

# FREEDOM SW 230

## INVERTER/CHARGER

**xantrex**<sup>™</sup>  
Smart choice for power<sup>™</sup>

The Freedom SW is a true sine wave, high surge, wide temp and full featured inverter/charger. The heart of your power system!

Available in: 230 VAC / 24 V

2500 W  
65 A

3400 W  
90 A



Just like its North American 110 Vac counterpart, the Freedom SW 230 Vac inverter/charger offers true sine wave performance and efficient, multi-stage charging. The 2x continuous power surge rating provides necessary start-up power for demanding applications including inductive motor loads. Available in two 230 Vac / 50 Hz, 24 Vdc models, the Freedom SW offers parallel stacking capability to enable twice-the-rated output. Both models can operate in tandem with a generator to temporarily assist power loads with large start-up demands such as air conditioners, water pumps etc. A Xanbus AGS must be installed in the system in order for this feature work. Both are compatible with optional accessories such as the System Control Panel (SCP) and the Automatic Generator Start (AGS). The Freedom SW inverter/charger provides utility grade AC power to operate commonly used AC-powered electronics such as plasma television sets, microwaves, entertainment systems, computers, printers, power tools, refrigerators and much more

### Product Features

- » Available in 2 models: 2500 W with 65 A charger, 3400 W with 90 A charger
- » Parallel stacking capability to double the inverter power output
- » 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
- » Temperature compensated charging for all climate conditions
- » Ignition lockout prevents unnecessary battery drain when the alternator is not providing power\*
- » Wide operating temperature range: -4°F to 140°F (-20°C to 60°C)
- » Conformal coated circuit boards to protect against humid environments
- » Compatible with the Xanbus Automatic Generator Start\*\* (Part# 809-0915)
- » Meets CE (Europe), RCM (Australia)

### Protection Features

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

\*When used with the remote panel. \*\* Sold separately.



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

### Applications:



Recreational vehicles



Marine



Heavy duty trucks



Work vehicles



Buses / coaches



Specialty vehicles



### 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

# FREEDOM SW 230

## INVERTER/CHARGER



Electrical specifications – inverter	Freedom SW 2524	Freedom SW 3524
Output power (continuous at 25°C)	2500 W	3400 W
Surge rating (5 seconds)	5000 W	6800 W
Output frequency	50 Hz +/- 0.2 Hz	50 Hz +/- 0.2 Hz
Output voltage	230 Vac	230 Vac
Output wave form	True sine wave	True sine wave
Optimal efficiency	90%	90%
No-load power draw (inverting)	< 1.9 Adc	< 2.2 Adc
Input DC voltage range	20 - 32 Vdc	20 - 32 Vdc
AC connections	Single phase in / out	Single phase in / out

Electrical specifications – charger		
Output current (continuous at 25°C)	65 A	90 A
Output voltage	24 Vdc	24 Vdc
Output voltage range	12 - 32 Vdc	12 - 32 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)	10.6 A rms nominal	14 A rms nominal
Input AC voltage	230 Vac	230 Vac
Input AC voltage range	170 - 270 Vac	170 - 270 Vac
Dead battery charge	> 12 Vdc	> 12 Vdc

General specifications		
Compatible battery types	Flooded / gel / AGM	Flooded / gel / AGM
Transfer relay rating	1 leg of 30 A	1 leg of 30 A
Transfer time (AC to inverter and inverter to AC)	< 20 ms	< 20 ms
Operating temperature range (full power)	- 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	21.4 kg (47 lbs)	27.2 kg (60 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" (30 x 43.5 x 52.2 cm)	11.8 x 17.1 x 20.5" (30 x 43.5 x 52.2 cm)
Master carton weight	23.9 kg (52 lbs)	30.7 kg (67 lbs)
Part Number	815-2524-02	815-3524-02

Accessories	
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

Regulatory and environmental compliance
CE (Europe), RCM (Australia), EN 62040-2, E-mark
Specifications are subject to change without notice.