



**Planet Sun**  
PHOTOVOLTAIC SYSTEM  
**Beghelli**

Pronto Sole 400

### Pronto Sole 400

400W of Solar Power provides enough energy for large amounts of bright, clean LED light, over multiple days in complex locations. Does your team work in remote areas? Do you have to recharge battery powered equipment when working away from the grid? Do you need to keep perishable or medical goods cold far from consistent electricity sources? All of these and more can be done with the Beghelli Pronto Sole 400 kit. Beghelli will custom design the kit and provide batteries, poles and mounting recommendations based upon your specific needs. Your location doesn't dictate your standard of living - Pronto Sole 400!

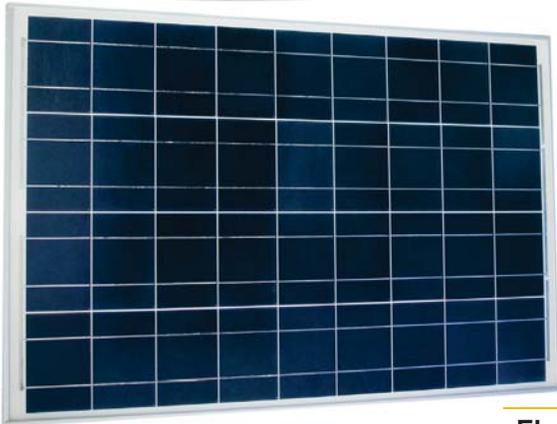


[www.beghelli.com](http://www.beghelli.com)

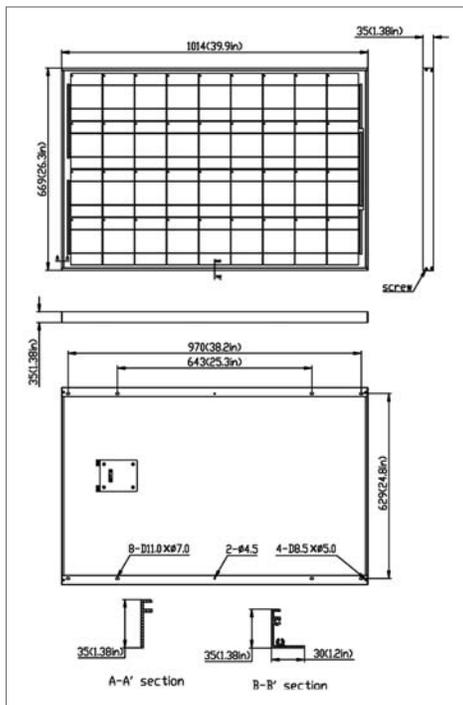
## Beghelli PV 4X 100W Solar Modules

### Features:

- IEC61215, TUV certification
- UL 1703 certification, ETL Class I ,Division 2,Groups C and D certification
- Using high efficiency 6" Multicrystalline cells.
- Using low iron tempered glass and an EVA pottant with TPT back sheet to encapsulated cells.
- Anodized aluminum frame protected structural strength.
- 10 years limited warranty of 90% power output and 25 years limited warranty of 80% power output.



### Dimensional Drawings



### Electrical Characteristics SPM100P

Power at STC(Pm)	100W		
Maximum power voltage(Vpm)	18.6V		
Maximum power current(Ipm)	5.38A		
Open circuit voltage(Voc)	22.8V		
Short circuit current(Isc)	5.76A		
Tolerance	5%		
Module efficiency	14.8%		
Standard test conditions	Temperature 25°C, Irradiance 1000W/m <sup>2</sup> , AM=1.5		
Maximum system voltage	1000V DC	Series fuse	Rating 10A
Temperature coefficient	Isc:0.05%/K	Voc:-0.36%/K	Pmax:-0.46%/K

### Specifications

Cell	Multicrystalline silicon solar cell, (156mm x 104mm)
No. of cell and connection	36 (4x9)
Dimension	1014mm(39.9in) x 669mm(26.3in) x 35mm(1.38in)
Weight	9.0KG

### Ambient Conditions

Operating Temperature	-40°C to +85°C
Storage Humidity	<90%

### Output

Type of output terminal	Junction box
Cable Length	



## Beghelli PV Solar Charge Controller



CHARGE CONTROL	LOAD CONTROL	DIVERSION CONTROL
<ul style="list-style-type: none"> <li>• Constant voltage series PWM design to provide highly efficient battery charging</li> <li>• 4-stage charging to increase battery capacity and life: bulk charge, PWM regulation, float and equalize</li> <li>• Parallel for larger solar arrays up to 300 amps or more</li> </ul>	<ul style="list-style-type: none"> <li>• Starts large loads including motors and pumps with no damage to controller</li> <li>• Allows inrush current to 300 amps</li> <li>• Electronic short-circuit and overload protection with automatic reconnect</li> <li>• LVD is current compensated and has a delay to avoid false disconnects</li> </ul>	<ul style="list-style-type: none"> <li>• May be used for solar, wind or hydroelectric</li> <li>• To protect against battery overcharge, excess energy is diverted from primary battery to a secondary battery or alternate DC resistive load</li> <li>• PWM reduces power into diversion load during overcurrent conditions</li> </ul>

### Electrical Specifications

Rated solar, load or diversion current:

TriStar-45	45A
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System Voltage	12-48V
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Accuracy 12/24V:	0.1% ±50mV
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Min. voltage to operate	9V
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Max. solar voltage (Voc)	125V
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Self-consumption:

Controller	<20mA
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Meter	7.5mA
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### Environmental Specifications

Operating ambient temperature:

Controller	-40°C to +60°C
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Meter	-40°C to +60°C
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Storage temperature:	-55°C to +85°C
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Humidity:	100% (non-condensing)
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Tropicalization:

Conformal coating on both sides of all printed circuit boards

### Electrical Protection

Reverse polarity protection (any combination)

Short-circuit protection

Overcurrent protection

Lightning and transient surge protection using 4500W transient voltage suppressors

High temperature protection via automatic current reduction or complete shut down

Prevents reverse current from battery at night

### Mechanical Specifications

Operating ambient temperature:

Dimensions:	Height: 26.0cm/10.3 inch
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	Width: 12.7cm/5.0 inch
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	Depth: 7.1cm/2.8 inch
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Weight:	1.6 kg/3.5 lb
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Largest Wire:	35mm <sup>2</sup> /2 AWG
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Conduit knockouts:	Eccentric 2.5/3.2 cm (1.0/1.25 inch)
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Enclosure:	Type 1, indoor rated
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### Electrical Protection

TriStar Meter — 2 x 16 display mounts to controller and provides system and controller information, data logging, bar graphs and choice of 5 languages

13.5v	25c	12.3A	V A	14.4 V	1135 7Ah
1234.5Ah	5Ah	FLOAT			

TriStar Remote Meter — Includes 30 meters of cable for mounting meter away from the controller

Remote Temperature Sensor — Provides temperature compensated charging by measuring temperature at the battery (10 meter cable)

### Certifications

CE Compliant

UL Listed (UL 1741)

cUL (CSA-C22.2 No.107.1-95)

Complies with U.S. National Electric Code

Manufactured in a certified ISO 9001 facility

*"Only when I saw the Earth from space,  
in all its ineffable beauty and fragility,  
did I realize that humankind's most urgent task is  
to cherish and preserve it for future generations."*

*- Sigmund Jahn  
German Cosmonaut*



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