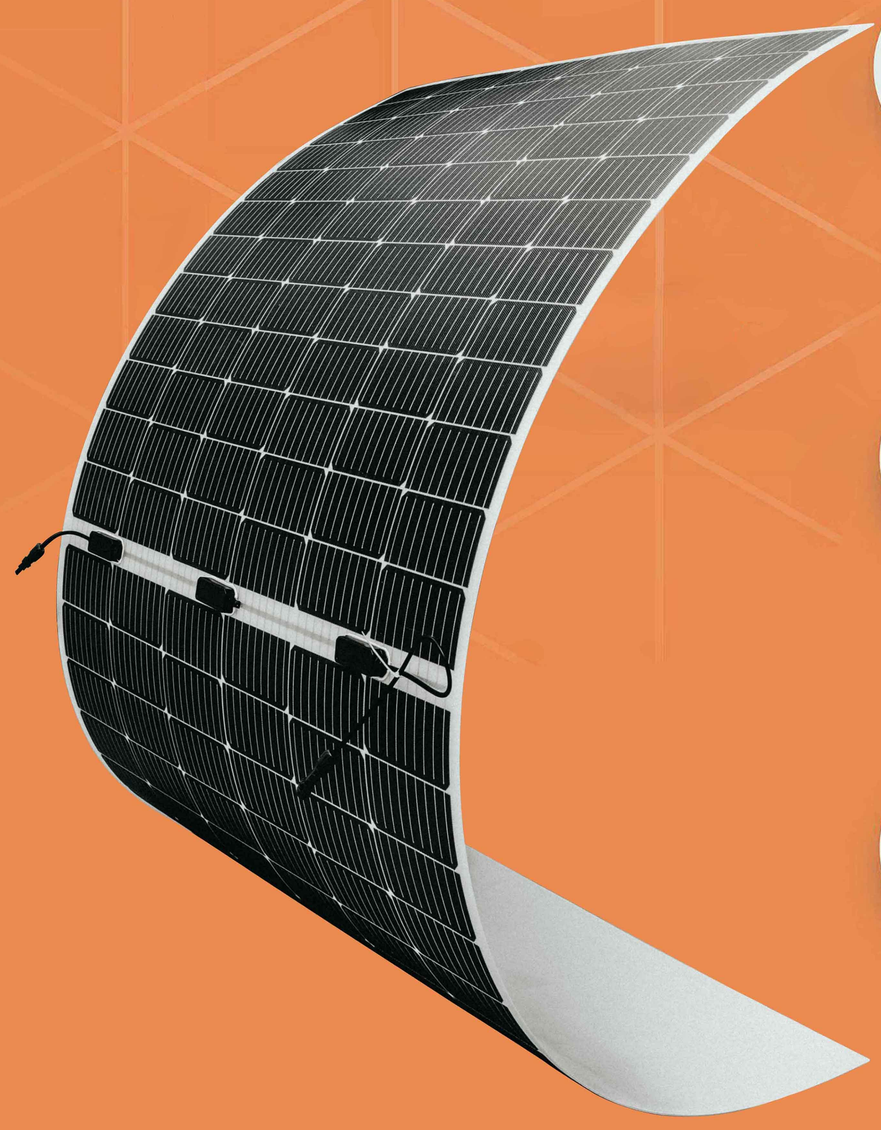
OMNISPOWER®
POWER THE FUTURE

CORTEX™

OPXXXMF-P2

430/440/450/460W

144 Half Cell Monocrystalline Module



Ultra-light: Glass free module weighs 7.3 kg, 70% lighter than conventional glass modules.

Fast-Installation: Through "Quick-Bonding" installation, eArc requires no penetration, reduces time on roof by 40% and eliminates the use of mounting hardware.

Aesthetic: Seamless integration with underlying installation surface.

2400pa

Durable: Cortex modules pass the same durability tests as conventional glass modules, including IEC 61215:2016, IEC61730 :2016 and UL1703 (USA). eArc has also passed PID, salt mist and ammonia corrosion tests.

POWER OUTPUT RANGE	430~460W
POWER TOLERANCE	0-5W

15 Year Product Warranty

25 Year Linear Power Warranty

CE IEC

ULTRA-LIGHT&FLEXIBLE SOLAR PANEL

LINEAR PERFORMANCE WARRANTY

CAUTION:Read installation manual before using the product.

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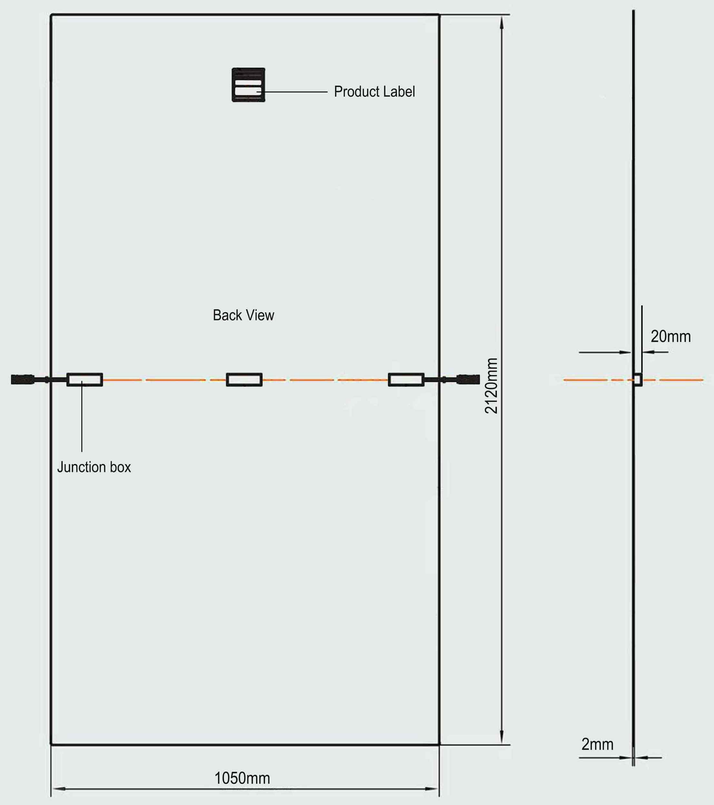
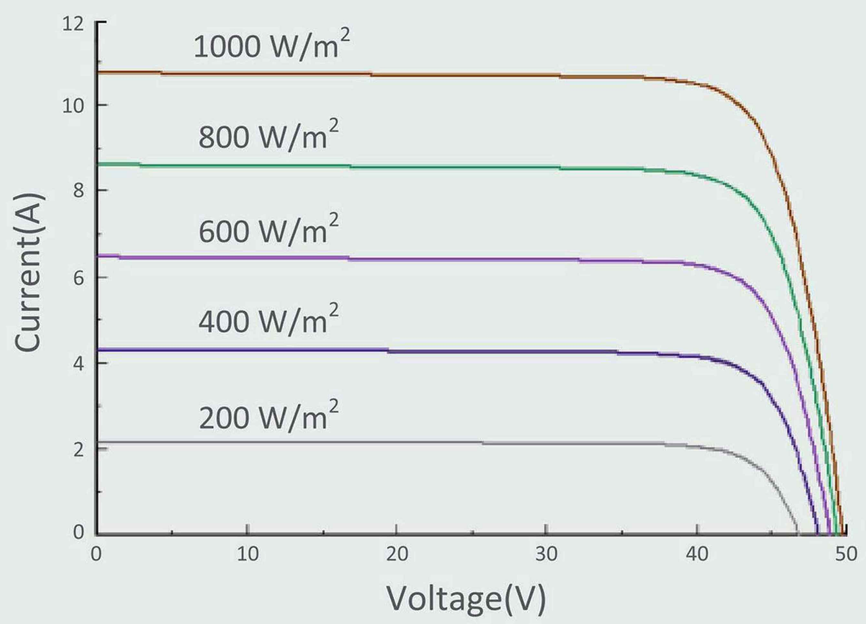
DIMENSIONS



I-V CURVE (430)



TEMPERATURE CHARACTERISTICS

Nominal Module Operating Temperature(NOMT)	41±2℃
Temperature Coefficient of P_{max}	-0.38 %/℃
Temperature Coefficient of V_{oc}	-0.28 %/℃
Temperature Coefficient of I_{sc}	0.020 %/℃

ELECTRICAL CHARACTERISTICS

STC	OP430MF-P2	OP440MF-P2	OP450MF-P2	OP460MF-P2
Maximum Power (P_{max})	430	440	450	460
Maximum Power Voltage (V_{mp})	40.2	40.4	40.8	41.4
Maximum Power Current (I_{mp})	10.24	10.35	10.67	11.38
Open-circuit Voltage (V_{oc})	49.8	48.5	48.9	49.3
Short-circuit Current (I_{sc})	10.74	11.01	11.24	11.38
Module Efficiency (%)	19.2	19.6	20	20.4
Operating Temperature	-40°C to 85°C			
Maximum System Voltage	1000 V DC (IEC)			
Maximum Series Fuse Rating	20A			
Application Class	Class A			
Power Tolerance	0/+5 W			

STC: Irradiance 1000W/m², Cell temperature 25°C, AM=1.5 Tolerances of P_{max},V_{oc} and I_{sc} are within ±5%

NOMT	OP430MF-P2	OP440MF-P2	OP450MF-P2	OP460MF-P2
Maximum Power (P_{max})	325.1	326.5	328	335
Maximum Power Voltage (V_{mp})	37.5	37.8	38.1	38.6
Maximum Power Current (I_{mp})	8.15	8.38	8.6	8.67
Open-circuit Voltage (V_{oc})	46.3	46.8	46	46.4
Short-circuit Current (I_{sc})	8.69	8.93	9.06	9.12

NMOT: Irradiance 800W/m², Ambient temperature 20 °C, AM=1.5, Wind speed 1m/s.

MECHANICAL CHARACTERISTICS

Solar Cell	Monocrystalline silicon(166mm half cell)
No. of Cells	144 (12×12)
Module Dimensions	2120*1050*2mm
Weight	7.3kg
Backsheet	White
Frame	Frameless
J-box	IP 68 rated
Output Cables	Photovoltaic technology cable 4.0 mm 2 , (+)150 / (-)450 mm
Connector	MC4 compatible

PACKAGING CONFIGURATION

	20' GP	40' HC
Module per pallet	66+50	66
Pieces per container	580	1320