FREEDOM SW INVERTER/CHARGER DATASHEET



AVAILABLE IN:
230V~ / 24V

2500W/65A
3400W/90A

THE HEART OF YOUR POWER SYSTEM

Just like its North American 120V~ counterpart, the Freedom SW 230 V~ 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 V / 50 Hz, 24 Vdc models, the Freedom SW offers parallel stacking capability to enable twice-the-rated current. 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).

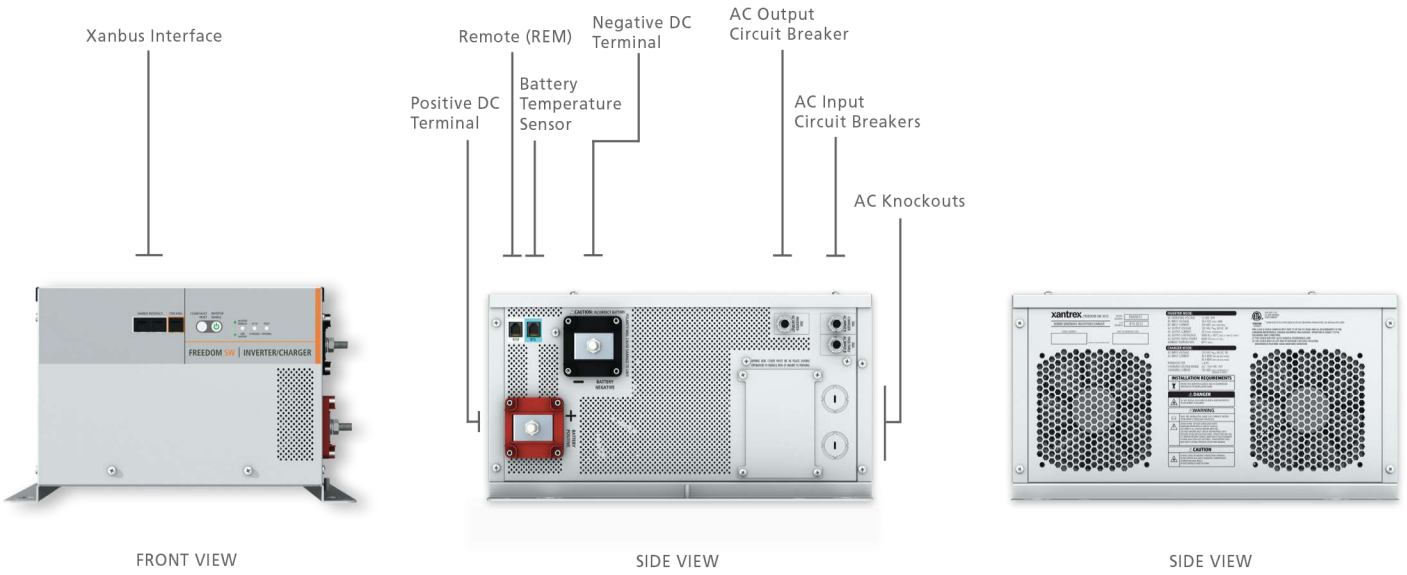
The Freedom SW inverter/charger provides utility grade AC power to operate commonly used AC-powered electronics such as LED television sets, microwaves, entertainment systems, computers, printers, power tools, refrigerators and much more.

- Built-in hybrid functionality - combines shore and AC generator input to power loads
- Designed to charge lithium ion batteries
- CE Marking and Regulation 10R E-Mark (Europe) and RCM (Australia / New Zealand) requirements
- Exceptional surge for extended time

APPLICATIONS:

H.A.L.T.

2 YEAR WARRANTY



FRONT VIEW

SIDE VIEW

SIDE VIEW

PRODUCT FEATURES

- Parallel stacking enables the Freedom SW inverter/chargers to double the available AC output current in inverter mode
- Temperature compensated charging for varying climate conditions
- 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
- Ignition lockout feature helps to minimize unnecessary battery drain
- Wide operating temperature range: -20°C to 60°C
- Conformal coated circuit boards for humid environments
- Power factor corrected multi-stage charger for fast, efficient charging
- Meets CE and E-Mark (Europe), RCM (Australia/New Zealand)

PROTECTION FEATURES

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

RECOMMENDED ACCESSORIES



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



FREEDOM SW Conext Combox (809-0918)

xantrex COMBOX

DOWNLOAD ON

ONLY FOR TABLETS

- Control inverter
- Control generator
- Shore breaker size
- Data logging

ELECTRICAL SPECS - INVERTER

	FREEDOM SW 2524	FREEDOM SW 3524
Output power (continuous at 40°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 V∿	230 V∿
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 SPECS - BATTERY CHARGER

	FREEDOM SW 2524	FREEDOM SW 3524
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)
Optmial 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 V∿	230 V∿
Input AC voltage range	170-270 V∿	170-270 V∿
Dead battery charge	> 12 Vdc	> 12 Vdc

GENERAL SPECS

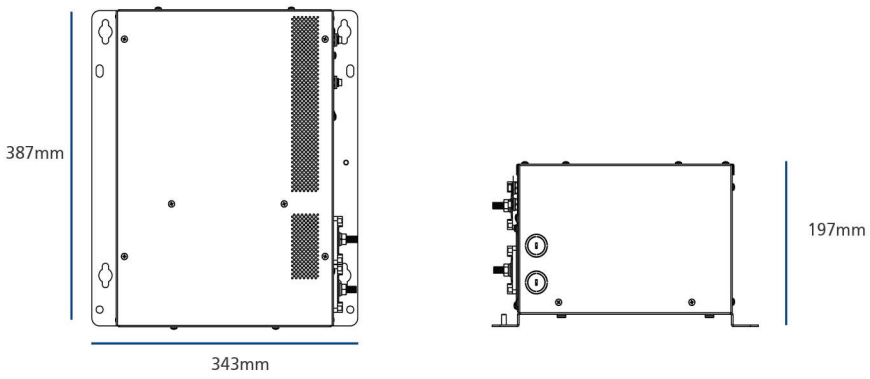
	FREEDOM SW 2524	FREEDOM SW 3524
Compatible battery types	$LiFePO_4$ / Flooded / gel / AGM*	$LiFePO_4$ / Flooded / gel / AGM*
Transfer relay rating	1 leg of 30 A	2 legs at 30 A each
Transfer time (AC to inverter and inverter to AC)	< 20 ms	< 20 ms
Optimal operating temperature range	- 20°C to 60°C	- 20°C to 60°C
Storage ambient temperature range	- 40°C to 85°C	- 40°C to 85°C
Part Number	815-2524-02	815-3524-02
L x W x H	197 x 343 x 387 mm	197 x 343 x 387 mm
Net Weight	21.4 kg	27.2 kg

REGULATORY APPROVALS

	FREEDOM SW 2524, FREEDOM SW 3524
Safety	CE Marking, Low Voltage Directive Compliant (Marine installations, drip shield, 808-9004)
EMC	CE Marking, EMC Directive and Automotive EMC - Regulation 10 R E-Mark Compliant
Environmental	CE Marking, RoHS Directive Compliant

*System Control Panel is required for configuring various battery types

FREEDOM SW DIMENSIONS



ACCESSORIES

Mfg Part #	Description
809-0946	Battery temperature sensor
808-9002	Freedom SW On/Off Remote Panel
809-0915	Automatic Generator Start (AGS)
809-0921	System control panel (SCP)
809-0940	25' network cable for system control panel
809-0941	50' network cable for system control panel
809-0942	75' network cable for system control panel
808-9004	Drip shield
809-0918	Freedom SW Combox
808-9010	Freedom SW telephone to network cable adapter

MASTER CARTON INFO

Master carton quantity	1
Master carton dimensions (H x W x L)	30 x 43.5 x 52.2 cm
Master carton weight	FREEDOM SW 2524 - 23.9 kg / FREDOM SW 3524 - 30.7 kg