

# FREEDOM SW 24V

## 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**  
55 A

**3000 W**  
80 A



Freedom SW series from Xantrex are the most advanced and capable inverter chargers in the mobile market. Available in 3000 W with 80 A charger and 2000 W with 55 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 12V.*

### Product Features

- » Available in 2 models: 2000 W with 50 A charger, 3000 W with 75 A charger
- » Parallel stacking capability to double the inverter power output
- » Series stacking capability enables operation of 240 Vac appliances
- » 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\*
- » Full output at higher temperatures
- » Conformal coated circuit boards to protect against humid environments
- » Dual input / Dual output AC interface (3000 W model only)
- » Compatible with the Xantrex Automatic Generator Start\*\* (Part#809-0915)
- » Meets CSA, UL458 (with marine supplement), ABYC and FCC Part 15, Class B requirements

### 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 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



# FREEDOM SW 24V

## INVERTER/CHARGER



Electrical specifications – inverter	SW 2024	SW 3024
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	Pure sine wave	Pure sine wave
Optimal efficiency	94%	94%
No-load power draw (inverting)	<1.5 Adc	< 1.5 Adc
Input DC voltage range	20 - 32 Vdc	20 - 32 Vdc
AC connections	Single phase in / out	Split phase in / dual out

Electrical specifications – charger		
Output current (continuous at 25°C)	50 A	75 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)
Efficiency	> 85%	> 85%
AC input power factor (maximum charge)	0.98 typical	0.95 typical
Input current (for maximum charging)	15.8 A rms nominal	22 A rms nominal
Input AC voltage	120 Vac	120 Vac
Input AC voltage range	85 - 140 Vac	85 - 140 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	2 legs at 30 A each
Transfer time (AC to inverter and inverter to AC)	< 20 ms	< 20 ms
Operating temperature range (full power)	- 4°F to 86°F (- 20°C to 30°C)	- 4°F to 104°F (- 20°C to 40°C)
Storage ambient temperature range	- 67°F to 167°F (- 55°C to 75°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)	31.5 kg (69.4 lbs)
Master carton quantity	1	1
Master carton dimensions (H x W x L)	11.8 x 17.1 x 20.5" (300 x 43.5 x 52.2 mm)	11.8 x 17.1 x 20.5" (300 x 43.5 x 52.2 mm)
Master carton weight	30 kg (66 lbs)	35 kg (77 lbs)
Part Number	815-2024	815-3024

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
Freedom Sequence Power Manager	Part# 809-0913 - Sold separately

Regulatory and environmental compliance
ETL certified to CSA 107.1, UL458 with marine supplement, FCC Part 15, Class B, RoHS
Specifications are subject to change without notice.