

Barrel®

ULTRA LIGHT &
FLEXIBLE SOLAR PANEL

430 Watt 144 Cell Monocrystalline Module

POWER OUTPUT RANGE 425-430 W

POWER TOLERANCE 0-5 W

Warranties:

12

YEARS
PRODUCT

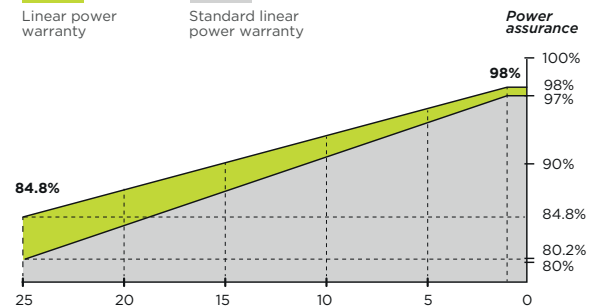
25

YEARS
LINEAR
POWER

Linear performance warranty

Linear power warranty

Standard linear power warranty



Ultra-light

Glass free module weighs 7.2 kg, 70% lighter than conventional glass modules.



Aesthetic

Seamless integration with underlying installation surface.



Fast-Installation

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



Durable

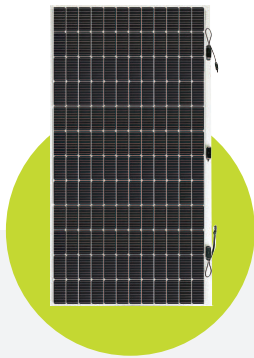
eArc is the first glassless module to pass the same durability tests as conventional glass modules, including IEC 61215:2016, IEC61730:2016 and UL 1703 (USA). eArc has also passed PIO, salt mist and ammonia corrosion tests.



CAUTION: read installation manual before using the product.

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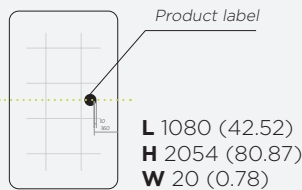
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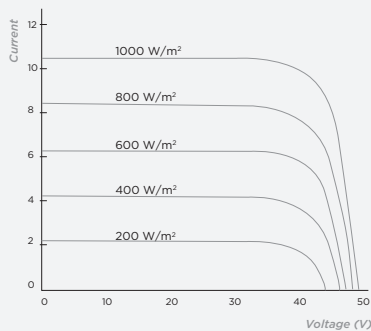
ULTRA LIGHT &
FLEXIBLE SOLAR PANEL

430 Watt
144 Cell Monocrystalline Module

Dimensions



I-V Curve (375)



Temperature characteristics

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

Electrical characteristics

STC	425	430
Maximum Power (P_{max})	425	430
Maximum Power Voltage (V_{mp})	41.8	40.2
Maximum Power Current (I_{mp})	10.17	10.24
Open-circuit Voltage (V_{oc})	49.6	49.8
Short-circuit Current (I_{sc})	10.67	10.74
Module Efficiency (%)	19.2	19.4
Operating Temperature	-40 °C to 85 °C	
Maximum System Voltage	1000 V DC (IEC)	
Maximum Series Fuse Rating	20 A	
Application Class	Class A	
Power Tolerance	0/+5 W	

STC: Irradiance 1000 W/m², Cell temperature 25 °C, AM=1.5

Tolerances of P_{max} , V_{oc} and I_{sc} are with in ±5%

NMOT	425	430
Maximum Power (P_{max})	321.4	325.1
Maximum Power Voltage (V_{mp})	38.6	38.8
Maximum Power Current (I_{mp})	8.33	8.38
Open-circuit Voltage (V_{oc})	46.6	46.8
Short-circuit Current (I_{sc})	8.64	8.69

NMOT: Irradiance 1000 W/m², Ambient temperature 20 °C, AM=1.5, Wind speed 1 m/s.

Mechanical characteristics

Solar Cell	Monocrystalline silicon (166mm half cell)
N° Cells	144 (12x12)
Module Dimensions	2054x1080x20 mm
Weight	7.2kg
Backsheet	White
Frame	Frameless
J-box	IP 68 rated
Output Cables	Photovoltaic technology cable 4.0 mm 2, (+)450 / (-)450 mm
Connector	MC4 compatible

Packaging configuration

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