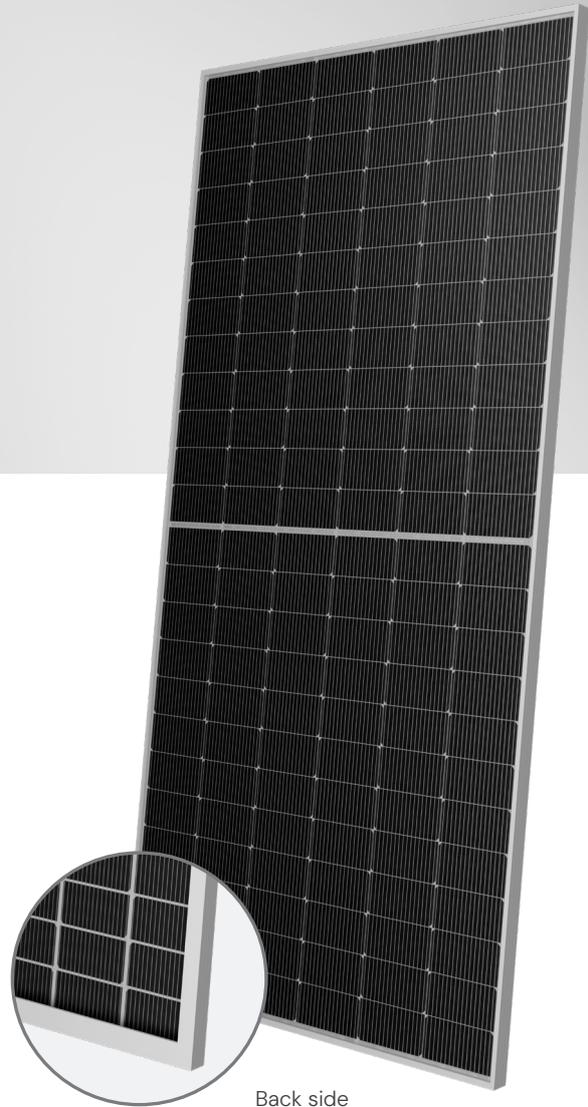


OR10H610MNDB

OR Series – 610 W

144 cells
MONO M10 HALF | N-TYPE



Back side



Extra-EU module

Manufactured in our production factory



TOPCon bifacial technology



Anti-reflective double glass

Maximum efficiency and high performance



Compact and sturdy frame

Anchorable also on the short side ⁽⁵⁾



Class of reaction to fire

Class 1 (UNI 9177),
B-s1, d0 (EN 13501-1)
B_{ROOF}(t1) (EN 13501-5)



30 years

Linear power warranty

25 years

Product warranty



QBE insurance

QBE Product Liability Insurance

QBE is a global leader in the insurance sector, offering comprehensive solutions for business risk management. With a worldwide network, it protects clients against a wide range of risks and provides flexible insurance solutions tailored to various industries, including the energy sector.

Electrical Characteristics (STC) ⁽¹⁾

Nominal Output (Pmax) ⁽²⁾	610 W
Sorting Tolerance	0/+5 W
Voltage at Pmax (Vmp)	44,63 V
Current at Pmax (Imp)	13,67 A
Open Circuit Voltage (Voc) ⁽²⁾	52,87 V
Short Circuit Current (Isc) ⁽²⁾	14,26 A
Maximum System Voltage	1500 V
Maximum Series Fuse Rating	30 A
Module Efficiency	23,61%
Protection class against electric shock	Class II

1. STC: (Standard Test Condition) Irradiance 1000 W/m²; Module Temperature 25 °C; Air Mass 1,5

2. Pmax, Voc, Isc measurement tolerance: ±3%

Electrical Characteristics with rear side power gain

Pmax gain	5%	10%	15%	20%	25%
Nominal Output (Pmax)	641 W	671 W	702 W	732 W	763 W
Voltage at Pmax (Vmp)	44,63 V				
Current at Pmax (Imp)	14,35 A	15,04 A	15,72 A	16,40 A	17,09 A
Open Circuit Voltage (Voc)	52,87 V				
Short Circuit Current (Isc)	14,97 A	15,69 A	16,40 A	17,11 A	17,83 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 / POE
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	30 kg / 66,14 lbs
Max Load (Test Load) - SF	5400 Pa - 1,5 ⁽⁵⁾

5. Consult the installation manual for the relative mounting configurations

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

3. NMOT: Nominal Module Operating Temperature; Irradiance 800 W/m²; Air 20 °C; Wind speed 1 m/s

Packaging ⁽⁴⁾

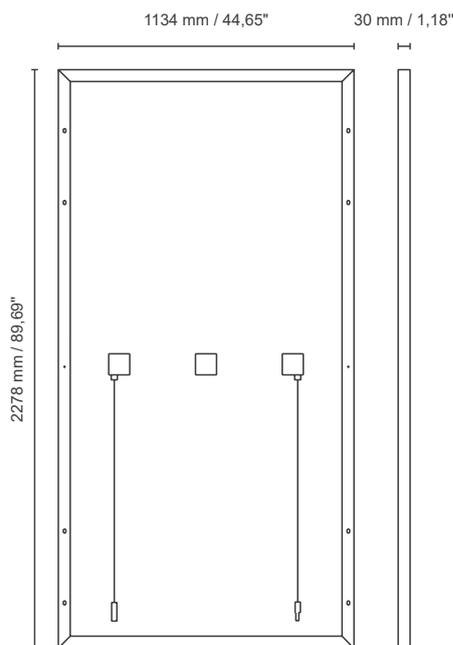
Pallet dimensions	Pieces per pallet - Weight
2300 x 1130 x 1265 mm / 90,6 x 44,5 x 49,8"	37 pcs - 1144 kg / 2522,08 lbs

4. Pallets can be stacked up to two

Certifications

Reaction to fire	Class I (UNI 9177), B-s1, d0 (EN 13501-1), B _{ROOF} (t1) (EN 13501-5)
Product Certificate	IEC 61215-1, IEC 61215-1-1, IEC 61215-2, IEC 61730-1, IEC 61730-2
PID free	IEC 61215-2 MQT21
Salt mist	IEC 61701:2020
Ammonia	IEC 62716:2013
Dust and Sand	IEC 60068-2-68:1994

Dimensions



Current/Voltage Characteristics

