



Forza

 **650 W**

2+2 mm glass



Suitable
for FERX
program

25 Product
Guarantee
YEAR

87,4% Power
Warranty
AFTER 30 YEARS

Electrical data (STC*)

Maximum power (W)	650
Cell technology	N type, TOPCon - bifacial
Open circuit voltage (V_{oc}/V)	44,28
Short circuit current (I_{sc}/A)	18,48
Max power voltage (V_{mpp}/V)	37,30
Max power current (I_{mpp}/A)	17,43
Module efficiency (n)	22,97%
Max system voltage (V)	1500
Max current (A)	35
Power tolerance	0/+5W

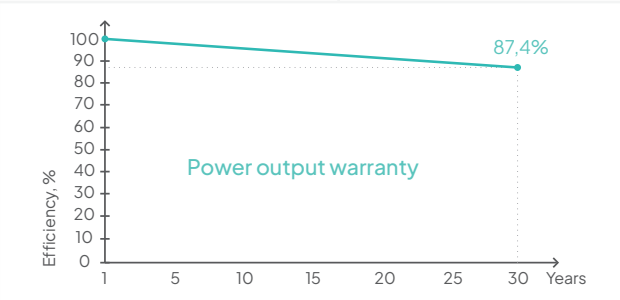
*Under standard test conditions (STC) of irradiance of 1000W/sq.m., spectrum AM1.5 and cell temperature of 25°C. Flash testing measurement accuracy of +/-5%.

Warranty

25 years product warranty

30 years efficiency warranty

First year degradation (%)	1
Annual degradation (%)	0,40
Power in year 30 (%)	87,4%



Certifications

IEC 61215:2021; IEC 61730:2023

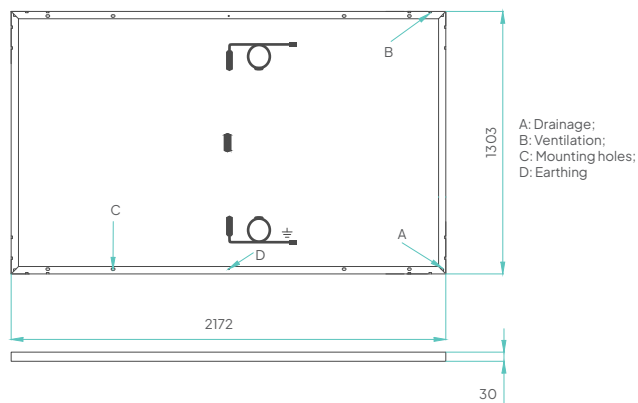
IEC 62716:2013	Ammonia corrosion testing
IEC 61701:2020	Salt mist corrosion testing
ISO 9001:2015	Quality management systems
ISO 14001:2015	Environmental management systems
ISO 45001:2018	Occupational health and safety

Temperature ratings

Current temperature coefficient (α)	+0,045% / °C
Voltage temperature coefficient (β)	-0,250% / °C
Power temperature coefficient (γ)	-0,300% / °C
Nominal operating module temperature	45 °C

Mechanical data

Dimensions (LxWxH) (mm)	2172x1303x30
Weight (kg)	34,2
Front glass (mm)	2 structured, low reflection, with AR coating
Back glass (mm)	2, white
Cell Size (mm)	210x105
Cell configuration	6x20
Frame	White anodized aluminium frame
Rated operating altitude (m)	Up to 2000
Operating temperature (°C)	-40 ÷ +85
Maximum test load (wind/snow) (Pa)	2400/5400
Junction box / IP class	Split junction box / IP68
Cable cross section size (mm ²)	4
Cable length (m)	1,3
Bypass diodes	3
Connector	MC4 compatible



Packing information

Modules per pallet (pcs)	36
Modules per 13,6 m truck (pcs)	648

