

# FREEDOM SW 12V

## INVERTER/CHARGER

**xantrex™**  
Smart choice for power™

True sine, high surge, wide temp and full featured, the Freedom SW is the state of the art. The heart of your power system!

Available in:

2000 W  
100 A

3000 W  
150 A



Freedom SW series from Xantrex are the most advanced and capable inverter chargers in the mobile market. Available in 3000 W with 150 A charger and 2000 W with 100 A charger, these units are packed with features like "Generator Support Mode" which enables the Freedom SW to assist a generator when AC loads exceed the generator's capacity. They are also stackable for extra power and with the ComBox accessory, data logs and system control can be pushed to your tablet or phone! If you are looking for a unit for your air conditioning, this is the one! With a powerful long duration 2x surge and other industry leading features, the Freedom SW series will handle any RV power requirement. *Also available is 24V.*

### Product Features

- » Parallel stacking enables the Freedom SW inverter/chargers to double the available AC output power in inverter mode
- » Series stacking enables the Freedom SW inverter/chargers to generate 120/240 V split phase power\*
- » Temperature compensated charging for varying climate conditions
- » Battery over-voltage and under-voltage protection
- » Available AutoGen Start accessory, ComBox accessory
- » True sine wave output to operate sensitive electronics
- » Advanced configuration options for customized applications
- » Built-in transfer switch automatically transfers between inverter power and incoming AC power
- » Power factor corrected multi-stage charger for fast, efficient charging
- » Ignition lockout feature helps to minimize unnecessary battery drain\*\*
- » Full inverter output up to 40°C (104°F) for 3000W model; 30°C (86°F) for 2000W model
- » Conformal coated circuit boards for humid environments
- » Dual input / Dual output AC interface for 3000 W model only
- » Ability to charge batteries drained to extremely low voltage

### Protection Features

- » Battery over-voltage and under-voltage protection
- » Over-temperature shutdown
- » Automatic overload protection
- » Short-circuit protection
- » Integrated, resettable AC breakers

\* AC source must be split-phase, requires Stacking Cable (#809-9005). \*\*When used with On/Off Remote Panel sold separately



Available telephone to network cable adapter to avoid the need to replace cables when replacing an old inverter. (#808-9010 sold separately)

### Applications:



Recreational vehicles



Marine



Heavy duty trucks



Work vehicles



Buses / coaches



Specialty vehicles



ETL listed to CSA Standard C22.2 No. 107.1 and UL 458\* with Marine supplement

\*For marine supplement compliance drip shield in specific mounting orientation is required. See installation guide



### Schneider Electric Solar Business

3700 Gilmore Way  
Burnaby, British Columbia  
Canada V5A 4B5  
800 670 0707 Toll Free  
604 420 1591 Fax

541 Roske Drive, Suite A  
Elkhart, Indiana  
USA 46516  
800 446 6180 Toll Free  
574 294 5989 Fax

[www.xantrex.com](http://www.xantrex.com)

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Electrical specifications – inverter	Freedom SW 2012	Freedom SW 3012
Output power (continuous at 40°C)	2000 W	3000 W
Surge rating (5 seconds)	4000 W	6000 W
Peak output current	55 A	80 A
Output frequency	60 Hz +/- 0.2 Hz	60 Hz +/- 0.2 Hz
Output voltage	120 Vac	120 Vac
Output wave form	True sine wave	True sine wave
Optimal efficiency	90%	90%
No-load power draw (inverting)	3 Adc	3 Adc
Input DC voltage range	10 - 16 Vdc	10 - 16 Vdc
AC connections	Single phase in/out	Split phase in / dual out, Dual in / dual out

Electrical specifications – charger	Freedom SW 2012	Freedom SW 3012
Output current (continuous at 25°C)	100 A	150 A
Output voltage	12 Vdc	12 Vdc
Output voltage range	5 - 16 Vdc	5 - 16 Vdc
Charge control	3 stage with manual equalize	3 stage with manual equalize
Charge temperature compensation	Remote battery sensor (included)	Remote battery sensor (included)
Optimal Efficiency	> 85%	> 85%
AC input power factor (maximum charge)	0.98 typical	0.98 typical
Input current (for maximum charging)	16 A rms nominal	24 A rms nominal
Input AC voltage	120 Vac	120 Vac
Input AC voltage range	85 - 140 Vac	85 - 140 Vac
Dead battery charge	> 5 Vdc	> 5 Vdc

General specifications	Freedom SW 2012	Freedom SW 3012
Compatible battery types	Flooded / gel / AGM*	Flooded / gel / AGM*
Transfer relay rating	1 leg of 30 A	2 legs at 30 A each
Transfer time (AC to inverter and inverter to AC)	< 20 ms	< 20 ms
Optimal operating temperature range	- 4°F to 140°F (- 20°C to 60°C)	- 4°F to 140°F (- 20°C to 60°C)
Storage ambient temperature range	- 40°F to 185°F (- 40°C to 85°C)	- 40°F to 185°F (- 40°C to 85°C)
Unit dimensions (H x W x L)	7.75 x 13.5 x 15.25" (197 x 343 x 387 mm)	7.75 x 13.5 x 15.25" (197 x 343 x 387 mm)
Unit weight	27.5 kg (60.5 lbs)	33.5 kg (73.7 lbs)
Warranty	2 years	2 years
Master carton quantity	1	1
Master carton dimensions (H x W x L)	11.8 x 17.1 x 20.5" (300 x 435 x 522 mm)	11.8 x 17.1 x 20.5" (300 x 435 x 522 mm)
Master carton weight	30 kg (66 lbs)	35 kg (77 lbs)
Part Number	815-2012	815-3012

Accessories	Freedom SW 2012	Freedom SW 3012
Battery temperature sensor	Part# 809-0946 - Included	
Freedom SW On/Off Remote Panel	Part# 808-9002 - Sold separately	
Automatic Generator Start (AGS)	Part# 809-0915 - Sold separately	
System control panel (SCP)	Part# 809-0921 - Sold separately*	
25' network cable for system control panel	Part# 809-0940 - Sold separately	
75' network cable for system control panel	Part# 809-0942 - Sold separately	
Drip shield	Part# 808-9004 - Sold separately	
GFCI option	Part# 808-9003 - Sold separately	
Stacking cable for series stacking	Part# 808-9005 - Sold separately	

Regulatory and environmental compliance
ETL certified to CSA 107.1, UL458 with marine supplement**, FCC Part 15, Class B

\*System Control Panel is required for configuring various battery types

\*\*When used with the Drip Shield. Drip Shield sold separately. Note: Specifications subject to change without notice