

Cotech Solar Monocrystalline Silicon Modules CS5M12-5-45W

Features

- ❖ Low voltage-temperature coefficient allows higher power output at high-temperature condition.
- ❖ High conversion efficiency, High reliability with guaranteed +3% power output tolerance, ensuring return on investment
- ❖ Withstands high wind-pressure and snow load (passed IEC 5400Pa mechanical loading test), and extreme temperature variation.
- ❖ Custom design with wide power selection down to 5W

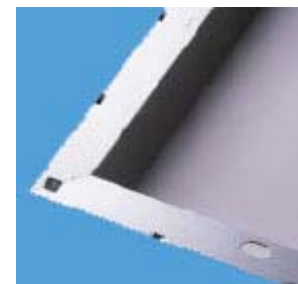
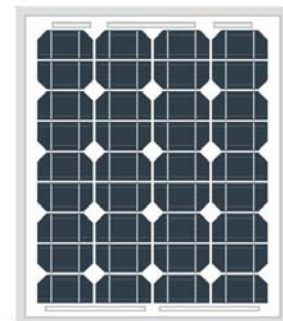
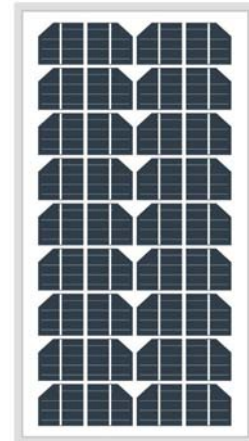
Quality and Safety

- ❖ 10years workmanship warranty, 12 years 90% power output, 25 years 80% power output
- ❖ Rigorous quality control meeting the highest international standards ISO 9001:2000 and ISO 14001:2004 certified factories manufacturing world class products
- ❖ CE, IEC61215, IEC61730, TUV,VDE and UL1703

Materials

- ❖ Advanced EVA encapsulation system with triple-layer back sheet meets the most stringent safety requirements for high-voltage operation
- ❖ The sturdy, anodized aluminum frame allows the modules to be mounted on a variety of standard racking systems and to withstand harshest conditions
- ❖ Ultra reliable bypass diodes prevent damage through overheating due to shaded or defective cells
- ❖ Innovative, environmentally friendly packing method using pile-edges ensures modules arrive in perfect condition
- ❖ New frame design incorporating drainage holes, with more grounding holes, provide flexible installation and use

CS5M12-5 CS5M12-10
 CS5M12-15 CS5M12-20
 CS5M12-25 CS5M12-30
 CS5M12-35 CS5M12-40
 CS5M12-45



COTECH SOLAR HOLDINGS LIMITED

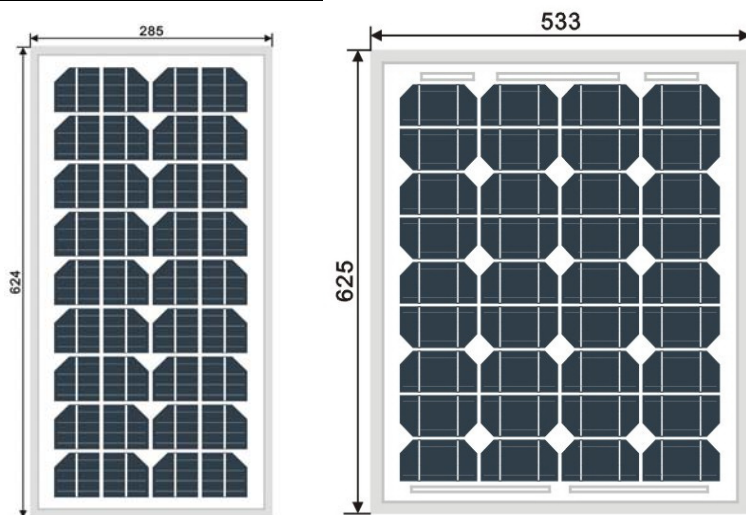
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Electrical Characteristics										
Type:CS5M12	12 -5	12 -10	12 -15	12 -20	12 -25	12 -30	12 -35	12 -40	12 -45	12 -50
Nominal Maximum Power (Pmax)	5w	10w	15w	20w	25w	30w	35w	40w	45w	50w
Optimum Operating Voltage (Vmp)	17.6	17.6	17.3V	17.5V	17.2	17.4	17.4	17.7	17.6	18.0
Optimum Operating Current (Imp)	0.29	0.57	0.87A	1.15A	1.45	1.73	2.01	2.30	2.55	2.78
Open Circuit Voltage (Voc)	21.6	21.6	21.4V	21.8V	21.4	21.6	21.6	21.6	21.9	22.0
Short Circuit (Isc)	0.34	0.67	0.97A	1.24A	1.57	1.87	2.17	2.48	2.75	2.97
Maximum Series Fuse Rating	1.5A		2.5A	3.0A			4.0A	5.0 A		
Dimensions	290*205	290*343	295*435	295*630*25		540*434	540*515	625x540x25mm		
Weight	1kg	1.8KG	2.5kg	3.5kg		4.2kgs	4.8kgs	5.5kg		
Operating Temperature	-40 °C ~+85 °C									
Maximum System Voltage	1,000V (IEC) /600V (UL)									
Power Tolerance	+3%									
Temp. Coeff. of Pmax (TK Pmax)	-0.45°C									
Temp. Coeff. of Voc (TK Voc)	-0.35 %/°C									
Temp. Coeff. of Isc (TK Isc)	0.060 %/°C									
Nominal Operating Cell Temp.	45°C									
Cell Type and Arrangement	Monocrystalline Silicon, 125mm x 125mm, 36pcs in series									
Glass ,Type and Thickness	High Transmission ,Low Iron, Tempered Glass 3.2mm									
Under Standard Test Conditions (STC) of irradiance of 1000W/m2, spectrum AM 1.5 and cell temperature of 25										

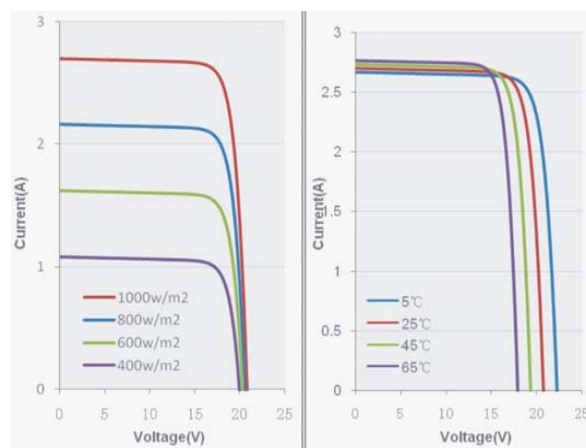
Module Diagram



15-20W

40-50W

I-V Curves-CS5M12-45W



Brief Introduction

Cotech Solar is one of the few large-scale solar companies in China, designs, manufactures and sells solar modules and designs, assembles, sells and installs solar systems. The annual production capability of solar modules is more than 120MW and have passed UL,TUV, IEC, VDE and CE certification.