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# Solar Panel Guide Specification Data Sheet

Solartech Power, Inc. SPM020-90P-BP SPM020P-BP

Also available on the web at EnergyPal.com/solartech-power-inc-solar-panels/spm020p-bp



# J-Series 20W PV Module SPM020P-BP

#### **Solartech J-Series Modules**

Solartech photovoltaic J-Series Modules are constructed with high efficient polycrystalline solar cells and produce higher output per module than others in it class. This industrial grade module is an industry standard among various industry professionals.

#### **Features**

Class 1, Division 2, (C1D2) Group A,B,C and D

• Accessible junction box with 4-1/2" knockout for ease of installation.

 (EVA) with TPT cushions the solar cells within the laminate an ensures the operating characteristics of the solar cells under virtually any climatic condition
Rigid anodized aluminum frame and low iron tempered glass

• Easily accessible grounding points on all four corners for fast installation

Proven junction box technology

#### Reliability

- Proven superior field performance
- Tight power tolerance

#### **Qualifications and Certifications**

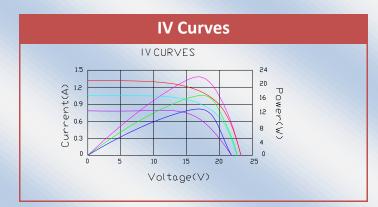


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## Model Number SPM020P-BP

# **Electrical Characteristics**

Max power(Pm)	20W
Maximum power voltage(Vpm)	16.8V
Maximum power current (Ipm)	1.19A
Short circuit current (Isc)	1.29A
Open circuit voltage (Voc)	21.0V
Module efficiency	9.4%
Tolerance	±5%
Nominal Voltage	12V
Temperature coefficient of Voc	-0.36%/K
Temperature coefficient of Pm	-0.46%/K
Temperature coefficient of lsc	0.05%/K
NOCT	48°C±2°C
Maximum series fuse rating	10A
Maximum system voltage	600V



#### Warranty

- 25-year limited warranty of 80% power output; 12-year limited warranty of 90% power output;
- 5-year limited warranty of materials and worksmanship

# **Certifications**

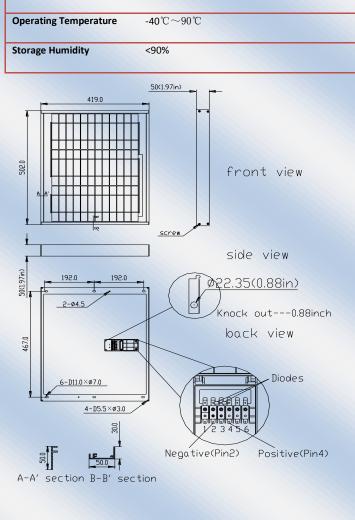
UL 1703 certification

ETL Class I, Division 2, Groups A, B, C and D certification

Mechanical	
Characteristics	
Construction	Tempered glass, silicon cell, EVA, Polyester with Tedlar
Solar Cells	36 cells (156mm x 26mm) in a 3x12 matrix connected in series
Front Cover	High transmission 3.2mm(1/8") glass
Encapsulant	EVA(Double layers)
Back Cover	White polyester
Frame	Anodized aluminum
Junction Box	IP65, UL94-5VA material
Diodes	Schottky by-pass diodes
Terminal	Accept 8-14 AWG wire
Dimensions	16.5in(419mm)x19.8in(502mm)x1.97in(50mm)

7.26lb (3.3kg)

Weight





# J-Series 30W PV Module SPM030P-BP

#### **Solartech J-Series Modules**

Solartech photovoltaic J-Series Modules are constructed with high efficient polycrystalline solar cells and produce higher output per module than others in it class. This industrial grade module is an industry standard among various industry professionals.

#### **Features**

Class 1, Division 2, (C1D2) Group A,B,C and D

• Accessible junction box with 4-1/2" knockout for ease of installation.

 (EVA) with TPT cushions the solar cells within the laminate an ensures the operating characteristics of the solar cells under virtually any climatic condition
Rigid anodized aluminum frame and low iron tempered glass

Easily accessible grounding points on all four corners for fast installation

Proven junction box technology

#### Reliability

- Proven superior field performance
- Tight power tolerance

#### **Qualifications and Certifications**



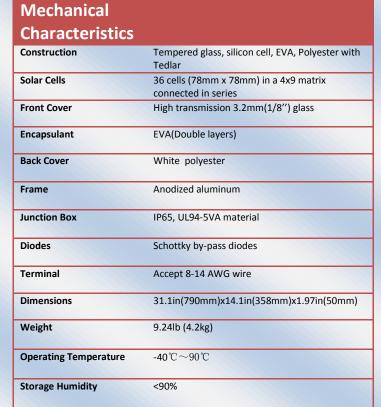


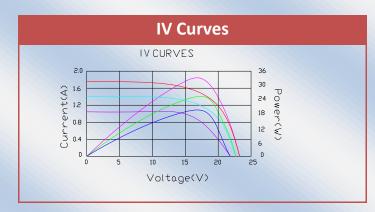
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- Area Lighting & Sign

## Model Number SPM030P-BP

## Electrical Characteristics

Characteristics	
Max power(Pm)	30W
Maximum power voltage(Vpm)	16.8V
Maximum power current (Ipm)	1.78A
Short circuit current (Isc)	1.94A
Open circuit voltage (Voc)	21.0V
Module efficiency	10.5%
Tolerance	±5%
Nominal Voltage	12V
Temperature coefficient of Voc	-0.36%/K
Temperature coefficient of Pm	-0.46%/K
Temperature coefficient of lsc	0.05%/K
NOCT	48℃±2℃
Maximum series fuse rating	10A
Maximum system voltage	600V



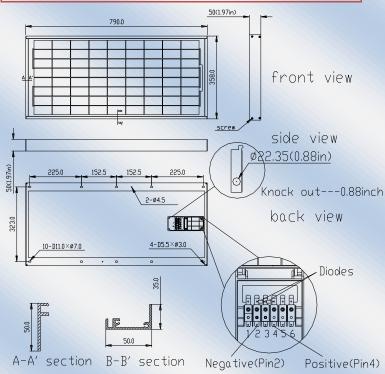


#### Warranty

- 25-year limited warranty of 80% power output; 12-year limited warranty of 90% power output;
- 5-year limited warranty of materials and worksmanship

# Certifications

UL 1703 certification





# J-Series 40W PV Module SPM040P-BP

#### **Solartech J-Series Modules**

Solartech photovoltaic J-Series Modules are constructed with high efficient polycrystalline solar cells and produce higher output per module than others in it class. This industrial grade module is an industry standard among various industry professionals.

#### **Features**

Class 1, Division 2, (C1D2) Group A,B,C and D

• Accessible junction box with 4-1/2" knockout for ease of installation.

 (EVA) with TPT cushions the solar cells within the laminate an ensures the operating characteristics of the solar cells under virtually any climatic condition
Rigid anodized aluminum frame and low iron tempered glass

• Easily accessible grounding points on all four corners for fast installation

Proven junction box technology

#### Reliability

- Proven superior field performance
- Tight power tolerance

#### **Qualifications and Certifications**

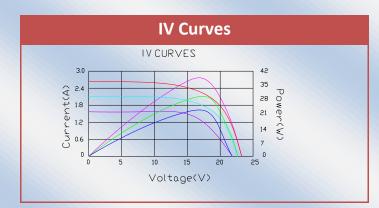


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- Area Lighting & Sign

## Model Number SPM040P-BP

# Electrical Characteristics

Characteristics	
Max power(Pm)	40W
Maximum power voltage(Vpm)	17.3V
Maximum power current (Ipm)	2.31A
Short circuit current (Isc)	2.54A
Open circuit voltage (Voc)	21.8V
Module efficiency	11.4%
Tolerance	±5%
Nominal Voltage	12V
Temperature coefficient of Voc	-0.36%/K
Temperature coefficient of Pm	-0.46%/K
Temperature coefficient of Isc	0.05%/K
NOCT	48°C±2°C
Maximum series fuse rating	10A
Maximum system voltage	600V



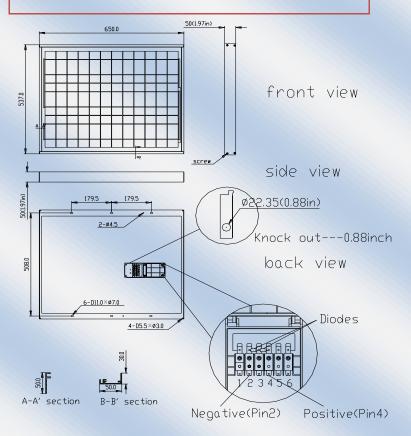
#### Warranty

- 25-year limited warranty of 80% power output; 12-year limited warranty of 90% power output;
- 5-year limited warranty of materials and worksmanship

# Certifications

UL 1703 certification

Mechanical	
Characteristics	
Construction	Tempered glass, silicon cell, EVA, Polyester with Tedlar
Solar Cells	36 cells (156mm x 48mm) in a 3x12 matrix connected in series
Front Cover	High transmission 3.2mm(1/8") glass
Encapsulant	EVA(Double layers)
Back Cover	White polyester
Frame	Anodized aluminum
Junction Box	IP65, UL94-5VA material
Diodes	Schottky by-pass diodes
Terminal	Accept 8-14 AWG wire
Dimensions	25.6in(650mm)x21.2in(537mm)x1.97in(50mm)
Weight	10.78lb (4.9kg)
Operating Temperature	-40℃~90℃
Storage Humidity	<90%





# J-Series 50W PV Module SPM050P-BP

#### **Solartech J-Series Modules**

Solartech photovoltaic J-Series Modules are constructed with high efficient polycrystalline solar cells and produce higher output per module than others in it class. This industrial grade module is an industry standard among various industry professionals.

#### **Features**

Class 1, Division 2, (C1D2) Group A,B,C and D

• Accessible junction box with 4-1/2" knockout for ease of installation.

 (EVA) with TPT cushions the solar cells within the laminate an ensures the operating characteristics of the solar cells under virtually any climatic condition
Rigid anodized aluminum frame and low iron tempered glass

• Easily accessible grounding points on all four corners for fast installation

Proven junction box technology

#### Reliability

- Proven superior field performance
- Tight power tolerance

#### **Qualifications and Certifications**

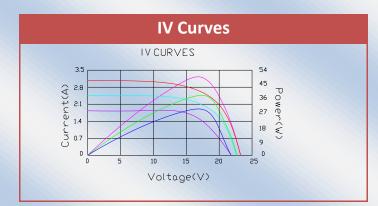


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- Marine
- Area Lighting & Sign

## Model Number SPM050P-BP

# Electrical Characteristics

Characteristics	
Max power(Pm)	50W
Maximum power voltage(Vpm)	17.5V
Maximum power current (Ipm)	2.90A
Short circuit current (Isc)	3.20A
Open circuit voltage (Voc)	21.8V
Module efficiency	11.1%
Tolerance	±5%
Nominal Voltage	12V
Temperature coefficient of Voc	-0.36%/K
Temperature coefficient of Pm	-0.46%/K
Temperature coefficient of Isc	0.05%/K
NOCT	48°C±2°C
Maximum series fuse rating	12A
Maximum system voltage	600V



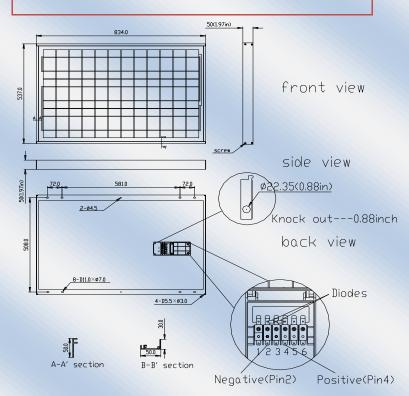
#### Warranty

- 25-year limited warranty of 80% power output; 12-year limited warranty of 90% power output;
- 5-year limited warranty of materials and worksmanship

# Certifications

UL 1703 certification

Mechanical	
Characteristics	
Construction	Tempered glass, silicon cell, EVA, Polyester with Tedlar
Solar Cells	36 cells (156mm x 62mm) in a 3x12 matrix connected in series
Front Cover	High transmission 3.2mm(1/8") glass
Encapsulant	EVA(Double layers)
Back Cover	White polyester
Frame	Anodized aluminum
Junction Box	IP65, UL94-5VA material
Diodes	Schottky by-pass diodes
Terminal	Accept 8-14 AWG wire
Dimensions	32.8in(834mm)x21.2in(537mm)x1.97in(50mm)
Weight	13.42lb (6.1g)
Operating Temperature	-40°C∼90°C
Storage Humidity	<90%





# J-Series 65W PV Module SPM065P-BP

#### **Solartech J-Series Modules**

Solartech photovoltaic J-Series Modules are constructed with high efficient polycrystalline solar cells and produce higher output per module than others in it class. This industrial grade module is an industry standard among various industry professionals.

#### **Features**

Class 1, Division 2, (C1D2) Group A,B,C and D

• Accessible junction box with 4-1/2" knockout for ease of installation.

 (EVA) with TPT cushions the solar cells within the laminate an ensures the operating characteristics of the solar cells under virtually any climatic condition
Rigid anodized aluminum frame and low iron tempered glass

• Easily accessible grounding points on all four corners for fast installation

Proven junction box technology

#### Reliability

- Proven superior field performance
- Tight power tolerance

#### **Qualifications and Certifications**





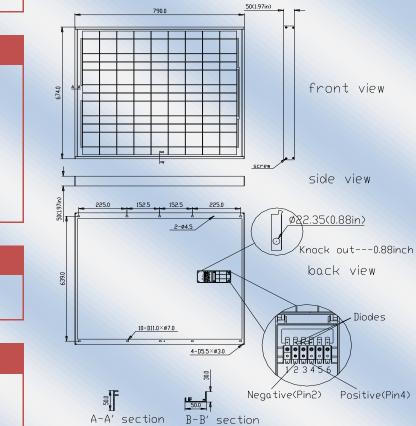
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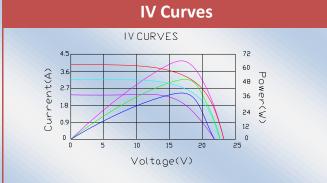
## Model Number SPM065P-BP

# Electrical Characteristics

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Max power(Pm)	65W
Maximum power voltage(Vpm)	17.6V
Maximum power current (Ipm)	3.69A
Short circuit current (Isc)	3.99A
Open circuit voltage (Voc)	21.7V
Module efficiency	12.1%
Tolerance	±5%
Nominal Voltage	12V
Temperature coefficient of Voc	-0.36%/K
Temperature coefficient of Pm	-0.46%/K
Temperature coefficient of Isc	0.05%/K
NOCT	48℃±2℃
Maximum series fuse rating	10A
Maximum system voltage	600V

Mechanical	
Characteristics	
Construction	Tempered glass, silicon cell, EVA, Polyester with Tedlar
Solar Cells	36 cells (156mm x 78mm) in a 4x9 matrix connected in series
Front Cover	High transmission 3.2mm(1/8") glass
Encapsulant	EVA(Double layers)
Back Cover	White polyester
Frame	Anodized aluminum
Junction Box	IP65, UL94-5VA material
Diodes	Schottky by-pass diodes
Terminal	Accept 8-14 AWG wire
Dimensions	31.1in(790mm)x26.5in(674mm)x1.97in(50mm)
Weight	15.4lb (7.0kg)
Operating Temperature	- <b>40</b> ℃~90℃
Storage Humidity	<90%





# Warranty

- 25-year limited warranty of 80% power output; 12-year limited warranty of 90% power output;
- 5-year limited warranty of materials and worksmanship

# Certifications

UL 1703 certification



# J-Series 90W PV Module SPM090P-BP

#### **Solartech J-Series Modules**

Solartech photovoltaic J-Series Modules are constructed with high efficient polycrystalline solar cells and produce higher output per module than others in it class. This industrial grade module is an industry standard among various industry professionals.

#### **Features**

Class 1, Division 2, (C1D2) Group A,B,C and D

• Accessible junction box with 4-1/2" knockout for ease of installation.

 (EVA) with TPT cushions the solar cells within the laminate an ensures the operating characteristics of the solar cells under virtually any climatic condition
Rigid anodized aluminum frame and low iron tempered glass

• Easily accessible grounding points on all four corners for fast installation

Proven junction box technology

#### Reliability

- Proven superior field performance
- Tight power tolerance

#### **Qualifications and Certifications**



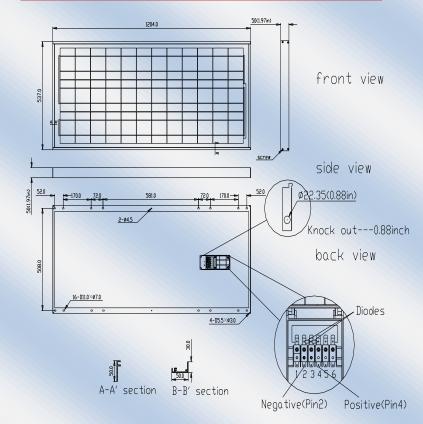
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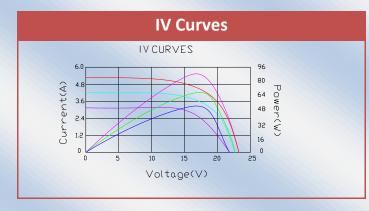
## Model Number SPM090P-BP

# Electrical Characteristics

Characteristics		
Max power(Pm)	90W	
Maximum power voltage(Vpm)	17.9V	
Maximum power current (Ipm)	5.03A	
Short circuit current (Isc)	5.58A	
Open circuit voltage (Voc)	22.2V	
Module efficiency	13.9%	
Tolerance	±5%	
Nominal Voltage	12V	
Temperature coefficient of Voc	-0.36%/K	
Temperature coefficient of Pm	-0.46%/K	
Temperature coefficient of Isc	0.05%/K	
NOCT	48°C ±2°C	
Maximum series fuse rating	12A	
Maximum system voltage	600V	

Mechanical	
Characteristics	
Construction	Tempered glass, silicon cell, EVA, Polyester with Tedlar
Solar Cells	36 cells (156mm x 91mm) in a 3x12 matrix connected in series
Front Cover	High transmission 3.2mm(1/8") glass
Encapsulant	EVA(Double layers)
Back Cover	White polyester
Frame	Anodized aluminum
Junction Box	IP65, UL94-5VA material
Diodes	Schottky by-pass diodes
Terminal	Accept 8-14 AWG wire
Dimensions	47.4in(1204mm)x21.2in(537mm)x1.97in(50mm)
Weight	19.8lb (9.0kg)
Operating Temperature	-40°C∼90°C
Storage Humidity	<90%





#### Warranty

- 25-year limited warranty of 80% power output; 12-year limited warranty of 90% power output;
- 5-year limited warranty of materials and worksmanship

# Certifications

UL 1703 certification