

Rear side

OR10H440MNDB (SF)

TOPCon BIFACIAL

● HALF-CELL MODULE

The 108-cell Half Cut module from the Half Cell Line selection combines the high power production yield of half-cell technology with an excellent price-quality ratio. The half-cell configuration improves the electrical distribution within the panel to increase product performance. Moreover, this product utilizes **bifacial TOPCon technology**, which allows sunlight to be captured on both sides of the module, further enhancing overall efficiency.

The Half Cut selection of the Half Cell Line is suitable not only for industrial installations but also for residential and commercial ones.

30 YEAR LINEAR POWER WARRANTY
25 YEAR PRODUCT WARRANTY



TOPCon BIFACIAL TECHNOLOGY



ANTI-REFLECTIVE GLASS



QBE INSURANCE
Product Liability Insurance QBE

Cells



108 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 ⁽⁵⁾

TOPCon BIFACIAL

Electrical Characteristics (STC) ⁽¹⁾

OR10H440MNDB (SF)

| | |
|--|----------|
| Nominal Output (Pmax) ⁽²⁾ | 440 W |
| Sorting Tolerance | 0/+5 W |
| Voltage at Pmax (Vmp) | 33.01 V |
| Current at Pmax (Imp) | 13.33 A |
| Open Circuit Voltage (Voc) ⁽²⁾ | 38.71 V |
| Short Circuit Current (Isc) ⁽²⁾ | 14.13 A |
| Maximum System Voltage | 1500 V |
| Maximum Series Fuse Rating | 30 A |
| Module Efficiency | 22.53% |
| Protection class against electric shock | Class II |

Electrical Characteristics with rear side power gain

| Pmax gain | 5% | 10% | 15% | 20% | 25% |
|-----------------------------|---------|---------|---------|---------|---------|
| Nominal Output (Pmax) | 462 W | 484 W | 506 W | 528 W | 550 W |
| Voltage at Pmax (Vmp) | 33.01 V | 33.01 V | 33.01 V | 33.01 V | 33.01 V |
| Current at Pmax (Imp) | 14.00 A | 14.66 A | 15.33 A | 16.00 A | 16.66 A |
| Open Circuit Voltage (Voc) | 38.71 V | 38.71 V | 38.71 V | 38.71 V | 38.71 V |
| Short Circuit Current (Isc) | 14.84 A | 15.54 A | 16.25 A | 16.96 A | 17.66 A |

Mechanical Characteristics

| | |
|---------------------------|---|
| Solar Cells | 108 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 | 1100 mm / 43.30" |
| Cables Section | 4.0 mm ² / 0.006 in ² |
| Dimensions | 1722 x 1134 x 30 mm / 67.79 x 44.64 x 1.18" |
| Weight | 23.1 Kg / 50.9 lbs |
| Max Load (Test Load) - SF | 5400 Pa - 1.5 ⁽⁵⁾ |

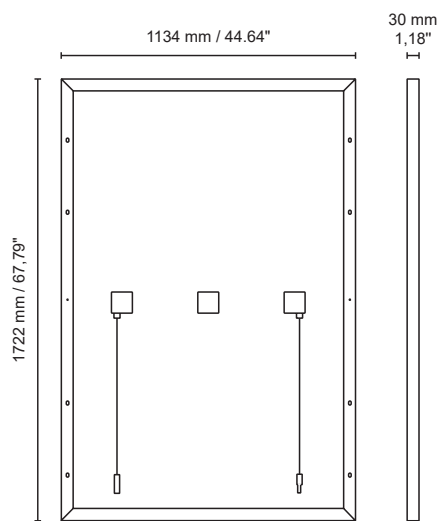
Temperature Characteristics

| | |
|---------------------------------|----------------|
| 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 |

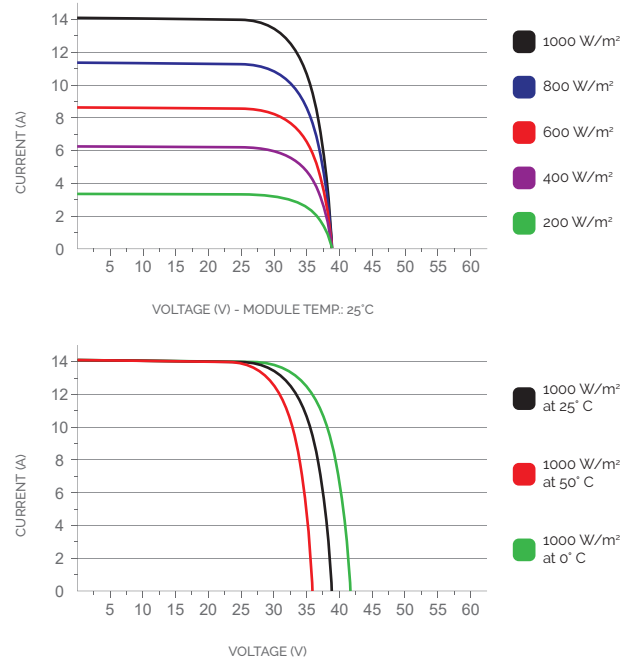
Packaging ⁽⁴⁾

| | |
|-------------------|--|
| Pallet dimensions | 1765 x 1120 x 1275 mm / 69.49 x 44.09 x 50.20" |
| Pieces per pallet | 36 |
| Weight | 887 kg / 1955.5 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