

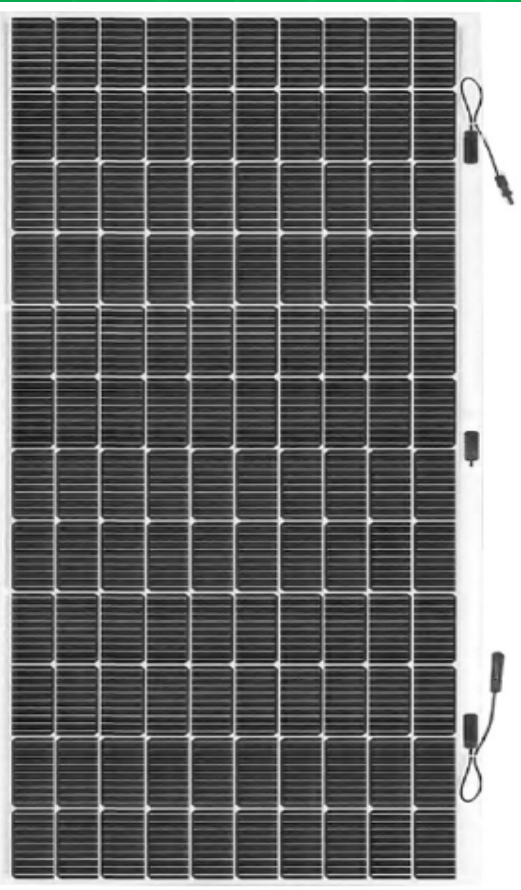


ZP-DB9A-460W

ZONPROSOLAR
轻质光伏开拓者
Lightweight PV And Portable PV Pioneer

460watt

120半片单晶硅太阳能组件 120 half cells Monocrystalline solar modules



轻质：通过替代玻璃及优化边框，该款组件的重量仅为 8.1 kg 比常规玻璃组件减重高达60%。

Lightweight: By replacing glass and optimizing the frame, this module's weight is just 8.1 kg, reducing weight by up to 60% compared to glass modules.



美观：无需穿透屋面生根，与下层屋面完美贴合。
Aesthetics: No need to penetrate the roof for fixation, perfectly adhering to the lower roof.



耐久性：轻质光伏是通过与常规玻璃组件相同耐久性测试的无玻璃组件。包括 IEC61215:2016, IEC61730:2016。

Durability: Lightweight PV modules are glass-free modules that have passed the same dual 85 damp heat tests as glass modules. Including IEC61215:2016, IEC61730:2016.

输出功率/Power output 460W

功率公差/Power Tolerance 0-5 W

单晶组件线性功率 Monocrystalline Module Linear Power

注意：使用产品前请阅读安装手册。

Note: Please read the installation manual before using the product.

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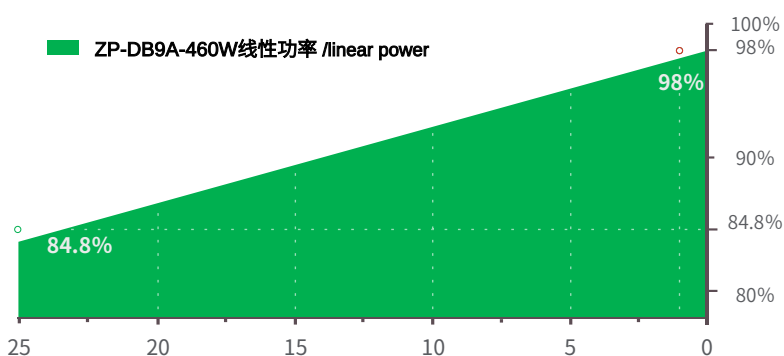
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地址：广州市南沙区南江二路5号丽晶湾科技孵化园4楼AB座。

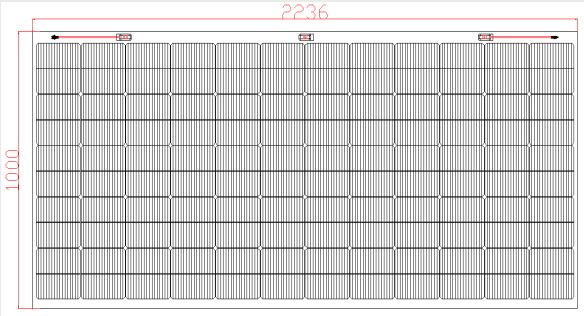
Address: 4th Floor, AB Block, Lijing Bay Area Technology Incubation Park, No. 5, Nanjiang 2nd Road, Nansha District, Guangzhou City, China.

E-mail: sales@zonprosolar.com

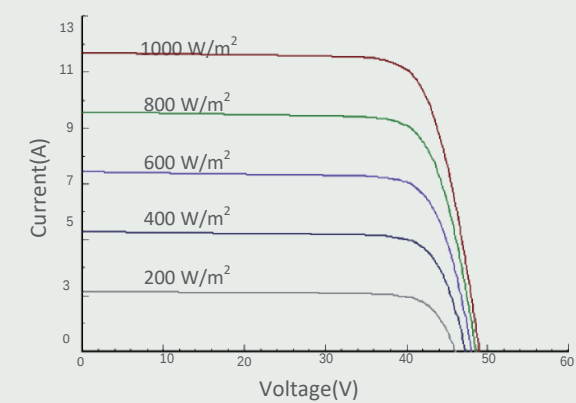
Web Address: www.zonprosolar.com



组件尺寸/Component dimensions



IV 曲线图/I-V curve



温度特性/Temperature Coefficient

额定电池工作温度(NMOT)	41±2℃
温度系数 P_{max}	-0.32 %/℃
温度系数 V_{oc}	-0.26 %/℃
温度系数 I_{sc}	0.046 %/℃



电学性能/Electrical characteristics

STC	ZP-DB9A-460W
STC峰值功率 (P_{max})	460W
最佳工作电压 (V_{mp})	36V
最佳工作电流 (I_{mp})	12.77A
开路电压 (V_{oc})	42.4V
短路电流 (I_{sc})	13.53A
电池片效率 (%)	≥ 25%
组件工作温度 Component Operating	-20℃ to 60℃
最大系统电压 Max. System Voltage	1000 V DC (IEC)
最大串联保险丝电流等级 Max. Series Fuse Rating	20 A
应用等级 Application Class	Class A
功率公差 Power Tolerance	0/+5 W

STC: 辐照度 1000W/m², 电池温度25℃, AM=1.5, P_{max} , V_{oc} , I_{sc} 的公差为±5%

产品规格/Product Specification

太阳能电池/Solar Cell	单晶硅(182mm半片)
电池数量/Number of Cells	120(12×10)
组件尺寸/Module Dimensions	2236×1000×3 mm
重量/Weight	8.1kg±5%
背板/Backsheet	白色
边框材质/Frame Material	NO
接线盒/Junction Box	IP 67 rated Photovoltaic technology cable 4.0 mm², 900mm long
输出电缆/Output Cables	MC4
连接器/Connectors	

包装信息/Packing Details

	20' GP	40' HC
片/托盘/Pallet	60	60
片/集装箱/Container	600	1200

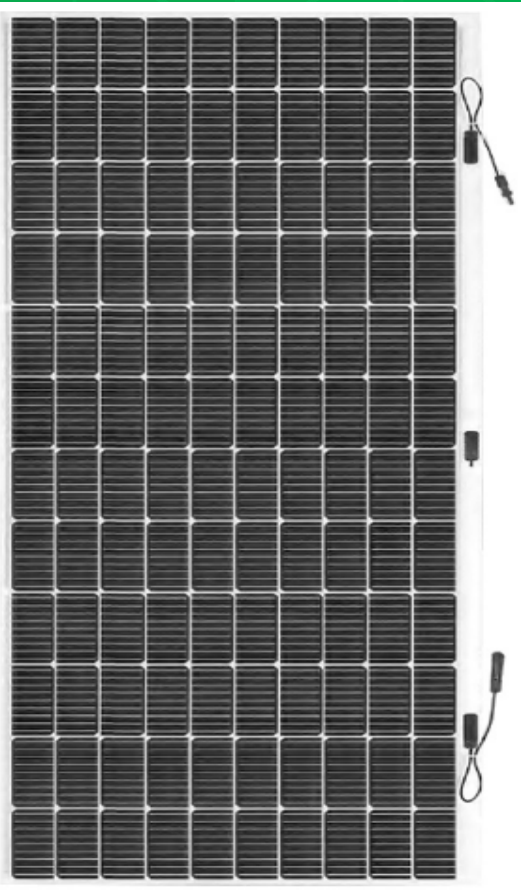


ZP-DB9A-430W

ZONPROSOLAR
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430watt

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Durability: Lightweight PV modules are glass-free modules that have passed the same dual 85 damp heat tests as glass modules . Including IEC61215:2016, IEC61730:2016.

输出功率/Power output 430W

功率公差/Power Tolerance 0-5 W

单晶组件线性功率 Monocrystalline Module Linear Power

注意：使用产品前请阅读安装手册。
Note: Please read the installation manual before using the product.

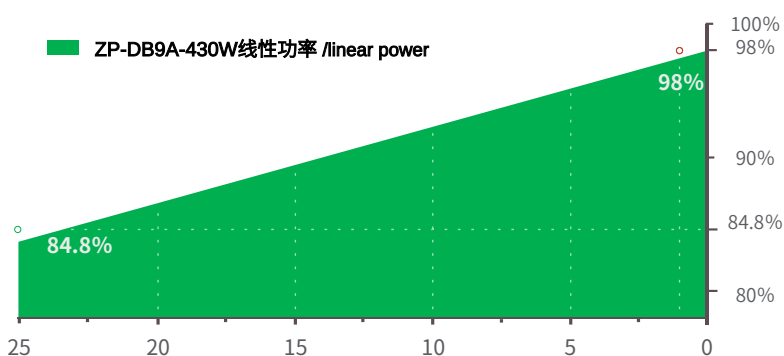
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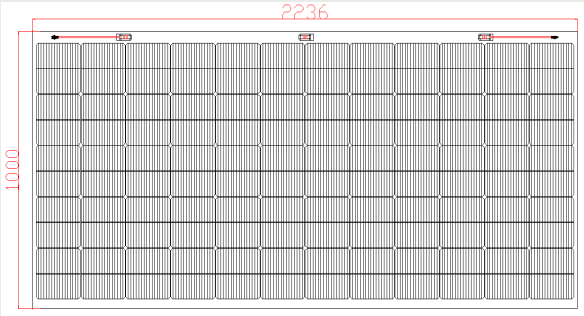
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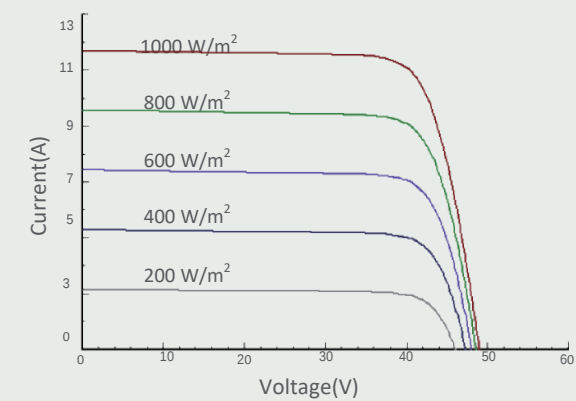
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电学性能/Electrical characteristics

STC	ZP-DB9A-430W
STC峰值功率 (P_{max})	460W
最佳工作电压 (V_{mp})	34V
最佳工作电流 (I_{mp})	12.64A
开路电压 (V_{oc})	40.1V
短路电流 (I_{sc})	13.39A
电池片效率 (%)	≥ 23%
组件工作温度 Component Operating	-20℃ to 60℃
最大系统电压 Max. System Voltage	1000 V DC (IEC)
最大串联保险丝电流等级 Max. Series Fuse Rating	20 A
应用等级 Application Class	Class A
功率公差 Power Tolerance	0/+5 W

STC: 辐照度 1000W/m², 电池温度25℃, AM=1.5, P_{max} , V_{oc} , I_{sc} 的公差为±5%

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