



M10

12 YEARS

Guarantee on product material and workmanship

25 YEARS

Linear power output warranty

**Full Black Module
NB144M-M10P-FB(515~525)**

**Solar Cells With PERC Technology
High Efficiency MONO Solar Module**

Excellent technical advantages and system design scheme to achieve high reliability, power generation effective gain and EPC cost reduction. Products can match different installation conditions, taking into account high adaptability and high compatibility. With mature support and inverter scheme, customized design for industrial and commercial and centralized ground power stations.



Mono MBB half cut technology



Production process reliability test



3 times EL test to ensure best quality



Competitive low light performance



Less mismatch to get more power



Less power loss by minimizing the shading impact

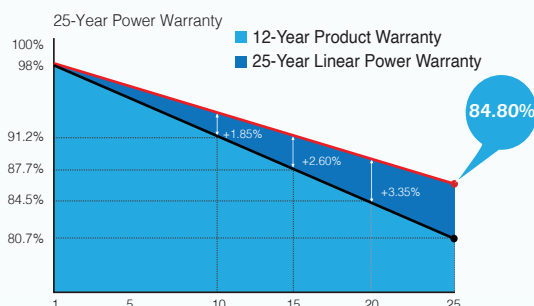


Ideal choice for utility and commercial scale projects by reduced BOS and improved ROI



Outstanding reliability proven by PVEL for stringent environment condition: Sand, Acid, Salt, Hailstones Anti-PID

QUALITY ASSURANCE



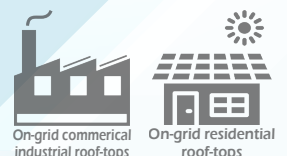
CERTIFICATION



TUV: IEC/EN 61215, IEC/EN 61730
GB/T 19001-2016 / ISO 9001:2015
GB/T 24001-2016 / ISO 14001:2015
CHSAS: 18001:2007
CNAS-CL01: ISO/IEC 17025:2017



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NB144M-M10P-FB

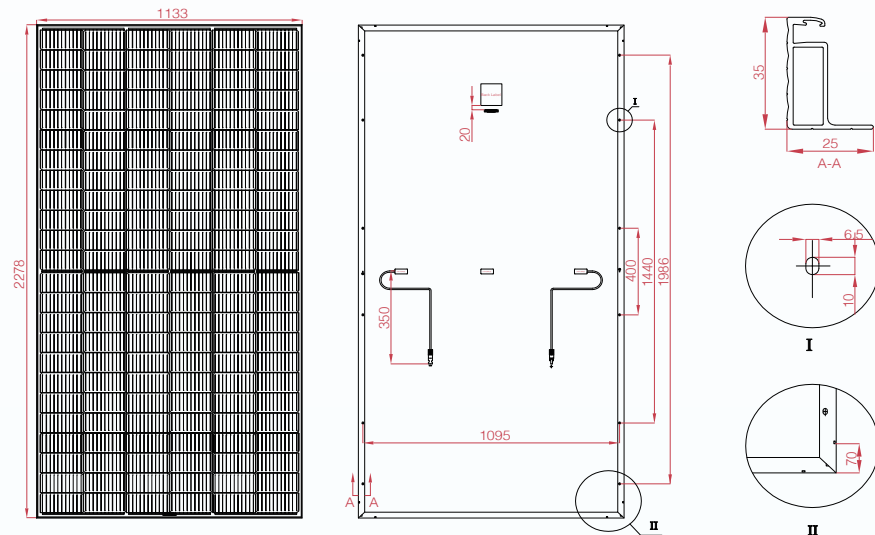
M10-144 Half-Cut Cell | MBB Mono PERC | Full Black Module

ELECTRICAL PARAMETERS

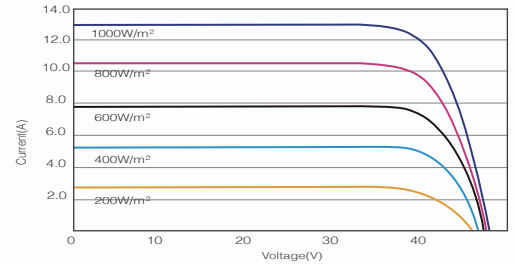
* Measurement tolerance: Pmax:±3%, Voc:±3%, Isc:±5%.

Module Type	NB144M-M10P-	FB515	FB520	FB525
STC AM1.5, 1000W/m ² Cell Temperature 25°C	Max. Power at STC (P _{mp} /W)	515	520	525
	Output Tolerance (W)	0-+5	0-+5	0-+5
	Max. Power Voltage (V _{mp} /V)	40.08	40.21	40.34
	Max. Power Current (I _{mp} /A)	12.85	12.94	13.02
	Open Circuit Voltage (V _{oc} /V)	48.55	48.71	48.87
	Short Circuit Current (I _{sc} /A)	13.53	13.62	13.7
	Module Efficiency (%)	19.96	20.15	20.35
NOCT AM1.5, 800W/m ² Ambient Temperature 20°C Wind Speed 1m/s	Max. Power at NOCT (P _{mp} /W)	383.28	386.99	390.72
	Max. Power Voltage (V _{mp} /V)	37.29	37.41	37.53
	Max. Power Current (I _{mp} /A)	10.28	10.35	10.41
	Open Circuit Voltage (V _{oc} /V)	45.83	45.98	46.13
	Short Circuit Current (I _{sc} /A)	10.93	11.00	11.06

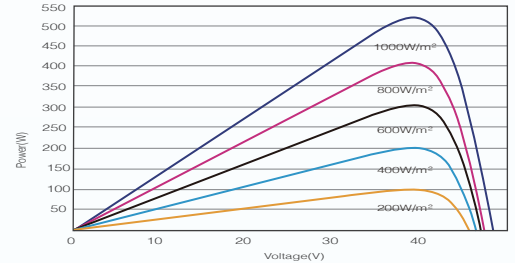
DIMENSIONS OF PV MODULE



I - V CURVES OF PV MODULE



P - V CURVES OF PV MODULE



MECHANICAL DATA

Solar Cells (mm)	182 x 91mm Mono PERC
Cell Orientation	144 Cells (6x24)
Module Dimensions (L*W*H)	2278x1133x35mm
Weight (Kg)	28 kg
Glass	3.2 mm coated tempered glass
Backsheet	Black
Frame	Black anodized aluminum alloy
J-Box	IP68, 3 bypass diodes
Cables	Length 350mm, 1x4.0mm ²
Connector	4mm ² , EVO2 or EVO2 compatible

TEMPERATURE RATINGS

NMOT	45°C (±2°C)
Temperature Coefficient of P _{max}	-0.348%/°C
Temperature Coefficient of V _{oc}	-0.282%/°C
Temperature Coefficient of I _{sc}	+0.05%/°C

MAXIMUM RATING

Operational Temperature (°C)	-40°C to +85°C
Maximum System Voltage (VDC)	1500
Max Series Fuse Rating (A)	25
Mechanical Load Front (Pa)	5,400
Mechanical Load Back (Pa)	2,400

PACKING CONFIGURATION

Module per box: 31 Pieces

MODULE PER CONTAINER

620 Pieces

CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCTS.

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