



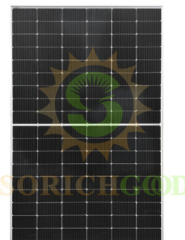
## 22.3% Efficiency Monocrystalline Silicon Panels for Extreme Environmental Conditions

Our Product Introduction

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### Basic Information

- Place of Origin: China
- Brand Name: GDQ
- Certification: IEC 61215 (2016) IEC 61730 (2016) ISO 9001:2015 ISO 45001:2018 ISO 14001:2015
- Model Number: Q415
- Minimum Order Quantity: 300 pcs
- Price: consult prices online
- Packaging Details: consult online
- Payment Terms: T/T



GDQX-415W-435W Semiconductor efficient photovoltaic modules

### Product Specification

- Maximum Power (Pmax): 415W-435W
- Module Efficiency: Up To 22.3%
- Open Circuit Voltage (Voc): 37.95V - 38.55V
- Maximum Power Voltage (Vmp): 31.84V - 32.64V
- Short Circuit Current (Isc): 13.74A - 14.05A
- Temperature Coefficient Of Pmax: -0.34%/°C
- Highlight: **415w monocrystalline silicon panels,**  
**415w monocrystalline silicon solar panels**

## Product Description

22.3% Efficiency Monocrystalline Silicon Panels for Extreme Environmental Conditions

# 415W-435W

## Semiconductor efficient photovoltaic modules



**High efficiency & low attenuation**  
Power up to 435W with 22.3% efficiency



**Anti-PID**  
Preferred encapsulation materials and strict process solutions to ensure the module's PID resistance



**Stronger & More Reliable**  
Front side max 5400Pa ;Rear side max 2400Pa



**Excellent low light effect**  
Higher output in low light conditions such as overcast, morning and sunset

### Product Description:

This high-efficiency 415W-435W semiconductor photovoltaic module is designed for optimal energy generation with up to 22.3% efficiency. Utilizing TOPCON technology with 182\*91mm cell size, this module integrates advanced PID resistance and enhanced mechanical load durability, capable of withstanding front loads up to 5400Pa and rear loads up to 2400Pa. It also boasts excellent performance in low-light conditions, making it ideal for environments with varying weather patterns. The product is built with an anodized frame, IP68-rated junction box, and customizable cable options, ensuring durability and flexibility in installation.

Mechanical specifications			
Cell Type	TOPCON 182*91mm	OPERATING PARAMETER	
No.OfCells	108 M(6*18)	Max.System Voltage	1500V/DC
Junction Box	IP68.3 diodes	Operation Temperature	-40°C-85°C
Frame	Anodized frame	Max.Snow Load(Front)	5400Pa
Weight	20.5Kg±3%	Max.Wind Load(Front)	3600Pa
Dimension	1722*1134*30mm	NOCT	45±2°C
Cable	4mm².350mm inlength,can be customized	Customzoble	All black,Double gloss
Glass	Single glass,3.2mm high tansmission.antireflection coating		
ElectricalCharacteristics			
Module Type	108M		
	STC NOCT STC NOCT STC NOCT STC NOCT STC NOCT STC NOCT		
Maximum Power(Pmax)	415W 312W 420W 316W 425W 320W 430W 324W 435W 328W		
Maximum Power Voltage (Vmp)	31.84V 29.78V 32.04V 29.97V 32.24V 30.16V 32.44V 30.35V 32.64V 30.54V		
Maximum Power Curent (imp)	13.04V 10.48V 13.11V 10.54V 13.18V 10.61V 13.26V 10.67V 13.33V 10.74V		
Open-circuit Voltage(Voc)	37.95A 36.06A 38.15A 36.24A 38.35A 36.42A 38.55A 38.60A 38.75A 36.78A		
Short-circuit Current (Isc)	13.74A 11.09A 13.80A 11.14A 13.86A 11.19A 13.92A 11.24A 13.98A 11.29A		
	79.63% 79.79% 79.94% 80.16% 80.32%		
Module Efficiency STC(%)	21.25% 21.51% 21.76% 22.02% 22.28%		

Temperature Characterstcs	
NMOT	45+2°C
Temp Coefficient of ISC	+0.05%/C
Temp Coefficient of VOC	-0.28%°C
Temp Coefficient ofPmax	-0.34%°C
Modules/Pallet	36 Pieces
Modules/40'Contain er	936Pieces
Pockaging Description	26 Pallets.Total=(36+36)x13=936 Pieces

