

# PRODUCT DATASHEET M 410 P 54 LM -SF-F3

## 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 linar 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)	410 W
Maximum Power Current Imp (STC)	12.91 A
Short Circuit Current Isc (STC)	13.66 A
Maximum Power Voltage Vmp (STC)	31.76 V
Open Circuit Voltage Voc (STC)	37.66 V
Module efficiency factor (STC)	20.99 %

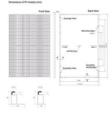
## ELECTRICAL DATA NMOT

Maximum Power Pmax (NMOT)	310 W
Maximum Power Current Imp (NMOT)	10.56 A
Short Circuit Current Isc (NMOT)	11.18 A
Maximum Power Voltage Vmp (NMOT)	29.36 V
Open Circuit Voltage Voc (NMOT)	35.03 V

## ELECTRICAL DATA STC and NMOT

Power tolerance	3 %

## MECHANICAL DATA



Type of Faciality	Monofacial	
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	1722 mm	
Height	30 mm	
Product weight	20200.000 g	

Cable length	1.2 m	
Glass with anti-reflection coating	Yes	
Colour backsheet	White	
Colour cells	Dark blue	
Colour frame	Silver	

## **TEMPERATURE RATINGS**

Nominal operating cell temperature	44 °C
Temperature coefficient lsc	0.050 %/K
Temperature coefficient Pmpp	-0.350 %/K
Temperature coefficient Uoc	-0.275 %/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

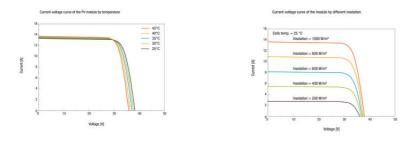
	Documents and certificates Document name	
POF	User instruction / safety instructions	PV MODULE
POF	Declarations of conformity	CE Certificate PV Panels
PDF	Product family datasheet	M395-415P54LM-SF-F3_EN

## LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854137181	Shipping box 36	1,739 mm x 1,120 mm x 1,147 mm	728150.00 g	2233.99 dm <sup>3</sup>

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.

#### ADDITIONAL CATALOG INFORMATION



## DISCLAIMER

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