

CS5A

160/170/180

All-purpose Module

CS5A is a robust all-purpose solar module with 72 solar cells. These modules can be used for on-grid and off-grid solar applications. Our meticulous design and production techniques ensure a high-yield, long-term performance for every module produced. Our rigorous quality control and in-house testing facilities guarantee Canadian Solar's modules meet the highest quality standards possible.

Key Features

Strong frame, passing mechanical load test of 5400Pa, instead of the normal 2400Pa, to withstand heavier snow load and higher wind-pressure

Industry leading power tolerance : $\pm 5W$ ($\pm 2.8\%$)

25 years performance warranty

The 1st manufacturer in PV industry certified to ISO:TS16949 (The automotive quality management system, since 2003) in module production

ISO17025 qualified manufacturer owned testing lab (pending), fully complying to IEC, TUV, UL testing standards

Applications

On-grid and off-grid residential roof-tops
On-grid and off-grid commercial/industrial roof-tops
Rural area applications
Solar power stations
Other on-grid and off-grid applications

Quality Certificates

IEC 61215, IEC61730(pending),
TUV Safety Class II, UL 1703, CE
ISO9001:2000: Standards for quality management systems
ISO/TS16949:2002: The automotive quality management system
QC080000 HSPM: The Certification for Hazardous Substances Regulations

CS5A-160/170/180

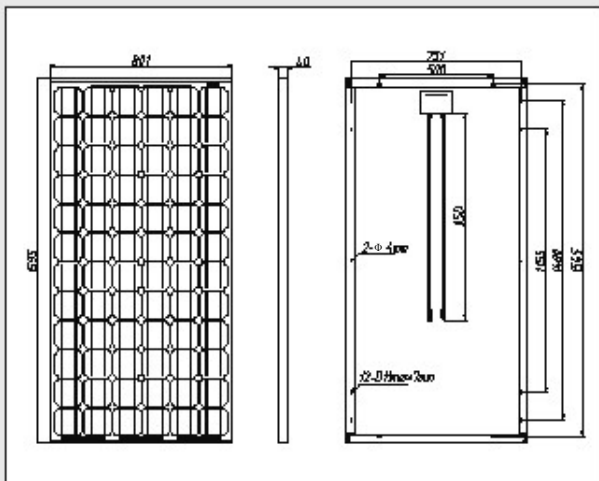
Electrical Data

		CS5A-160	CS5A-170	CS5A-180
Nominal Maximum Power at STC (Pmax)		160W	170W	180W
Optimum Operating Voltage (Vmp)		34.9V	35.5V	36.1V
Optimum Operating Current (Imp)		4.58A	4.79A	4.99A
Open Circuit Voltage (Voc)		43.6V	44.1V	44.5V
Short Circuit Voltage (Isc)		4.97A	5.19A	5.40A
Operating Temperature		-40°C ~ +85°C		
Maximum System Voltage		1,000V (IEC) / 600V (UL)		
Maximum Series Fuse Rating		10A		
Power Tolerance		±5W		
Temperature Coefficient	Pmax	-0.45 %/°C		
	Voc	-0.35 %/°C		
	Isc	0.060 %/°C		
	NOCT	45°C		

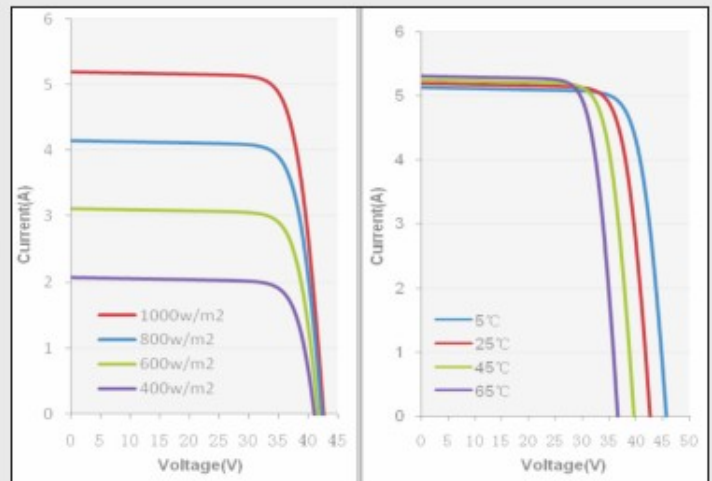
Mechanical Data

Cell Type	Mono-crystalline (Poly-crystalline)
Cell Arrangement	72 (6 x 12)
Dimensions	1595mm x 801mm x 40mm (62.8x 31.5 x 1.6 in)
Weight	15.5kg (34.2 lbs)
Front Cover	Tempered glass
Frame Material	Anodized aluminium alloy
Packaging (Modules per Pallet)	20pcs

Engineering Drawings



I-V Curves





CS5P

200/210/220/230/240

On-grid Module

CS5P is a robust big solar module with 96 solar cells. These modules can be used for on-grid and off-grid solar applications. Our meticulous design and production techniques ensure a high-yield, long-term performance for every module produced. Our rigorous quality control and in-house testing facilities guarantee Canadian Solar's modules meet the highest quality standards possible.

Key Features

Strong frame, passing mechanical load test of 5400Pa, instead of the normal 2400Pa, to withstand heavier snow load and higher wind-pressure

Industry leading power tolerance : $\pm 5W$ ($\pm 2.1\%$)

25 years performance warranty

The 1st manufacturer in PV industry to apply ISO:TS16949 (quality control management for automotive industry) in module production

ISO17025 qualified manufacturer owned testing lab (pending), fully complying to IEC, TUV, UL testing standards

Applications

- On-grid residential roof-tops
- On-grid commercial/industrial roof-tops
- Solar power stations
- Other on-grid applications

Quality Certificates

- IEC 61215, IEC61730, TUV Safety Class II, UL 1703, CE
- ISO9001:2000: Standards for quality management systems
- ISO/TS16949:2002: The automotive quality management system
- QC080000 HSPM: The Certification for Hazardous Substances Regulations

CS5P-200/210/220/230/240

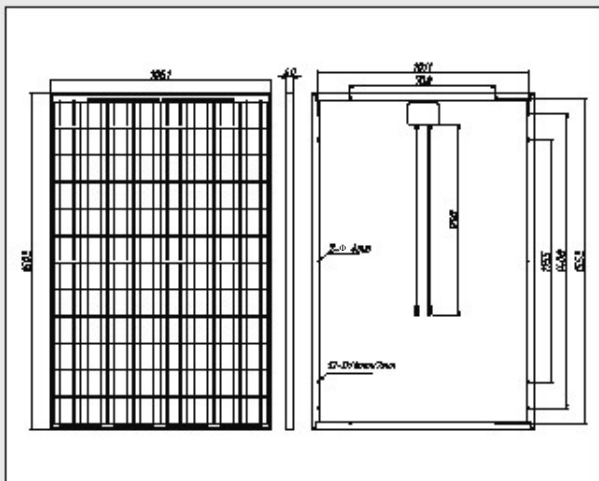
Electrical Data

		CS5P-200	CS5P-210	CS5P-220	CS5P-230	CS5P-240
Nominal Maximum Power at STC (Pmax)		200W	210W	220W	230W	240W
Optimum Operating Voltage (Vmp)		46.4V	46.6V	46.9V	47.5V	48.1V
Optimum Operating Current (Imp)		4.31A	4.51A	4.69A	4.84A	4.99A
Open Circuit Voltage (Voc)		57.4V	57.9V	58.4V	58.8V	59.3V
Short Circuit Voltage (Isc)		4.78A	4.94A	5.10A	5.25A	5.40A
Operating Temperature		-40°C ~ +85°C				
Maximum System Voltage		1,000V (IEC) / 600V (UL)				
Maximum Series Fuse Rating		10A				
Power Tolerance		±5W				
Temperature Coefficient	Pmax	-0.45 %/°C				
	Voc	-0.35 %/°C				
	Isc	0.060 %/°C				
	NOCT	45°C				

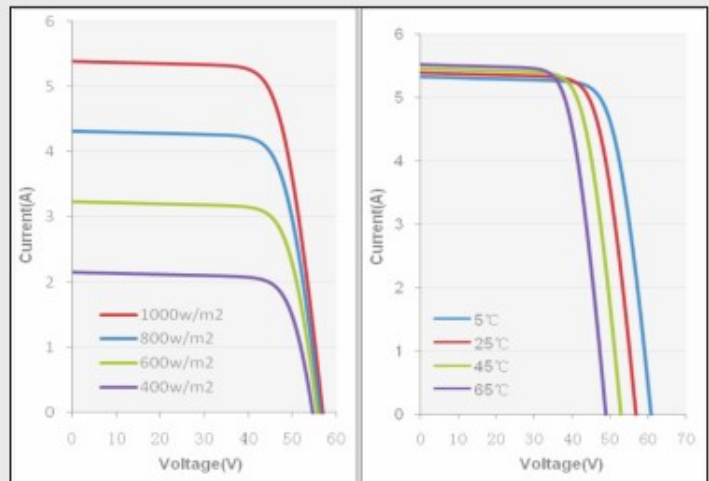
Mechanical Data

Cell Type	Poly-crystalline (Mono-crystalline)
Cell Arrangement	96 (8*12)
Dimensions	1602mm*1061mm*40mm
Weight	20kg
Front Cover	Tempered glass
Frame Material	Anodized aluminium alloy
Packaging (Modules per Pallet)	20pcs

Engineering Drawings



I-V Curves





All-black CS5A

160/170/180

All-purpose Module

All-black CS5A is a robust all-purpose solar module with 72 solar cells. These modules can be used for on-grid and off-grid solar applications. The all-black modules use high efficiency mono-crystalline silicon cells, laminated with black back sheet and framed with black anodized aluminum. The all-black modules are the perfect choice of customers who not only are keen on using solar energy, but also look for aesthetic value.

Key Features

Aesthetic all-black appearance

Strong frame, passing mechanical load test of 5400Pa, instead of the normal 2400Pa, to withstand heavier snow load and higher wind-pressure

Industry leading power tolerance : $\pm 5W$ ($\pm 2.8\%$)

25 years performance warranty

The 1st manufacturer in PV industry certified to ISO:TS16949 (The automotive quality management system, since 2003) in module production

ISO17025 qualified manufacturer owned testing lab (pending), fully complying to IEC, TUV, UL testing standards

Applications

- On-grid and off-grid residential roof-tops
- On-grid and off-grid commercial/industrial roof-tops
- Rural area applications
- Solar power stations
- Other on-grid and off-grid applications

Quality Certificates

- IEC 61215, TUV Safety Class II, UL 1703, CE
- ISO9001:2000: Standards for quality management systems
- ISO/TS16949:2002: The automotive quality management system
- QC080000 HSPM: The Certification for Hazardous Substances Regulations

CS5A-160/170/180

All-black (Preliminary Version)

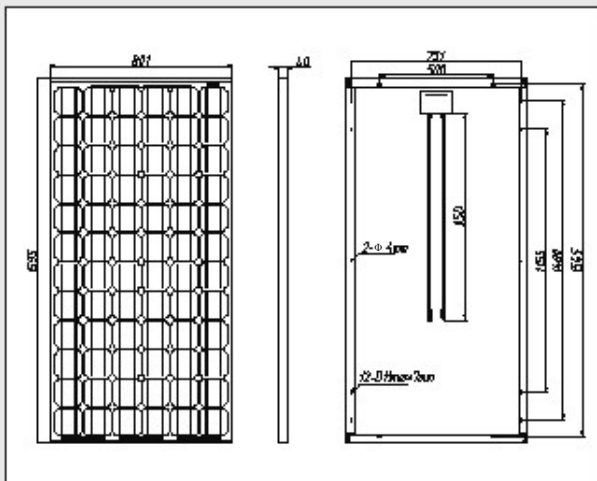
Electrical Data

		CS5A-160	CS5A-170	CS5A-180
Nominal Maximum Power at STC (Pmax)		160W	170W	180W
Optimum Operating Voltage (Vmp)		34.9V	35.5V	36.1V
Optimum Operating Current (Imp)		4.58A	4.79A	4.99A
Open Circuit Voltage (Voc)		43.6V	44.1V	44.5V
Short Circuit Voltage (Isc)		4.97A	5.19A	5.40A
Operating Temperature		-40°C ~ +85°C		
Maximum System Voltage		1,000V (IEC) / 600V (UL)		
Maximum Series Fuse Rating		10A		
Power Tolerance		±5W		
Temperature Coefficient	Pmax	-0.45 %/°C		
	Voc	-0.35 %/°C		
	Isc	0.060 %/°C		
	NOCT	45°C		

Mechanical Data

Cell Type	Mono-crystalline
Cell Arrangement	72 (6 x 12)
Dimensions	1595mm x 801mm x 40mm (62.8x 31.5 x 1.6 in)
Weight	15.5kg (34.2 lbs)
Front Cover	Tempered glass
Frame Material	Anodized aluminium alloy
Packaging (Modules per Pallet)	20pcs

Engineering Drawings



I-V Curves

