

108 MBB 54S 2P cells



PERC Half Cell Mono Technology



Higher power output



Light-weight design



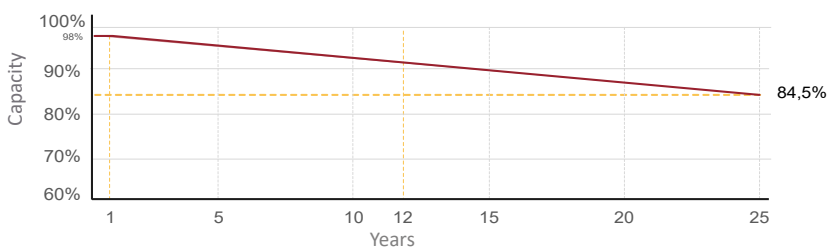
Low light performance



Higher module conversion efficiency

WARRANTY

Linear Power Warranty



Watts positive tolerance



Years product warranty



Years linear power warranty



Electrical Performance

EM410-PH

Module type	410M Half cell Mono PERC
Maximum power (Wp)	410 Wp
Maximum power current (Im)	13,04 A
Maximum power voltage (Vm)	31,45 V
Short circuit current (Isc)	13,92 A
Open circuit voltage (Voc)	37,35 V
Module efficiency	21%
Maximum series fuse	25 A
Number of diode	3
Watts positive tolerance	0+3%
Standard test conditions	1.000 W/m ² , 25 °C, AM 1.5
Maximum system voltage	1.500 V
Temperature-Coefficient Isc	0,048% / °C
Temperature-Coefficient Voc	-0,270% / °C
Temperature-Coefficient Pmp	-0,350% / °C
Operating temperature	-40°C / +85°C
Normal operating cell temperature	45°C ±2
Load capacity for the cover of the module	5.400 Pa IEC61215 (snow)
Load capacity for front & back of the module	2.400 Pa IEC61215 (wind)

* Standard Measurement Conditions STC: Irradiance 1.000 W/m², spectrum AM1.5, cell at 25°C.

Electrical Performance NOCT**

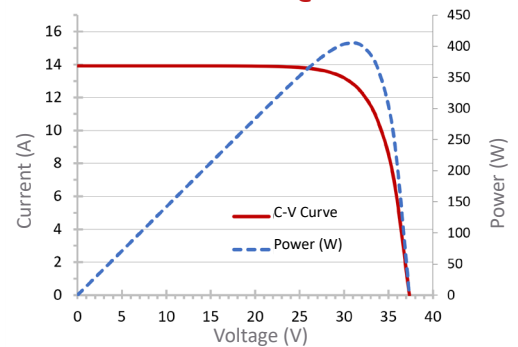
Maximum power (wp)	310 W
Maximum power voltage (Vm NOCT)	29,70 V
Maximum power current (Im NOCT)	10,43 A
Open circuit voltage (Voc NOCT)	35,10 V
Short circuit current (Isc TONC)	11,07 A

**TONC conditions: Irradiance of 800 W/m², AM1.5, ambient temperature 20 °C and wind of 1 m/s.

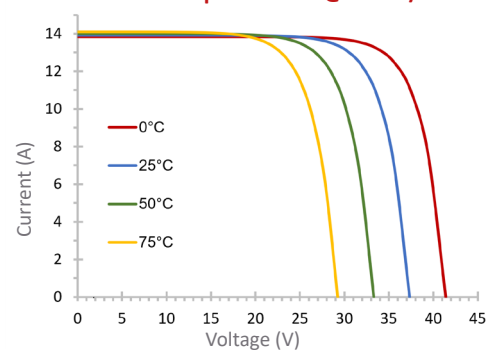
Mechanical Characteristics

Front cover (material/thickness)	Low-iron tempered glass / 3.2mm
Module weight	22,5 kg
Module dimensios (L / W / H)	1.722 x 1.133 x 30mm
Backsheet (color)	TPT in black
Cell (quantity/material/dimensions)	108 (6x9x2) / monocrystalline silicon
Frame (material/color)	Anodized aluminum / black
Junction box (protection degree)	≥ IP68
Cable & Plug connectors	4mm ² , leng. 300mm
Application class	Class A
Electrical protection class	Class II
Fire safety class	Class C

C-V and Power Curve @ STC



C-V and Temperature °C @ 100W/m²



C-V and Irradiation W/m² @ 25°C

