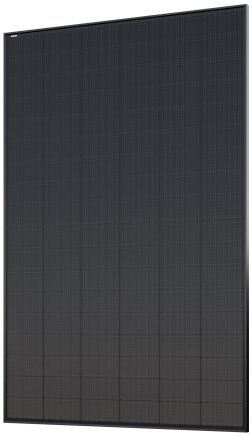
PRODUCT DATASHEET
M 500 N 54 RB-BB-F7

PV PANELS N-TYPE BIFACIAL FULL BLACK | TopCon bifacial photovoltaic panels in full black version



SUPERIOR CLASS

Areas of application

- Commercial and industrial installations
- Residential installations

Product benefits

- TopCon technology provides higher efficiency due to better sunlight conversion than standard panels
- Glass-glass modules offer improved protection against moisture, mechanical loads and fire protection
- 25-years of product guarantee, 30-years of linear power output guarantee
- Limited PID-effect (potential induced degradation) thanks to strict quality control in production process
- Very low yearly degradation of the cells thanks to the better resistance to high temperatures
- Durable design and highest production standards guarantees operational reliability and quality

Product features

- Bifacial - both sides of the panel are absorbing the light
- Original Stäubli MC4 EVO 2 connectors
- Available in a long cable version
- Frame made of anodized aluminum alloy
- Multi-bus bar (MBB) technology
- Maximum static load up to 5400 Pa

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TECHNICAL DATA

ELECTRICAL DATA STC

Maximum Power Pmax (STC)	500 W
Maximum Power Current Imp (STC)	15.02 A
Short Circuit Current Isc (STC)	15.85 A
Maximum Power Voltage Vmp (STC)	33.32 V
Open Circuit Voltage Voc (STC)	40.12 V
Module efficiency factor (STC)	22.48 %

ELECTRICAL DATA NMOT

Maximum Power Pmax (NMOT)	382 W
Maximum Power Current Imp (NMOT)	12.14 A
Short Circuit Current Isc (NMOT)	12.79 A
Maximum Power Voltage Vmp (NMOT)	31.54 V
Open Circuit Voltage Voc (NMOT)	38.23 V

ELECTRICAL DATA STC and NMOT

Power tolerance	3 %

MECHANICAL DATA

Type of Faciality	Bifacial
Cell material	Mono crystalline
Number of cells	108
Number of bypass diodes	3
With frame	Yes
Type of connection	Staubli MC4 EVO2
Width	1134 mm
Length	1961 mm
Height	30 mm
Product weight	26500.000 g
Cable length	1.2 m
Glass with anti-reflection coating	Yes
Colour cells	Black
Colour frame	Black
Front Glass	2.0 mm coated semi-tempered glass
Back Glass	2.0 mm glazed semi-tempered glass

TEMPERATURE RATINGS

Nominal operating cell temperature	45 °C
Temperature coefficient Isc	0.045 %/K

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Temperature coefficient Pmpp	-0.290 %/K
Temperature coefficient Uoc	-0.260 %/K

OPERATING CONDITIONS

Maximum series fuse rating	30 A
Temperature range in operation	-40…+85 °C
Front Side Maximum Static Loading	5400 Pa
Rear Side Maximum Static Loading	2400 Pa
Reverse current load	30 A

EQUIPMENT / ACCESSORIES

- Product is delivered as a whole, no assembly required from customer
- MC4 EVO 2 connectors are fitted to the panel
- 3 bypass diodes are already installed in the panel

DOWNLOAD DATA

	Documents and certificates	Document name
PDF	User instruction / safety instructions	PV MODULE
PDF	Declarations of conformity	PV Panel 500W
PDF	Product family datasheet	M485 505N54RB BB F7

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854670213	Unpacked 1	1,961 mm x 1,134 mm x 30 mm	26500.00 g	66.71 dm^3
4099854670220	Shipping box 36	1,963 mm x 1,100 mm x 1,130 mm	976000.00 g	2440.01 dm^3

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

References / Links

- For Guarantee see www.ledvance.com/guarantee

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