

OR10H580MNDB

TOPCon BIFACIAL

 HALF-CELL MODULE

The 144 Half Cut module of the Import Line combines the high production efficiency of the half cell technology with an excellent quality / price ratio.

The half-cell configuration improves the electrical distribution inside the panel to increase the yield of the product. In addition, this product uses TOPCon double-sided technology, which allows sunlight to be captured on both sides of the module, further increasing overall efficiency. For these reasons, the Half Cell Line is suitable not only for industrial installations but also for residential and commercial installations.

Back side

30 YEAR LINEAR POWER WARRANTY
25 YEAR PRODUCT WARRANTY



TOPCon BIFACIAL TECHNOLOGY



ANTI-REFLECTIVE GLASS



QBE INSURANCE
Product Liability Insurance QBE

Cells



144 CELLS
MONO 16BB M10 HALF | N-TYPE

182 x 91 mm / 7.16 x 3.58"

Frame



COMPACT AND STURDY | 30 mm

ANCHORABLE ALSO ON
THE SHORT SIDE ⁽⁶⁾

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Electrical Characteristics (STC) ⁽¹⁾

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Nominal Output (Pmax) ⁽²⁾	580 W
Sorting Tolerance	0/+5 W
Voltage at Pmax (Vmp)	44.02 V
Current at Pmax (Imp)	13.18 A
Open Circuit Voltage (Voc) ⁽²⁾	52.52 V
Short Circuit Current (Isc) ⁽²⁾	13.95 A
Maximum System Voltage	1500 V
Maximum Series Fuse Rating	30 A
Module Efficiency	22.45%
Protection class against electric shock	Class II

Electrical Characteristics with rear side power gain

Pmax gain	5%	10%	15%	20%	25%
Nominal Output (Pmax)	609 W	638 W	667 W	696 W	725 W
Voltage at Pmax (Vmp)	44.02 V	44.02 V	44.02 V	44.02 V	44.02 V
Current at Pmax (Imp)	13.84 A	14.50 A	15.16 A	15.82 A	16.48 A
Open Circuit Voltage (Voc)	52.52 V	52.52 V	52.52 V	52.52 V	52.52 V
Short Circuit Current (Isc)	14.65 A	15.35 A	16.04 A	16.74 A	17.44 A

Mechanical Characteristics

Solar Cells	144 M10 HALF monocrystalline N-TYPE
Solar Cells Size	182 x 91 mm / 7.16 x 3.58"
Front Cover	2.0 mm / 0.08" thick, low iron tempered glass
Back Cover	2.0 mm / 0.08" thick, low iron tempered glass
Encapsulant	EVA (Ethylene vinyl acetate)
Frame	Anodized aluminium alloy, double wall
Frame finishing	Silver
Diodes	3 Bypass diodes serviceable
Junction Box	IP68 rated
Connector	MC4 or compatible connector
Cables Length	1400 mm / 55.12"
Cables Section	4.0 mm ² / 0.006 in ²
Dimensions	2278 x 1134 x 30 mm / 89.69 x 44.65 x 1.18"
Weight	31.2 Kg / 68.78 lbs
Max Load (Test Load) - SF	5400 Pa - 1.5 ⁽⁵⁾

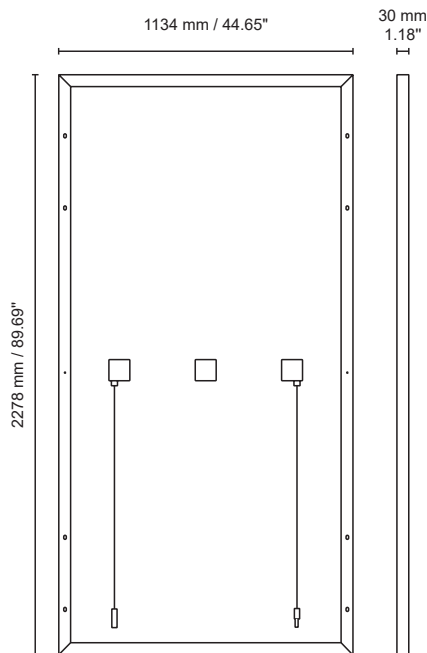
Temperature Characteristics

NMOT ⁽³⁾	43±2 °C
Temperature Coefficient of Pmax	-0.29 %/°C
Temperature Coefficient of Voc	-0.25 %/°C
Temperature Coefficient of Isc	0.046 %/°C
Operating Temperature	-40 °C - +85°C

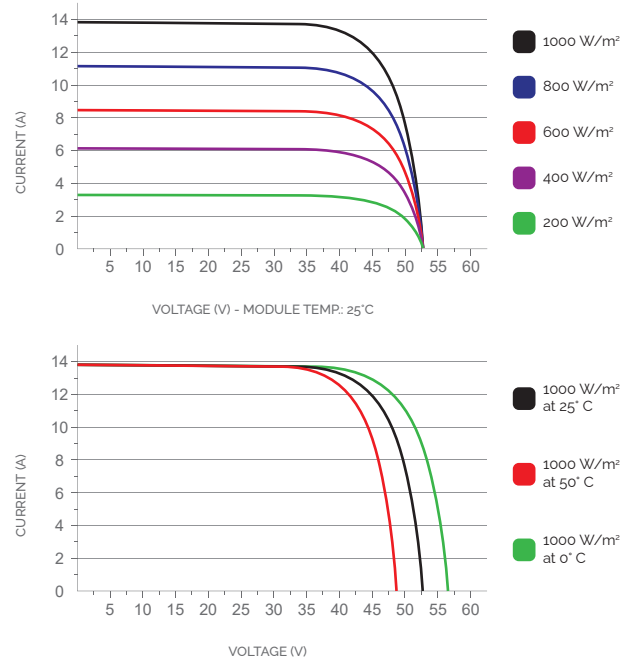
Packaging ⁽⁴⁾

Pallet dimensions	2310 x 1120 x 1260 mm / 90.94 x 44.09 x 49.61"
Pieces per pallet	36
Weight	1148 kg / 2531 lbs

Dimensions



Current/Voltage Characteristics



1. STC: (Standard Test Condition) Irradiance 1000W/m², Module Temperature 25°C, Air Mass 1.5
 2. Pmax Voc, Isc measurement tolerance: ±3%
 3. NMOT: Nominal Module Operating Temperature: Irradiance 800W/m², Air 20°C, Wind speed 1m/s
 4. Pallets can be stacked up to two
 5. Consult the installation manual for the relative mounting configurations