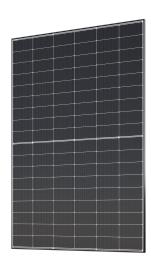


PRODUCT DATASHEET M 510 H 54 RB -BF-F9

PV PANELS HJT-TYPE BIFACIAL BLACK | HJT bifacial photovoltaic panels with black frame



Areas of application

- Commercial and industrial installations
- Residential installations



Product benefits

- HJT solar cells achieve the highest degree of efficiency due to heterojunction technology
- $\ \, \text{Glass-glass modules offer improved protection against moisture, mechanical loads and fire protection}$
- HJT technology significantly reduces the power degradation of the cells over the years
- 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
- Durable design and highest production standards guarantees operational reliability and quality

Product features

- Heterojunction (HJT) solar modules with glass-glass protection
- 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
- Maximum static load up to 5400 Pa

TECHNICAL DATA

ELECTRICAL DATA STC

Maximum Power Pmax (STC)	510 W
Maximum Power Current Imp (STC)	14.80 A
Short Circuit Current Isc (STC)	15.51 A
Maximum Power Voltage Vmp (STC)	34.46 V
Open Circuit Voltage Voc (STC)	41.02 V
Module efficiency factor (STC)	29.95 %

ELECTRICAL DATA NMOT

Maximum Power Pmax (NMOT)	387 W
Maximum Power Current Imp (NMOT)	11.83 A
Short Circuit Current Isc (NMOT)	12.40 A
Maximum Power Voltage Vmp (NMOT)	32.78 V
Open Circuit Voltage Voc (NMOT)	39.15 V

ELECTRICAL DATA STC and NMOT

Power tolerance	3 %

MECHANICAL DATA

Type of Faciality	Bifacial		
Cell material	Mono crystalline		
Number of cells	96		
Number of bypass diodes	3		
With frame Yes			
Type of connection	Staubli MC4 EVO2		
Width	1134 mm		
ength 1960 mm			
Height 30 mm			
Product weight	27600.000 g		
Cable length	1.2 m		
Glass with anti-reflection coating	Yes		
Colour cells	Dark blue		
Colour frame	ame Black		
Back Glass	2.0 mm tempered glass / Anti-reflective coating / Double glass		

TEMPERATURE RATINGS

Nominal operating cell temperature	44 °C
Temperature coefficient Isc	0.040 %/K
Temperature coefficient Pmpp	-0.290 %/K

Temperature coefficient Uoc	-0.240 %/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
POF	User instruction / safety instructions	PV MODULE
POF	Product family datasheet	M510H54RB-BF-F9

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854346217	Shipping box 36	1,982 mm x 1,140 mm x 1,140 mm	1008600.00 g	2575.81 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

DISCLAIMER

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.