

# xantrex™ SOLAR

## DATASHEET

AVAILABLE IN:

100W

160W



## MORE POWER IN A SMALLER, LIGHTER FRAME

The Xantrex Solar 100W and 160W kits feature solar panels with 5 busbars and PERC (Passivated Emitter and Rear Contact) mono-crystalline cells, a special cell technology that increases module efficiency significantly over standard solar cells.

Both solar kits include a 30A charge controller and system hardware that is designed for a fast & easy installation, including PV cables & battery cables with a built-in fuse and ring terminals, built-in ferrule terminations for quick connections to the charge controller and mounting brackets. Easily customize and extend your solar system using our expansion kits.

**15%**  
SMALLER & LIGHTER\*

BEST IN CLASS  
**18%**  
MODULE EFFICIENCY\*

**PERC**  
TECHNOLOGY\*\*

**5 BUSBAR**  
TECHNOLOGY\*\*\*

\*Xantrex 100W rigid panel specs and performance compared with 100W models of other popular brands

\*\*competitor panels do not currently use PERC technology

\*\*\*Most brands use 2-4 busbars, more busbars means better efficiency & durability

### APPLICATIONS:



**5 YEAR**  
**WARRANTY™**

\*WARRANTY ON PANEL CONSTRUCTION

[www.kussmaul.com](http://www.kussmaul.com)  
CUSTOMER CARE: 1.800.346.0857

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# WHAT'S INCLUDED

## EXPAND YOUR SOLAR KIT

# of panels that can be wired in only parallel per 30A charge controller:

100W Panels:

4

160W Panels:

2



SOLAR PANEL



PV CABLES  
READY TO USE  
'PLUG & PLAY'



BATTERY CABLES  
READY TO USE  
'PLUG & PLAY'



MOUNTS BRACKETS



30A CHARGE CONTROLLER



CABLE TIES AND CLAMPS

MC4-TYPE CONNECTOR



100W & 160W XANTREX SOLAR KIT

## CONTENTS

### Solar Panel

- A 100W or 160W solar panel with 5 busbars and PERC (Passivated Emitter and Rear Contact) mono-crystalline cells, a special cell technology that increases module efficiency significantly over standard solar cells.

### Charge Controller

- A 30A Pulse-Width Modulation (PWM) flush-mounted charge controller is provided to charge and protect your batteries. Featuring an LCD screen, multi-stage battery charging, charging protections, two USB ports and real-time system indicators.

### PV and Battery Cables

- Weather resistant and certified cables are provided to connect the solar panel to the charge controller and from the charge controller to the battery. The PV cables and battery cables, with a built-in fuse and ring terminals, built-in ferrule terminations for quick connections to the charge controller.

### Mounting Hardware

- Mounting brackets, cable clamps and tie wraps are included.

### Expansion Kits

- Includes solar panel, mounting hardware and a pair of male and female branch connectors to connect solar panels in parallel.

## EXPANSION KITS

EXPAND YOUR SOLAR KIT



110W OR 160W PANEL



CABLE TIES AND CLAMPS



MOUNTING BRACKETS



BRANCH CONNECTOR

## RECOMMENDED POWER SOLUTIONS

COMPLETE YOUR ELECTRICAL SYSTEM



AUTO POWER 1500W  
091-263-12-1500



AUTO POWER 2000W  
091-269-12-2000



AUTO POWER 3000W  
091-269-12-3000

## ELECTRICAL DATA

PANEL TYPE	100W	160W
Maximum power-Pmax (W) at STC*	100	160
Maximum power voltage-Vmp (V)	19.2	19.2
Maximum power current-Imp (A)	5.21	8.34
Open circuit voltage-Voc (V)	23.0	23.0
Short-circuit current-Isc (A)	5.51	8.70
Module efficiency $\mu\text{m}$ (%)	17.8	18
Maximum System Voltage	600VDC	600VDC
Maximum Series Fuse Rating	10A	10A

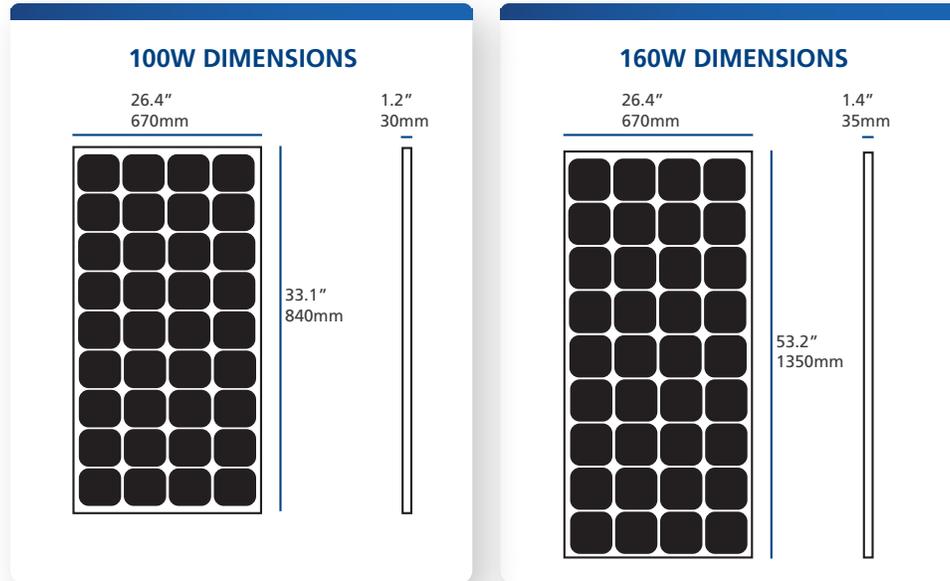
\*Standard Test Conditions (STC): Irradiance: 1000W/m<sup>2</sup>, Cell Temperature: 25°C, Air Mass: 1.5

## MECHANICAL DATA

PANEL TYPE	100W	160W
Cell Type	Mono-crystalline PERC	Mono-crystalline PERC
Junction Box	IP65 rated	IP65 rated
Connector	MC4 - type	MC4 - type
Glass	3.2mm high transmission, low iron, tempered glass	3.2mm high transmission, low iron, tempered glass
Frame	Anodized aluminum alloy	Anodized aluminum alloy
Number of cells	36 (4 x 9)	36 (4 x 9)
Weight	14.99lbs (6.8kg)	23.15lbs (10.5kg)
Dimensions	33.1in x 26.4in x 1.2in 840mm x 670mm x 30mm	53.2in x 26.4in x 1.4in 1350mm x 670mm x 35mm
Charge controller dimensions	7.3in x 4in x 2.4in 181mm x 100.9mm x 59.8mm	7.3in x 3.9in x 2.4in 181mm x 100mm x 59.8mm

## TEMPERATURE DATA

PANEL TYPE	100W	160W
Operating temperature	-40°C to +85 °C	-40°C to +85°C
Nominal operating cell temperature	45 +/- 2°C	45 +/- 2°C
Temperature coefficients of Pmax	-0.40%/°C	-0.40%/°C
Temperature coefficients of Voc	-0.50%/°C	-0.50%/°C
Temperature coefficients of Isc	0.08%/°C	0.08%/°C



**SOLAR KITS**

Mfg Part #	Description
780-0100-01	100W Xantrex Solar Kit
780-0160-01	160W Xantrex Solar Kit

**EXPANSION KITS**

Mfg Part #	Description
780-0100-02	100W Xantrex Solar Exp Kit
780-0160-02	160W Xantrex Solar Exp Kit

**ACCESSORIES**

Mfg Part #	Description
C12	C Series PWM 12A
C35	C Series PWM 35A
C40	C Series PWM 40A
C60	C Series PWM 60A
708-0030	PV Extension Cables (15')
708-0040	PV Single Connector (1 Pair)
708-0050	PV Branch Connector (1 Pair)
708-0060	PV Connector Assembly Tool
708-0070	Mounting Hardware
708-0080	Remote Battery Temperature Sensor
708-0090	Roof Entry Cable Plate
708-0100	PV Connector-to-SAE PV Adapter Cable (2')

**UPC CODES**

<p>100W SOLAR KIT</p>  <p>7 15535 90382 4</p>	<p>160W SOLAR KIT</p>  <p>7 15535 90390 9</p>
<p>100W EXPANSION KIT</p>  <p>7 15535 90398 5</p>	<p>160W EXPANSION KIT</p>  <p>7 15535 90450 0</p>

**SHIPPING INFO**

Mfg Part #	Estimated Weight (Kg)	Unit Dimensions (mm)	Master Carton Dimensions	Units in Pallet
780-0100-01	10.2	75 x 700 x 870	No Master Carton	84
780-0100-02	7.9	75 x 700 x 870	No Master Carton	84
780-0160-01	14.2	75 x 700 x 1380	No Master Carton	42
780-0160-02	11.8	75 x 700 x 1380	No Master Carton	42

**CONTACT**

**CUSTOMER SERVICE**

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