

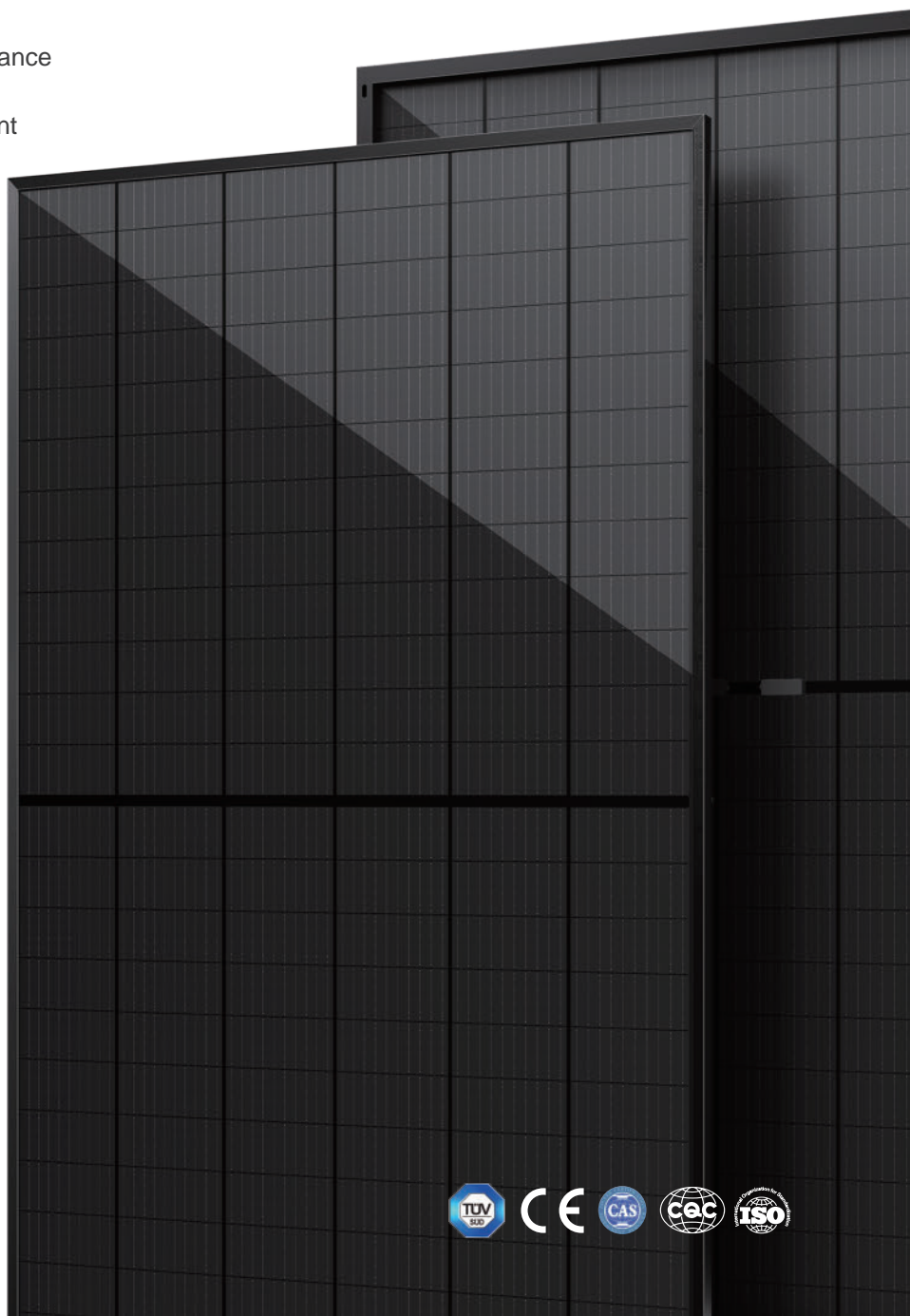


TO MAKE A BETTER LIFE

# ORM60D35MR 450~465W

ALL BLACK PERC Bifacial

- Adopting multi-main shed (MBB) half-sheet technology
- Anti-PID performance
- Excellent low light power generation performance
- Load 2400 Pa at the back 5400 Pa at the front



## COMPREHENSIVE PRODUCTS & SYSTEM CERTIFICATES

IEC 61215 / IEC 61730 / CE / JPEA / FIDE / INMETRO

ISO 45001:

2018/International standards for occupational health & safety

ISO 14001:

2015/Standards for environmental management system

ISO 9001:

2015/Quality management system

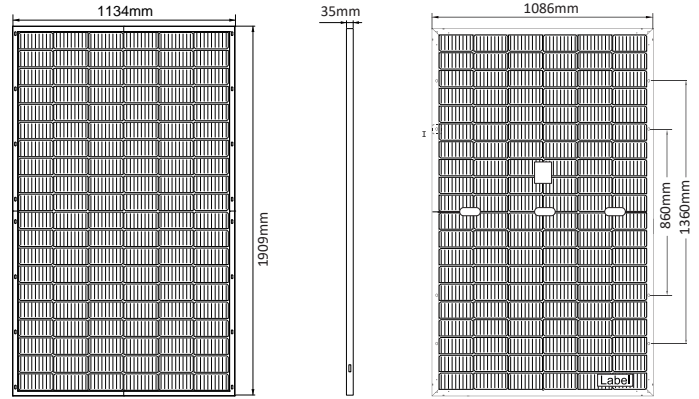


# ORM60D35MR450~465W



## MECHANICAL PARAMETERS

Cell type	Monocrystalline
Weight	28kg
Module dimension	1909*1134*35mm
Number of cells	120 (6*20)
Cable	4mm <sup>2</sup>
Junction box	IP68, 3 diodes
Connector	MC4 compatible connector
Packaging	31 pieces per pallet 744pcs/40'HQ Container



## ELECTRICAL PERFORMANCE

STC: AM1.5 1000W/m<sup>2</sup> 25 °C

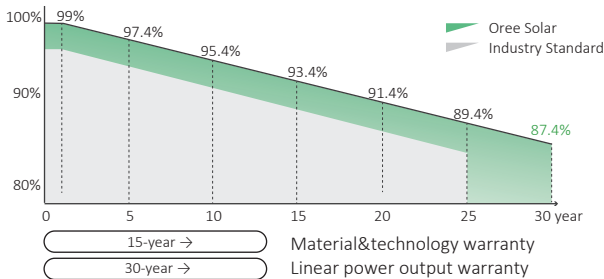
NOCT: AM1.5 800W/m<sup>2</sup> 20 °C 1m/s

Model	ORM60D35-450/MR		ORM60D35-455/MR		ORM60D35-460/MR		ORM60D35-465/MR	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum power (W)	450	341	455	344	460	348	465	352
Voltage at maximum power point (VMP/V)	34.75	32.87	35.06	33.08	35.37	33.29	35.69	33.50
Current at maximum power point (IMP/A)	12.93	10.37	12.96	10.40	12.99	10.45	13.02	10.51
Open circuit voltage (VOC/V)	41.72	39.20	41.92	39.41	42.12	39.62	42.33	39.97
Short circuit current (ISC/A)	13.66	11.00	13.69	11.05	13.71	11.10	13.73	11.15
Component efficiency (%)	20.79%		21.02%		21.25%		21.48%	
Power tolerance	0~+3%							
Temperature Coefficient of Isc(α <sub>Isc</sub> )	+0.05%/°C							
Temperature Coefficient of Voc(β <sub>Voc</sub> )	-0.275%/°C							
Temperature Coefficient of Pmax(γ <sub>Pmp</sub> )	-0.350%/°C							

## BIFACIAL OUTPUT-REAR SIDE POWER GAIN

Gain	Parameter	ORM60D35-450/MR	ORM60D35-455/MR	ORM60D35-460/MR	ORM60D35-465/MR
5%	Maximum Power (Pmax)	473Wp	478Wp	483Wp	488Wp
	Module Efficiency STC (%)	21.85%	22.08%	22.31%	22.55%
15%	Maximum Power (Pmax)	518Wp	523Wp	529Wp	535Wp
	Module Efficiency STC (%)	23.93%	24.16%	24.44%	24.70%

## SUPERIOR WARRANTY



## WORKING PARAMETERS

Maximum system voltage	1500V (TUV)
Operating temperature	-40 °C ~ +85 °C
Maximum series fuse rating	20A
Maximum static load, front side	5400pa
Maximum static load, back side	2400pa
Nominal battery operating temperature	44±2 °C
Application level	Class A

## CHARACTERISTICS

