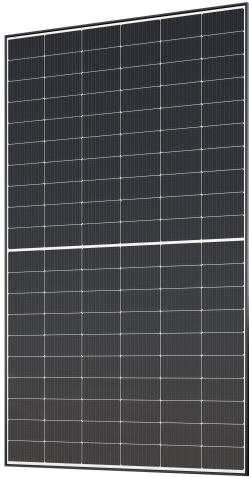


PRODUCT DATASHEET

M 455 P 60 LM-BF-F7

PV PANELS P-TYPE MONOFACIAL BLACK | PERC monofacial photovoltaic panels with black frame



Areas of application

- Commercial and industrial installations
- Residential installations

Product benefits

- 12-years of product guarantee, 25-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

- 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

TECHNICAL DATA

ELECTRICAL DATA STC

| | |
|---------------------------------|---------|
| Maximum Power Pmax (STC) | 455 W |
| Maximum Power Current Imp (STC) | 13.05 A |
| Short Circuit Current Isc (STC) | 13.94 A |
| Maximum Power Voltage Vmp (STC) | 34.87 V |
| Open Circuit Voltage Voc (STC) | 41.46 V |
| Module efficiency factor (STC) | 21,02 % |

ELECTRICAL DATA NMOT

| | |
|----------------------------------|---------|
| Maximum Power Pmax (NMOT) | 344 W |
| Maximum Power Current Imp (NMOT) | 10.44 A |
| Short Circuit Current Isc (NMOT) | 11.15 A |
| Maximum Power Voltage Vmp (NMOT) | 32.95 V |
| Open Circuit Voltage Voc (NMOT) | 38.81 V |

ELECTRICAL DATA STC and NMOT

| | |
|-----------------|-----|
| Power tolerance | 3 % |
|-----------------|-----|

MECHANICAL DATA

| | |
|------------------------------------|------------------|
| Type of Faciality | Monofacial |
| Cell material | Mono crystalline |
| Number of cells | 120 |
| Number of bypass diodes | 3 |
| With frame | Yes |
| Type of connection | Staubli MC4 EVO2 |
| Width | 1134 mm |
| Length | 1909 mm |
| Height | 30 mm |
| Product weight | 23800.000 g |
| Cable length | 1.2 m |
| Glass with anti-reflection coating | Yes |
| Colour backsheet | White |
| Colour cells | Dark blue |
| Colour frame | Black |
| Front Glass | Yes |

TEMPERATURE RATINGS

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

| | |
|--|------------|
| Temperature coefficient P _{mpp} | -0.335 %/K |
| Temperature coefficient U _{oc} | -0.265 %/K |



OPERATING CONDITIONS

| | |
|-----------------------------------|--------------|
| Maximum series fuse rating | 25 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 | 25 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 |
|---|--------------------------|
|  User instruction / safety instructions | PV MODULE |
|  Declarations of conformity | CE Certificate PV Panels |

DISCLAIMER

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