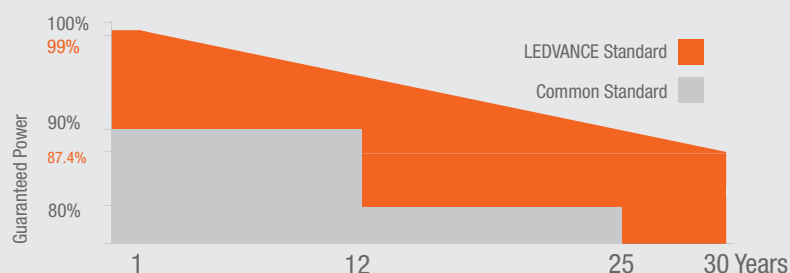


M485~505N54RB-BF-F7

108 Half-Cut Cells
Monocrystalline N-TOPCon Bifacial PV
Module
Black Frame



**25
YEARS**

**Product
guarantee**

**30
YEARS**

**Linear Power
guarantee**

**485-
505p**

**Power
range**

22.71%

**Maximum
efficiency**

0.40%

**Yearly
degradation**



SMBB

Excellent Cell Efficiency

Super multi Bus Bar technology increases the efficiency of the modules



Resistance to power degradation

Resistance to power degradation caused by Potential-Induced Degradation PID effect, thanks to strict quality control in the module production process and other subassemblies



Better Weak Illumination Response

Excellent performance in weak light conditions, such as haze, clouds and early morning



Adapted to harsh outdoor environments

Resistant to harsh environments such as salt, ammonia, sand, high temperatures and high humidity environments



Highest production standards

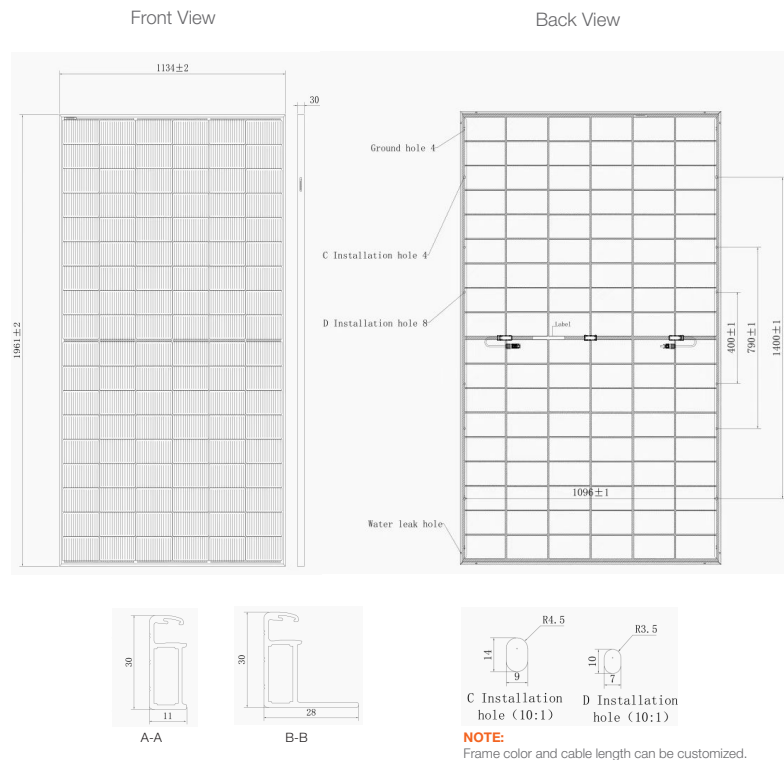
Guarantees of operational reliability and quality module production go far beyond requirements specified in certificates



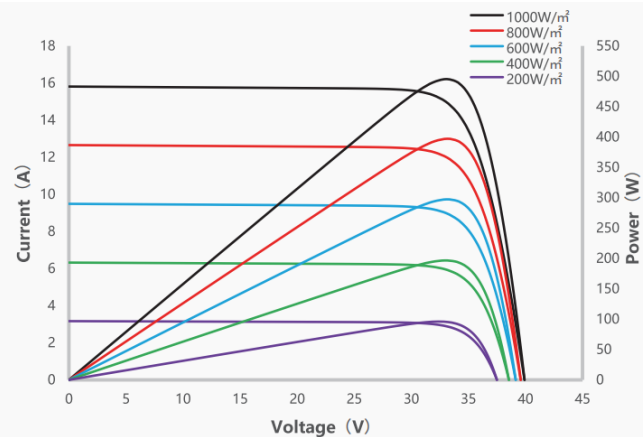
IEC 61215: Design suitability and type approval
IEC 61730: Safety qualification
IEC 61701: Salt mist corrosion testing
IEC 62716: Ammonia corrosion testing
IEC 60068: Environmental testing: Dust and sand

With subsidiaries in more than 50 countries and business activities in over 150 countries, LEDVANCE is committed to supplying reliable and durable PV products to customers to create together a greener planet.

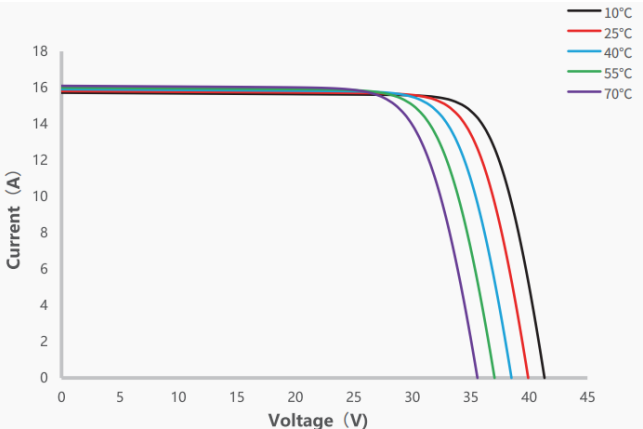
Dimensions of PV module (mm)



Current-voltage curve of the module by different insolation



Current-voltage curve of the PV module by temperature



ELECTRICAL CHARACTERISTIC | STC ¹⁾

Module	M485N54 RB-BF	M490N54 RB-BF	M495N54 RB-BF	M500N54 RB-BF	M505N54 RB-BF
Nominal power Watt P _{max} (Wp)	485	490	495	500	505
Maximum power voltage V _{mpp} (V)	32.72	32.92	33.12	33.32	33.52
Maximum power current I _{mp} (A)	14.84	14.90	14.96	15.02	15.08
Open circuit voltage V _{oc} (V)	39.52	39.72	39.92	40.12	40.32
Short circuit current I _{sc} (A)	15.76	15.79	15.82	15.85	15.88
Module efficiency η(%)	21.81	22.03	22.26	22.48	22.71

Measuring tolerance: + 3%

Bifacial Output-Rearside Power Gain (495W)

Power Gain	5%	10%	15%	20%	25%
Maximum Power (Pmax)[W]	519	544	569	594	619
Open-Circuit Voltage (Voc)[V]	39.92	39.92	39.92	40.02	40.02
Maximum Power Voltage (Vmp)[V]	33.12	33.12	33.12	33.22	33.22
Short-Circuit Current (Isc)[A]	16.55	17.33	18.14	18.87	19.70
Maximum Power Current (Imp) [A]	15.69	16.44	17.18	17.89	18.64

ELECTRICAL CHARACTERISTIC | NMOT ²⁾

Power Level	485	490	495	500	505
Maximum power P _{max} (Wp)	370	374	378	382	386
Maximum power voltage V _{mpp} (V)	30.73	31.00	31.27	31.54	31.81
Maximum power current I _{mp} (A)	12.05	12.08	12.11	12.14	12.16
Open circuit voltage V _{oc} (V)	37.99	38.07	38.15	38.23	38.31
Short circuit current I _{sc} (A)	12.73	12.75	12.77	12.79	12.81

Measuring tolerance: + 3%

WORKING CONDITIONS

Maximum system voltage	1500 V DC
Operating temperature	-40°C~+85°C
Operating humidity	5~85%
Maximum series fuse	30 A
Front/Rear load	5400 Pa / 2400 Pa

MECHANICAL DATA

Solar cells	Monocrystalline N-TOPCon
Number of cells	108 (6x18) pcs
Size of cells	210 x 105 mm
Module dimension	1961 x 1134 x 30 mm
Frame color	BF – Black frame
Weight	26.5±1 kg
Glass (Front/Back)	2.0 mm tempered glass, anti-reflective coating
Type of frame	Anodized aluminum alloy
Junction box	IP68, 3 diodes
Cables	4 mm ² , Portrait: 1200 mm or Customized Length
Connectors	MC4-Evo2

TEMPERATURE RATINGS

NMOT	45±2 °C
Temperature coefficient of P _{max}	-0.290% / °C
Temperature coefficient of V _{oc}	-0.260% / °C
Temperature coefficient of I _{sc}	0.045% / °C

PACKAGING CONFIGURATION

Piece / Box	36
Size of packing	1969×1100×1130 mm
Weight of packing	1009.5 kg
Piece / Container (40'HC)	864

FOOTNOTES:

- 1) STC (Standard Test Conditions): 1000W/m² solar irradiance, cell temperature 25°C, AM 1.5G
2) NMOT (nominal cell operating temperature): insolation 800W/m², ambient temperature 20°C, AM 1.5G, wind speed 1m/s

CAUTION:

- Do not connect two or more strings of modules to one fuse.
– The electrical data in this product sheet does not refer to a single module and is not part of the offer, it is used to compare different types of modules only.
– Due to continuous technical innovation, development and product improvement, technical data contained in this product sheet is subject to change at any time without notice and may not be the basis for any damage claims.