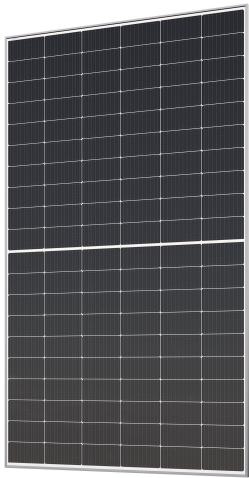


# PRODUCT DATASHEET

## M 455 P 60 LM-SF-F7

PV PANELS P-TYPE MONOFACIAL SILVER | PERC monofacial photovoltaic panels with silver frame



### Areas of application

- Utility installations
- 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                       | Silver           |
| Front Glass                        | Yes              |

### TEMPERATURE RATINGS

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

|  |            |
|--|------------|
| Temperature coefficient P <sub>mpp</sub> | -0.335 %/K |
| Temperature coefficient U <sub>oc</sub>  | -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.