

BLACK **IBS144M2** FRAME

540W-550W

KEY FEATURES



years
**Product
Warranty**



years
**Performance
Warranty**



Cell
efficiency up
to **23,50 %**



Module
efficiency
up to

21.28 %



Heavy snow load
up to **5,400 Pa**



Wind load
up to **2,400 Pa**



PID Free



ELECTRICAL PARAMETERS

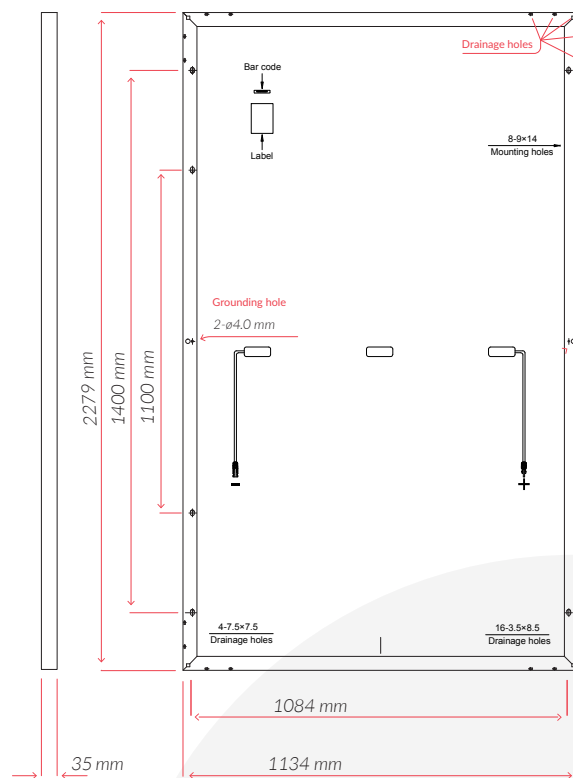
Model	IBS144M BlackFrame		
Maximum Power (Pmax/W)	540	545	550
Operating Voltage (Vmpp/V)	40.71	40.76	40.83
Operating Current (Impp/A)	13.27	13.38	13.48
Open-Circuit Voltage (Voc/V)	49.42	49.51	49.60
Short-Circuit Current (Isc/A)	13.85	13.94	14.04
Module Efficiency η_m (%)	20.89	21.09	21.28
Power Tolerance		0+5 Wp	
NOCT		43°C±2°C	

Values at Standard Test Conditions STC (AM 1.5, Irradiance 1000 W/m², Cell Temperature 25°C)

SPECIFICATIONS

Cell Type	Mono Crystalline PERC
Cells size	182x91mm
Number of cells	144 (6x24)
Weight	28.9 kg
Front side glass	3,2 mm hardened solar tempered glass
Dimensions	2.279x1,134x35 mm
Cable length	300 mm / 1200mm
Cable cross section size	4 mm ²
Number of bypass diodes	3
Connectors	MC4 compatible
Frame	Anodized Aluminium Alloy
Junction Box	IP68

ENGINEERING DRAWINGS



WORKING CONDITIONS

Maximum System Voltage	DC 1,000 V (IEC) / 1,500 V available
Operating temperature	-40°C / +85° C
Maximum reverse current	20A
IP protection level	IP68
Safety class	II

TEMPERATURE COEFFICIENTS

Power temperature coefficient (Pmax)	-0,36 %/°C
Voltage temperature coefficient (Voc)	-0,28 %/°C
Current temperature coefficient (Isc)	+0,05 %/°C



PACKAGING INFORMATION (I)

Pallet dimension	2,305/1,125/1,255 mm
Pallet weight	930 kg
Modules/pallet	31

PACKAGING INFORMATION (II)

Container	20 GP	40 HQ
Pallets per container	5	20
Pieces per container	155	620

PARTNERS