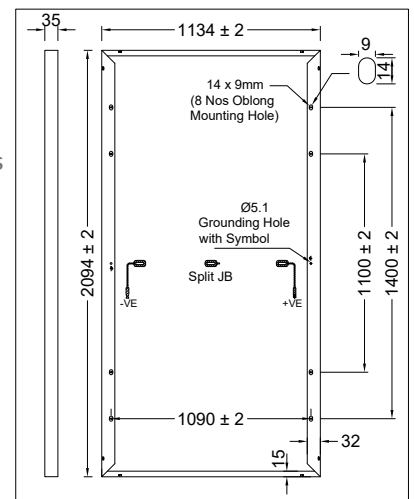
WARRANTY

PRODUCT WARRANTY : 10 YEARS

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

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

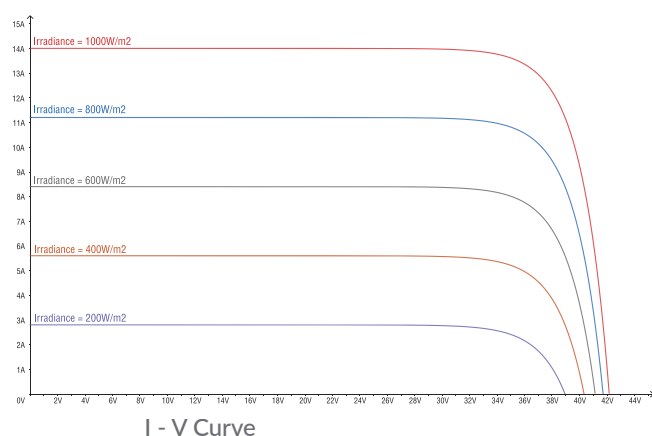
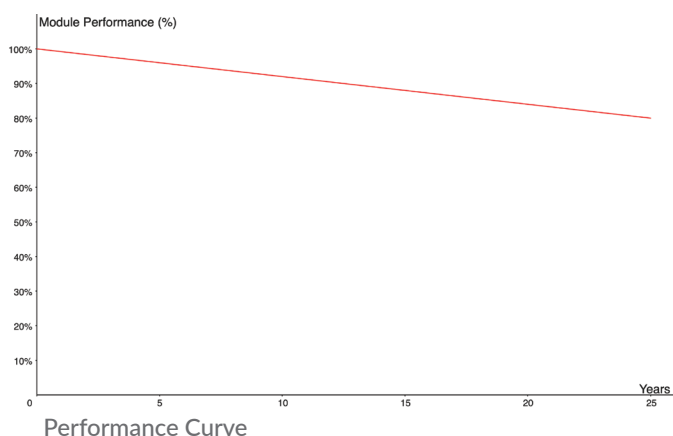


ELECTRICAL PARAMETER AT STC

Model	ALP24L 440WM	ALP24L 445WM	ALP24L 450WM	ALP24L 455WM	ALP24L 460WM	ALP24L 465WM	ALP24L 470WM
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 Voltage (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

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

**RATING TOLERANCE AT STC (PMPP / VOC / ISC)(%) : 0-3/ 5/ 5 | ELECTRICAL MEASUREMENT UNCERTAINTY: 3%



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)

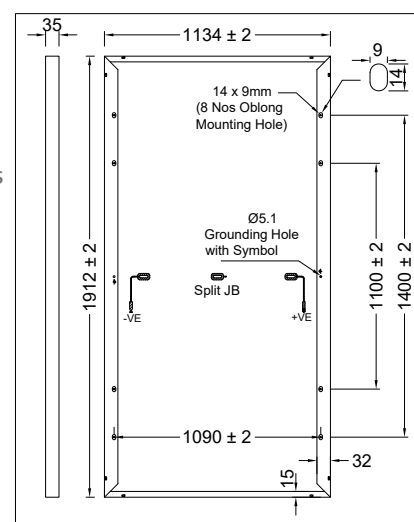
WARRANTY

PRODUCT WARRANTY : 10 YEARS

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

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

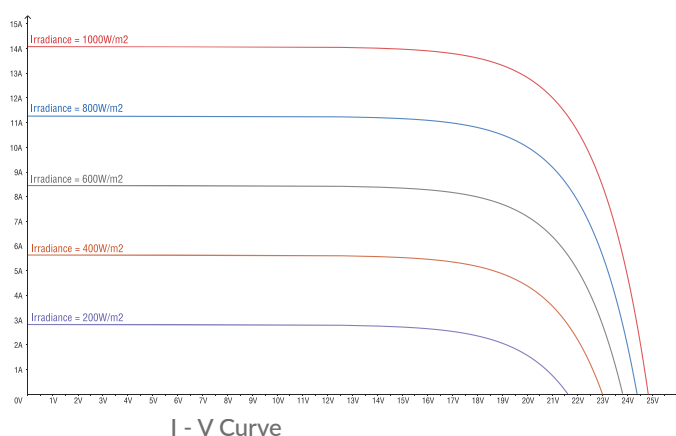
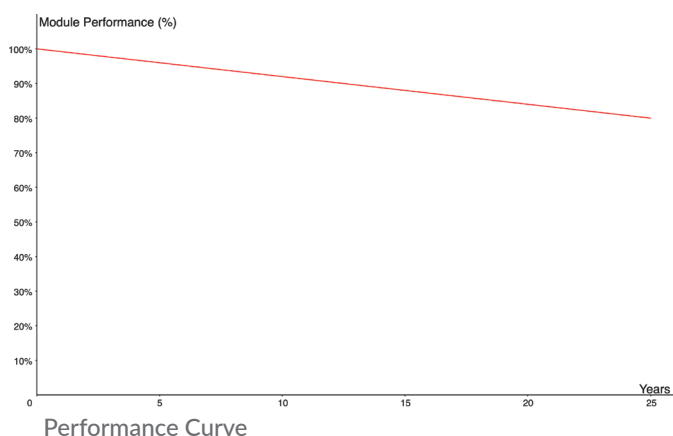


ELECTRICAL PARAMETER AT STC

Model	ALP24L 265WM	ALP24L 270WM	ALP24L 275WM	ALP24L 280WM
Peak Power (Pmax) [W] <small>(0~+4.99 wp)</small>	265	270	275	280
Max. Power Voltage (Vmp) [V]	20.69	28.83	20.95	21.12
Max. Power Voltage (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 | AM1.5G SPECTRUM

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NOCT	: 45°C ± 2°C
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Coefficient of Current (Isc)	: 0.045%/°C
Temperature Range	: -40°C to +85°C

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

PACKAGING CONFIGURATION

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

WARRANTY

PRODUCT WARRANTY : 10 YEARS

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

