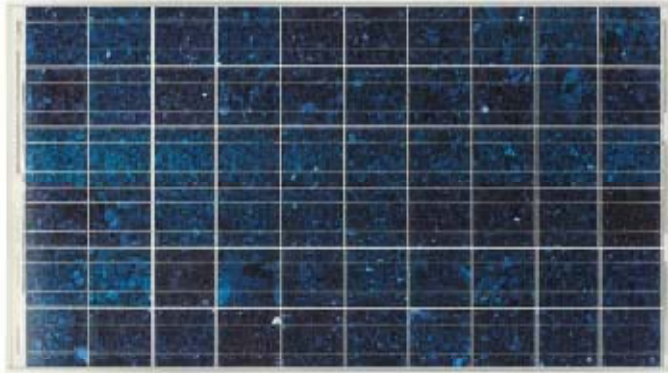




## PRODUCTS CATALOG - 2009



- **LARGE SCALE ON GRID PHOTOVOLTAIC MODULES 190W TO 220W**
- **MID RANGE OFF GRID PHOTOVOLTAIC MODULES 55W TO 130W**
- **SMALL BATTERY CHARGING PHOTOVOLTAIC MODULES 2W TO 40W**
- **PULSE WITH MODULATED (PWM) CHARGE CONTROLLERS 10A,30A**



### CERTIFICATION:

• ISO 9001

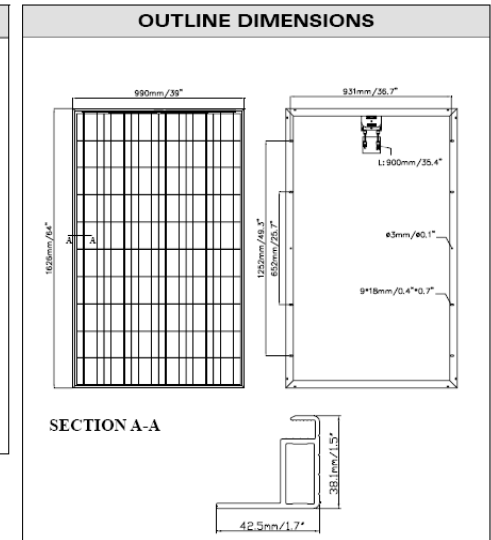
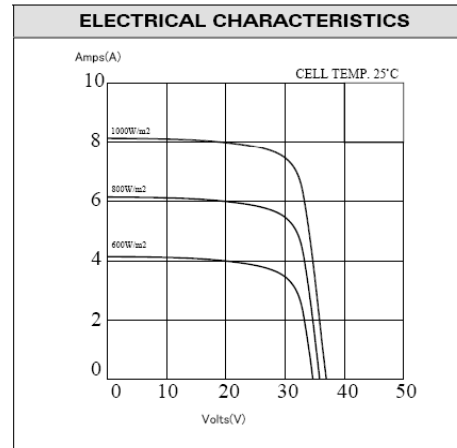


The XC2300 is XC3i's 6 inch high efficiency module. Thanks to its optimum size it is easy to handle and specifically dedicated to large scale on grid applications.

The XC2300 module uses multicrystalline technology. Encapsulation beneath high transmission tempered glass is accomplished using an advanced, UV resistant thermal setting plastic. The encapsulant, ethylene vinyl acetate, cushions the solar cells within the laminate and protect the cells from etching. The rear surface of the module is completely sealed from moisture and mechanical damage by a continuous high strength polymer sheet.

The XC2300 is using a reinforced anodised aluminum frame, designed to meet XC3i's High Quality Standards for corrosion resistance. With a tolerance of +/- 3%, the XC2300 module ensures more power in multi module installations.

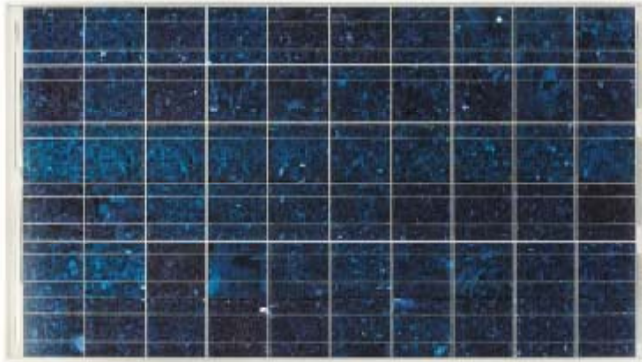
XC2300 POWER SPECIFICATIONS	200W	210W	220W	230W
Maximum Power Voltage (V <sub>pm</sub> )	28.44V	28.97V	30.20V	30.96V
Maximum Power Current (I <sub>pm</sub> )	7.04A	7.25A	7.32A	7.43A
Open Circuit Voltage (V <sub>oc</sub> )	36.24V	35.90V	36.90V	36.95V
Short Circuit Current (I <sub>sc</sub> )	7.62 A	7.76 A	7.85 A	7.97 A
Module Efficiency (%)	12.40	13.05	13.67	14.28
Cell Type / Cells in Series	Poly Crystalline / 60			
Maximum System Voltage	DC 1000V			
Series Fuse Rating	10A			
Performance Tolerance	+- 3%			
Weight (kg) / Dimensions (mm)	24.3 kg / 1626 x 990 x 38.1 mm			
Storage / Operating Temperature	-40 to 90 degrees C			



▪ Limited warranty : 25 years

XC3 INTERNATIONAL LLC.  
5348 VEGAS DRIVE #1017  
LAS VEGAS NV 89108-2347

PHONE: 702-387-7215  
FAX: 702-387-7218  
Email: info@xc3i.com



### CERTIFICATION:

• ISO 9001

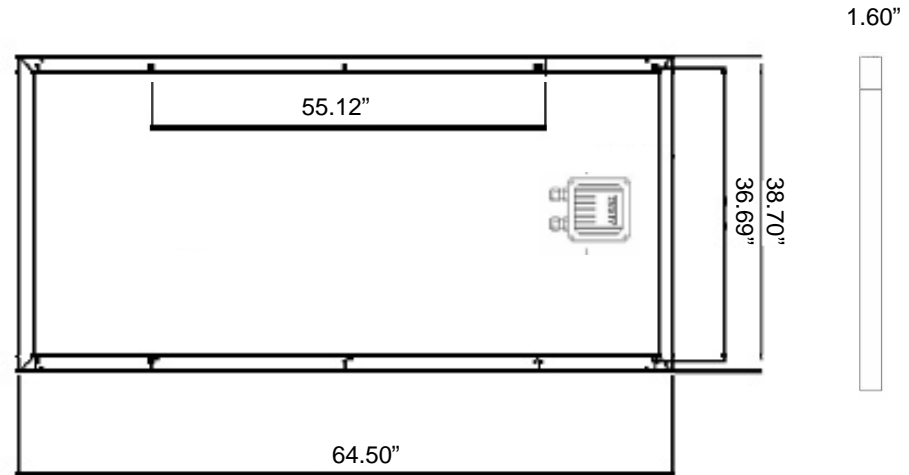


XC3 International's high efficiency module size is easy to handle and specifically designed for large scale off grid applications.

XC3i's module uses state of the art multicrystalline technology with a Silicon Nitride (SiN) coating that enhances cell efficiency. Encapsulation beneath high transmission tempered glass is accomplished using an advanced, UV resistant thermal setting plastic. The encapsulant, ethylene vinyl acetate, cushions the solar cells within the laminate and protect the cells from etching. The rear surface of the module is completely sealed from moisture and mechanical damage by a continuous high strength polymer sheet.

XC3i's module incorporates a reinforced anodised aluminium frame, designed to meet XC3i's High Quality Standards for corrosion resistance.

XCS6P-190	190W @ STC 168.5W @ PTC
Maximum Power Voltage (V <sub>pm</sub> )	28.80V
Maximum Power Current (I <sub>pm</sub> )	6.60A
Open Circuit Voltage (V <sub>oc</sub> )	36.00V
Short Circuit Current (I <sub>sc</sub> )	7.33 A
Cell Type	Poly
Nominal Voltage	12Vdc
Maximum System Voltage	DC 1000V
Series Fuse Rating	15A
Performance Tolerance	+ - 5%



- Limited warranty : 25 years

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Cells	
Cell Material	Polycrystalline
Number of Cells	60

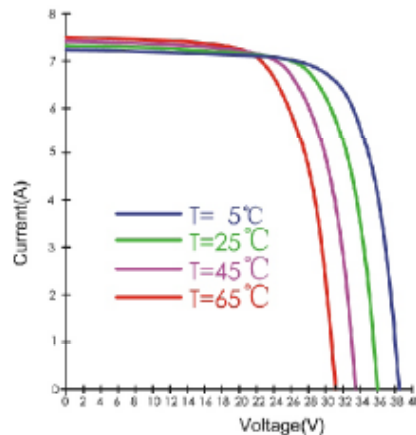
Dimensions		
Length*Width*Depth	mm	1638 x 982 x 40
	(in)	(64.5 x 38.7 x 1.6)
Weight	kg (lbs)	18.5 (40.8)

26 Modules / Pallet
1100LBS / Pallet
80"H x 70"W x 45"L

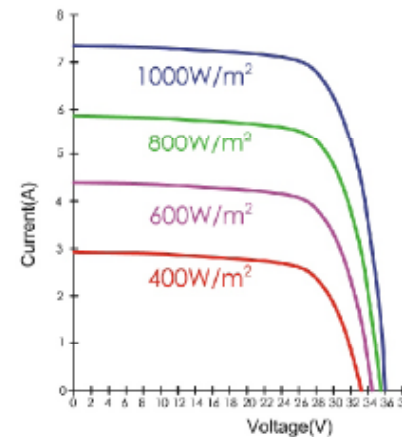
Maximum load rating	5400Pa(112.78 lbf/ft <sup>2</sup> )	
Temperature Coefficient	Voltage (Voc)	-0.35 %/°C
	Current (Isc)	0.060 %/°C
	Max Power(Pmax)	-0.45 %/°C

\*NOCT (Normal Operating Cell Temperature): 45°C    \*\*Module power tolerance: ±5W (approx. ±2.5%)

I-V Curves Under Different Temperatures, 1000W/m<sup>2</sup>



I-V Curves Under Different Irradiances ; AM 1.5 ; 25°C



\*Specifications included in this datasheet are subject to change without prior notice.

- Limited warranty : 25 years

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5348 VEGAS DRIVE #1017  
LAS VEGAS NV 89108-2347

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FAX: 702-387-7218  
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# PHOTOVOLTAIC HIGH EFFICIENCY MODULE – LARGE JBOX

## MODEL: XC1300 - 12V



### CERTIFICATION:

• ISO 9001



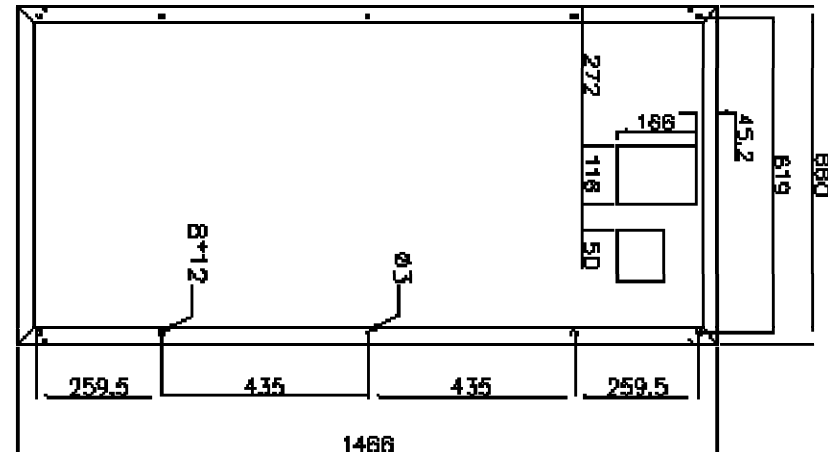
XC3 International's high efficiency module size is easy to handle and specifically designed for large scale off grid applications.

XC3i's module uses state of the art multicrystalline technology with a Silicon Nitride (SiN) coating that enhances cell efficiency. Encapsulation beneath high transmission tempered glass is accomplished using an advanced, UV resistant thermal setting plastic. The encapsulant, ethylene vinyl acetate, cushions the solar cells within the laminate and protect the cells from etching. The rear surface of the module is completely sealed from moisture and mechanical damage by a continuous high strength polymer sheet.

XC3i's module incorporates a reinforced anodised aluminium frame, designed to meet XC3i's High Quality Standards for corrosion resistance.

**1" inch = 25.4 mm (outside dimensions 57.76" L X 26"W)**

XC1300 POWER SPECIFICATIONS	115W	120W	125W	130W
Maximum Power Voltage (Vpm)	17.40V	17.52V	17.64V	17.76V
Maximum Power Current (Ipm)	6.60A	6.85A	7.11A	7.38A
Open Circuit Voltage (Voc)	21.90V	22.00V	22.11V	22.30V
Short Circuit Current (Isc)	6.97 A	7.24 A	7.50 A	7.79 A
Cell Type	Poly			
Nominal Voltage	12Vdc			
Maximum System Voltage	DC 1000V			
Series Fuse Rating	10A			
Performance Tolerance	+- 5%			



- Limited warranty : 25 years

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LAS VEGAS NV 89108-2347

PHONE: 702-387-7215  
FAX: 702-387-7218  
Email: info@xc3i.com



# PHOTOVOLTAIC HIGH EFFICIENCY MODULE – LARGE JBOX MODEL: XC8500 85W - 12V



### CERTIFICATION:

• ISO 9001

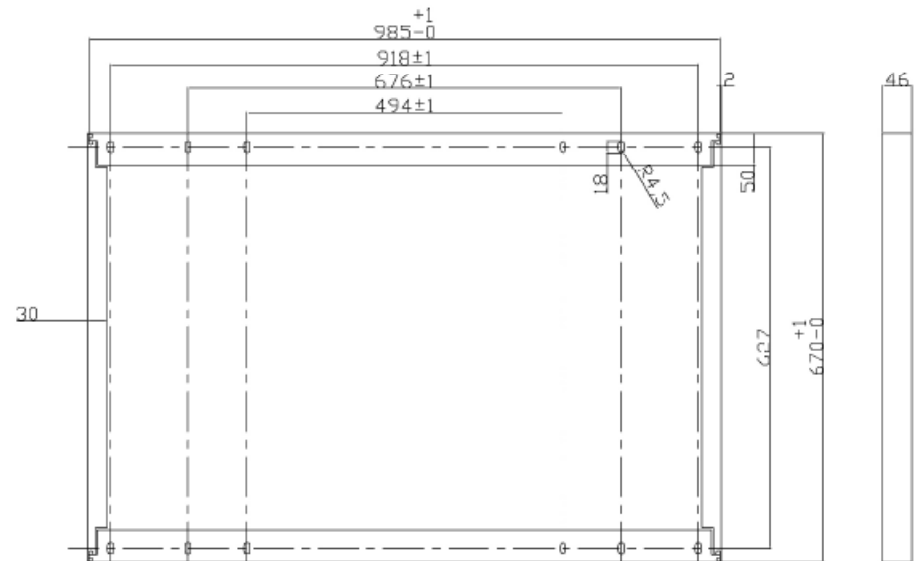


### DIRECT REPLACEMENT – Kyocera Solar KC85W

XC3 International's high efficiency module size is easy to handle and specifically designed for large scale off grid applications. XC3i's module uses state of the art multicrystalline technology with a Silicon Nitride (SiN) coating that enhances cell efficiency. Encapsulation beneath high transmission tempered glass is accomplished using an advanced, UV resistant thermal setting plastic. The encapsulant, ethylene vinyl acetate, cushions the solar cells within the laminate and protect the cells from etching. The rear surface of the module is completely sealed from moisture and mechanical damage by a continuous high strength polymer sheet. XC3i's module incorporates a reinforced anodised aluminium frame, designed to meet XC3i's High Quality Standards for corrosion resistance.

1" inch = 25.4 mm (outside dimensions 38.78" L X 26.38"W)

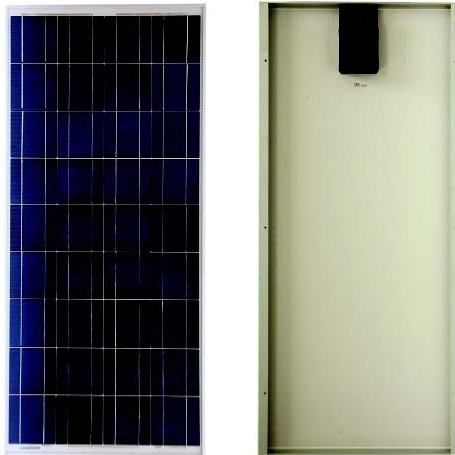
XC8500 85W	POWER SPECIFICATIONS
Maximum Power Voltage (V <sub>pm</sub> )	17.60V
Maximum Power Current (I <sub>pm</sub> )	4.80A
Open Circuit Voltage (V <sub>oc</sub> )	21.60V
Short Circuit Current (I <sub>sc</sub> )	5.20A
Cell Type	Poly
Nominal Voltage	12Vdc
Maximum System Voltage	DC 1000V
Series Fuse Rating	10A
Performance Tolerance	+ - 5%



▪ Limited warranty : 25 years

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5348 VEGAS DRIVE #1017  
LAS VEGAS NV 89108-2347

PHONE: 702-387-7215  
FAX: 702-387-7218  
Email: info@xc3i.com



### CERTIFICATION:

• ISO 9001



### DIRECT REPLACEMENT – SHELL (SIEMENS) SQ80,

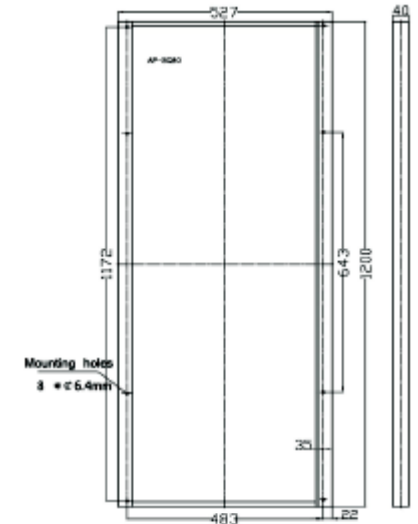
The XC80s is XC3i's high efficiency module. Thanks to its optimum size it is easy to handle and specifically dedicated to large scale off grid applications.

The XC80s module uses multicrystalline technology. Encapsulation beneath high transmission tempered glass is accomplished using an advanced, UV resistant thermal setting plastic. The encapsulant, ethylene vinyl acetate, cushions the solar cells within the laminate and protect the cells from etching. The rear surface of the module is completely sealed from moisture and mechanical damage by a continuous high strength polymer sheet.

The XC80s is using a reinforced anodised aluminum frame, designed to meet XC3i's High Quality Standards for corrosion resistance. With a tolerance of +/- 5%, the XC80s module ensures more power in multi module installations.

1" inch = 25.4 mm (outside dimensions 47.2" L X 20.8"W)

XC80s 80W	POWER SPECIFICATIONS
Maximum Power Voltage (V <sub>pm</sub> )	17.20 V
Maximum Power Current (I <sub>pm</sub> )	4.65 A
Open Circuit Voltage (V <sub>oc</sub> )	21.60 V
Short Circuit Current (I <sub>sc</sub> )	5.05 A
Cell Type	Poly
Nominal Voltage	12Vdc
Maximum System Voltage	DC 600V
Series Fuse Rating	10A
Performance Tolerance	+/- 5%



- Limited warranty : 25 years

**XC3 INTERNATIONAL LLC.**  
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**LAS VEGAS NV 89108-2347**

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**Email: info@xc3i.com**



### CERTIFICATION:

• ISO 9001



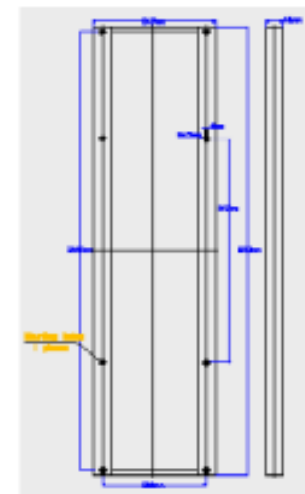
### DIRECT MOUNTING REPLACEMENT – SHELL (SIEMENS) SM55

The XC55s is XC3i's high efficiency module. Thanks to its optimum size it is easy to handle and specifically dedicated to large scale off grid applications.

The XC55s module uses multicrystalline technology. Encapsulation beneath high transmission tempered glass is accomplished using an advanced, UV resistant thermal setting plastic. The encapsulant, ethylene vinyl acetate, cushions the solar cells within the laminate and protect the cells from etching. The rear surface of the module is completely sealed from moisture and mechanical damage by a continuous high strength polymer sheet. The XC55s is using a reinforced anodised aluminum frame, designed to meet XC3i's High Quality Standards for corrosion resistance. With a tolerance of +/- 10%, the XC55s module ensures more power in multi module installations.

**1" inch = 25.4 mm (outside dimensions 50.9" L X 13.7"W)**

XC55bp 55W	POWER SPECIFICATIONS
Maximum Power Voltage (V <sub>pm</sub> )	17.40V
Maximum Power Current (I <sub>pm</sub> )	3.16A
Open Circuit Voltage (V <sub>oc</sub> )	21.40V
Short Circuit Current (I <sub>sc</sub> )	3.40A
Cell Type	Poly
Nominal Voltage	12Vdc
Maximum System Voltage	DC 600V
Series Fuse Rating	10A
Performance Tolerance	+ - 10%



- Limited warranty : 25 years

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**5348 VEGAS DRIVE #1017**  
**LAS VEGAS NV 89108-2347**

**PHONE: 702-387-7215**  
**FAX: 702-387-7218**  
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### CERTIFICATION:

• ISO 9001



### DIRECT REPLACEMENT – bp solar model bp 350

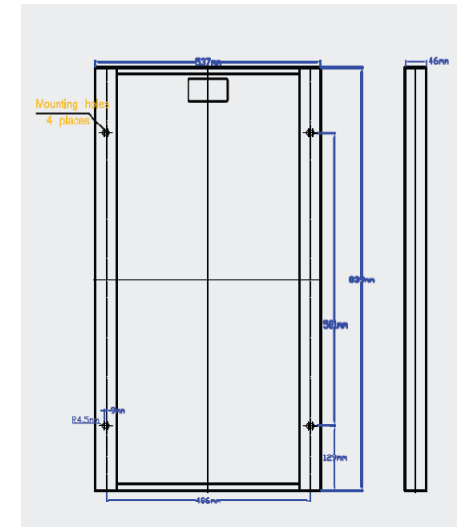
The XC55bp is XC3i's high efficiency module. Thanks to its optimum size it is easy to handle and specifically dedicated to large scale off grid applications.

The XC55bp module uses multicrystalline technology. Encapsulation beneath high transmission tempered glass is accomplished using an advanced, UV resistant thermal setting plastic. The encapsulant, ethylene vinyl acetate, cushions the solar cells within the laminate and protect the cells from etching. The rear surface of the module is completely sealed from moisture and mechanical damage by a continuous high strength polymer sheet.

The XC55bp is using a reinforced anodised aluminum frame, designed to meet XC3i's High Quality Standards for corrosion resistance. With a tolerance of +/- 10%,

XC55bp 55W	POWER SPECIFICATIONS
Maximum Power Voltage (Vpm)	17.40V
Maximum Power Current (Ipm)	3.16A
Open Circuit Voltage (Voc)	21.40V
Short Circuit Current (Isc)	3.40A
Cell Type	Poly
Nominal Voltage	12Vdc
Maximum System Voltage	DC 600V
Series Fuse Rating	10A
Performance Tolerance	+/- 10%

1" inch = 25.4 mm (outside dimensions 33.03" L X 21.14"W)



- Limited warranty : 20 years

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LAS VEGAS NV 89108-2347

PHONE: 702-387-7215  
FAX: 702-387-7218  
Email: info@xc3i.com

**CERTIFICATION:**

• ISO 9001



XC3 International's high efficiency module size is easy to handle and specifically designed for small off grid applications.

XC3i's module uses state of the art multicrystalline technology with a Silicon Nitride (SiN) coating that enhances cell efficiency. Encapsulation beneath high transmission tempered glass is accomplished using an advanced, UV resistant thermal setting plastic. The encapsulant, ethylene vinyl acetate, cushions the solar cells within the laminate and protect the cells from etching. The rear surface of the module is completely sealed from moisture and mechanical damage by a continuous high strength polymer sheet.

XC3i's module incorporates a reinforced anodised aluminium frame, designed to meet XC3i's High Quality Standards for corrosion resistance.

POWER SPECIFICATIONS	40w	20w	10w	5w
Maximum Power Voltage (Vpm)	17.4	17.4	17.4	17.4
Maximum Power Current (Ipm)	2.48	1.24	.590	.290
Open Circuit Voltage (Voc)	21.7	21.7	21.5	21.5
Short Circuit Current (Isc)	2.65	1.37	.650	.325
Cell Type	Poly			
Nominal Voltage	12 Vdc			
Maximum System Voltage	DC 600V			
Series Fuse Rating	10A			
Performance Tolerance	+ /- 10%			

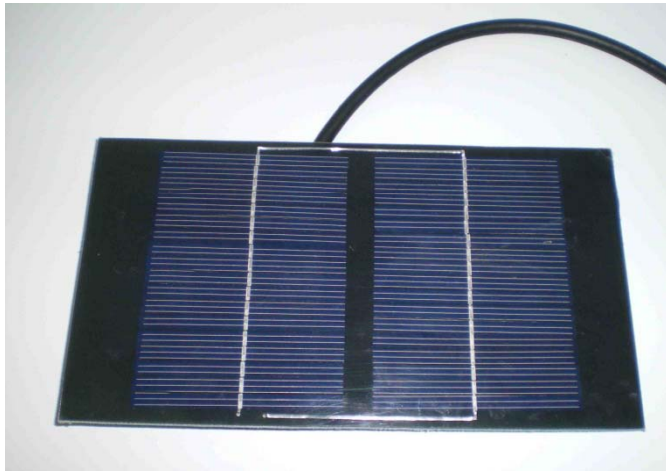
WEIGHTS & DIMENSIONS	40w	20w	10w	5w
LENGTH (Inches)	20.7	20.8	11.8	12.5
WIDTH (Inches)	25.7	13.4	13.7	7.20
DEPTH (Inches)	1.38	1.10	1.10	1.10
WEIGHT (LBS)	12.1	6.25	3.3	2.2



- Limited warranty : 10 years

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5348 VEGAS DRIVE #1017  
LAS VEGAS NV 89108-2347

PHONE: 702-387-7215  
FAX: 702-387-7218  
Email: info@xc3i.com



### CERTIFICATION:

• ISO 9001



The XC200 is XC3's high efficiency module. Thanks to its optimum size it is easy to handle and specifically dedicated to small battery charging applications and OEM product integration.

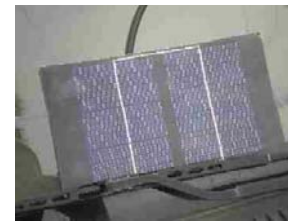
The XC200 module uses multicrystalline technology. Encapsulation beneath high transmission tempered glass is accomplished using an advanced, UV resistant thermal setting plastic. The encapsulant, ethylene vinyl acetate, cushions the solar cells within the laminate and protect the cells from etching. The rear surface of the module is completely sealed from moisture and mechanical damage by a continuous high strength polymer sheet.

The XC200 is used in a variety of applications including Lighting, Trickle battery charging, Marine battery charging, Auto battery charging.

**FRAMELESS – 8.5”L x 4.75”W x 1/16” thick .1 lbs**

**OUTPUT - Pigtails**

XC200 2.0W	POWER SPECIFICATIONS
Maximum Power Voltage (V <sub>pm</sub> )	17.20 V
Maximum Power Current (I <sub>pm</sub> )	.117 A
Open Circuit Voltage (V <sub>oc</sub> )	21.60 V
Short Circuit Current (I <sub>sc</sub> )	.127 A
Cell Type	Poly
Nominal Voltage	12Vdc
Maximum System Voltage	DC 60V
Series Fuse Rating	1A
Performance Tolerance	+ - 5%



- Limited warranty : 1 year

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**5348 VEGAS DRIVE #1017**  
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# PHOTOVOLTAIC CHARGE CONTROLLERS

## HIGH EFFICIENCY PWM 12V (24V)

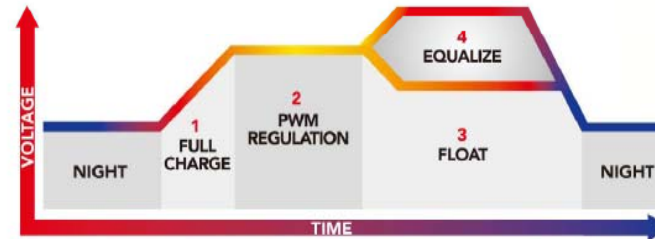


XC3 International's high efficiency PWM charge controllers are specifically designed for demanding off grid applications.

XC3i's high efficiency PWM charge controllers use state of the art microcontroller technology. All circuits are conformal coated to survive the harshest environments in the world.

- Latest control technologies
- Series design (not shunt)
- True 0 to 100% PWM duty cycle
- 100% solid state
- Setpoint accuracy to 35 mV
- Rated for 25% overloads

SPECIFICATIONS (VOLTAGES DOUBLE FOR 24V)*	MODEL XC1210-LVD	MODEL XC1230-LVD-M
PV - NOMINAL VOLTAGE	12V	12V or (24V)
PV - CHARGING CURRENT	10A	30A
LVD - LOAD CURRENT	10A	30A
LVD - DISCONNECT / RECONNECT	11.1V / 13.1V	11.1V* / 13.1V*
REGULATION VOLTAGE	14.1V	14.1V*
OPERATING TEMPERATURE	-35C – 55C	-35C – 55C
CASE DIMENSIONS (mm) L x W x D	140 x 89 x 27.2	189 x 130 x 51.7
MOUNTING DIMENSIONS (mm) L x W	133.5 x 70	178 x 90
NOMINAL SELF-CONSUMPTION	≤ 6mA	≤ 15mA



- Limited warranty : 3 years



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