

EN



OPEN 1XX-MM36



OPEN 1XX-MM36

Energy to the World

Real Power

- Modules available from 90 to 110W
- Strict power tolerance of $\pm 3\%$
- Individual module tested on site

Stable Power

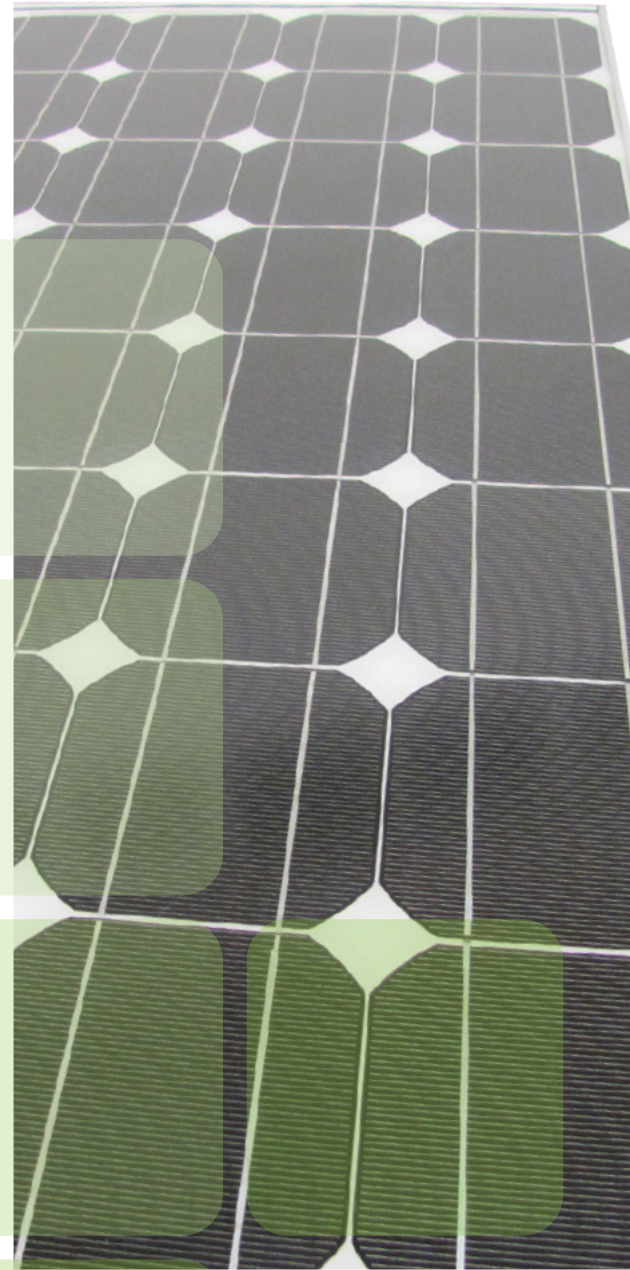
- High-quality 5" monocrystalline cells.
- Robust aluminium frame
- Open Renewables quality and durability.

Modular Power

- PV module designed for off-grid and embedding applications
- Popular format, easy to install, transport and maintain
- Broad range of option cable and connectors.

European Engineering

- Module manufacturer since 1994
- Built exclusively with excellent materials, made in Europe



the four excellency
cornerstones

Open your mind:
flexible power
energizes the world.



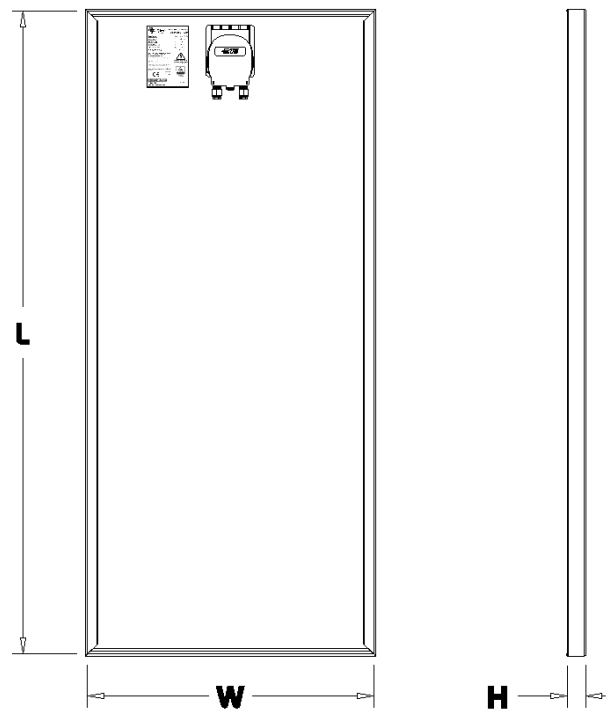
Electrical Specifications¹

		Open 90-MM36	95-MM36	100-MM36	105-MM36	110-MM36	
Rated Power	[P _n]	90	95	100	105	110	[Wp]
Nominal Power	[P _{max}]	90	95	100	105	110	[W]
Tolerance on peak power	[Tol]	±3	±3	±3	±3	±3	[%]
Module efficiency	[η]	13,8	14,6	15,4	16,2	17,0	[%]
Max. system voltage	[U _{sys}]	200	200	200	200	200	[V]
Peak power voltage	[U _{mpp}]	18,0	18,3	18,7	19,0	19,20	[V]
Peak power current	[I _{mpp}]	5,10	5,21	5,30	5,50	5,60	[A]
Open circuit voltage	[V _{oc}]	22,30	22,40	22,50	22,60	22,80	[V]
Short circuit current	[I _{sc}]	5,50	5,55	5,60	5,70	5,80	[A]
Max. reverse current	[I _r]	10	10	10	10	10	[A]

General Specifications³

Open 1XX-MM36

Lenght (L)	[mm]	1202,0 ±2
Width (W)	[mm]	540 ±3
Height (H)	[mm]	35
Weight	[Kg]	7,5 ±5%
Connector Type	Cable & Connector Optional	
Bypass diodes	2	
Max. Series Fuse	8 A	
Max. mechanical load	2400 Pa	
Cable lenght (C)	[mm]	Optional
Cable cross section	[mm ²]	4
Safety class	II	
Tecnology	mSi	
Operation temperature range	[°C]	-10°C ≤ T ≤ 45 °C
α (I _{sc})	[%/K]	0,024
β (V _{oc})	[%/K]	-0,356
Γ (P _{mpp})	[%/K]	-0,472



Electrical Equipment

Installation reserved to qualified professionals. This specification does not void the obligation from reading and understanding of the relevant manuals .

Warranties

Ten years material and workmanship⁴
 Guaranteed 90% minimum nominal power for ten years⁴
 Guaranteed 80% minimum nominal power for twenty five years⁴



¹ Air Mass AM 1.5, Irradiance 1000 W/m², Cell temperature 25 °C

³ Efficiency reduction from 1.000 to 200 W/m² is about 1%

⁴ Manufacturer's warranty conditions apply

Your Benefit:



- **Exclusive use of High-Quality Materials from European TIER 1 Manufacturers**
- **Over 25 years experienced staff**
- **Full-tracking-system**
- **In-house research and development laboratories**
- **Process control oriented production**
- **Responsible management system implemented according ISO 9001, 14001 and 45001.**
- **Product certified according to IEC61215 & IEC61730 by TÜV Rheinland**
- **Products tailored for High energy yield under different real-life conditions. Ask us for real data across the globe**



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Certificates and Qualifications

- **All Products are manufactured in Portugal.**
- **Open Renewables product Range:**
 - Monocrystalline: 95-320 Watt**
 - Policrystalline: 260-280 Watt**
- **Designed and manufactured to meet the requirements of IEC 61215 and IEC 61730**

Due to continuous research and product improvement, the specifications in this Product Information Sheet are subject to change without notice. Specifications can vary slightly. For installation and operation instructions, please see the applicable manuals. No rights can be derived from this Product Information Sheet and Open Renewables® assumes no liability whatsoever connected to or resulting from the use of any information. Version 3.05 from 05/2019, voids all previous editions. This document is published in different languages, In case of conflict, English version prevails.