1000W APS X Series 12VDC 230V Inverter/Charger with Pure Sine-Wave Output, Hardwired

MODEL NUMBER: **APSX1012SW**

Highlights
- Delivers pure sine-wave 230V AC power from AC or DC source
- 1000W continuous output power; 2000W peak power
- Auto-transfer switching option for UPS operation
- Protects against blackouts, surges and EMI/RFI line noise
- Rugged steel housing resists moisture and impact

Package Includes
- APSX1012SW 1000W APS XSeries 12V DC 230V AC Inverter/Charger
- Owner's manual

Description

The APSX1012SW 1000W APS X Series 12V DC 230V AC Inverter/Charger is a reliable power source for a wide variety of power tools, computers, audio/video components and other sensitive electronics at mobile, emergency and remote sites. With no fumes, fuel or excess noise, it's an excellent alternative to generator power.

The DC-to-AC pure sine-wave inverter delivers network-grade power to sensitive electronics. Its automatic line-to-battery transfer switch and integral charging system allow the unit to work as a vehicle inverter, standalone AC power source or extended-run UPS. It delivers 1000W of continuous power or 2000W of peak power during equipment startup or cycling. An automatic overload detector, cooling fan and resettable AC circuit breaker protect the unit from damage.

Designed for easy installation in RVs, fleet vehicles and emergency vehicles, the APSX1012SW converts stored power from a user-supplied battery to standard household current for unlimited runtime in heavy-load conditions. When powered by an external 230V AC source, the unit keeps the user-supplied battery charged via a three-stage 4-40A selectable charging system while simultaneously delivering conditioned, pure sine-wave AC power to connected equipment.

When used as a UPS, the APSX1012SW responds to blackouts and brownouts with an automatic, instantaneous transfer to battery-derived, pure sine-wave AC power. LEDs on the side of the unit indicate battery voltage, charger and inverter status.

Features

Reliable Power for Mobile, Emergency and Remote Sites

- Generates 230V pure sine-wave power from 12V battery bank
- Ideal for powering variable-speed tools, computers, LEDs, fans, audio/video components and other sensitive electronics
- Designed for easy installation in RVs, fleet vehicles and emergency vehicles
- Functions as vehicle inverter, standalone AC power source or extended-run UPS
- Unlimited runtime with variety of user-supplied batteries

Pure Sine-Wave Power for Normal and Peak Power Demands

- 1000W of continuous power
- 2000W of peak power to accommodate surge power demands during equipment startup and cycling
- Automatic overload detector, built-in cooling fan and resettable AC circuit breakers protect unit from damage
- High-current DC input terminals for simple hardwired installation

Automatic Transfer Switching
- Transfer relay switches to inverter power during blackout in 16.6 ms
- DIP switches configure high and low voltage auto-transfer

3-Stage 4/40A Selectable Battery Charger
- Serves as battery charger when external 230V AC power is supplied and powering connected equipment
- Protects battery from overcharging and overdischarging
- Low-battery protection prevents excessive battery depletion
- DIP switches configure wet/gel charging profiles

External Ports
- Battery temperature port allows connection of optional remote battery temperature sensor, such as Tripp Lite's APSSWTEMP
- RJ45 communication port allows connection of optional remote control module, such as Tripp Lite's APSRMSW with 32 ft. cord

Easy Operation
- LEDs indicate battery voltage, charger and inverter status
- On/off button provides one-touch control

Rugged Steel Housing
- Resists moisture, vibration, impact and high-humidity environments
- Built-in mounting feet for installation on any rigid horizontal surface

Specifications

OUTPUT	
Nominal Output Voltage(s) Supported	230V
Frequency Compatibility	50 / 60 Hz
Output Receptacles	Hardwire
Output (Watts)	1000
Continuous Output Capacity (Watts)	1000
Peak Output Capacity (Watts)	2000
Output Voltage Regulation	Nominal 230v +/- 5%
Output Frequency Regulation	50/60 Hz (+/- 0.5 Hz)
Overload Protection	Includes 7A input breaker dedicated to the charging system and 7A output breaker for AC output loads

INPUT

Nominal Input Voltage(s) Supported	220V AC; 230V AC; 240V AC
Nominal Input Voltage Description	170-264V +/- 3%
Recommended Electrical Service	DC INPUT: Requires 12VDC input source capable of delivering 240A for the required duration (when used at full continuous capacity - DC requirements increase during OverPower and DoubleBoost operation). For automotive applications, professional hardwire installation with 200A minimum battery system fusing is recommended.
Maximum Input Amps / Watts	DC INPUT: Full continuous load - 240A at 12VDC. AC INPUT: 17 amps at 230VAC with full inverter and charger load (8.7A max charger-only / combined input load to support charger and AC output is automatically controllable to 66%-33%-0% based on AC output loading using the charger limiting set points - see manual for setting instructions)
Input Connection Type	DC INPUT: Set of 2 DC bolt-down terminals. AC INPUT: Hardwire via built in junction box with cover plate
Voltage Compatibility (VAC)	220-240
Voltage Compatibility (VDC)	12

BATTERY

Expandable Battery Runtime	Runtime is expandable with any number of user supplied wet or gel type batteries
DC System Voltage (VDC)	12
Battery Pack Accessory (Optional)	98-121 sealed lead acid battery(optional)
Battery Charge	Includes selectable 4~40 amp DC charging system.
Expandable Runtime	Yes

USER INTERFACE, ALERTS & CONTROLS

Front Panel LEDs	Set of front panel LED's display inverter status, charger status, as well as battery voltage status
Switches	The inverter provides a RJ-45 port for optional APSRMSW remote control. RJ45 port operates with standard RS485 interface(APSRMSW sold separately)
Audible Alarm	Audible status indicators 10.5V (low battery)/21V start alarm

PHYSICAL

Shipping Dimensions (hwd / in.)	13 x 12.6 x 21.47
Shipping Dimensions (hwd / cm)	33.02 x 32.01 x 54.54
Shipping Weight (lbs.)	36.37
Shipping Weight (kg)	16.37
Unit Dimensions (hwd / in.)	7.25 x 8.75 x 18
Unit Dimensions (hwd / cm)	18.41 x 22.22 x 45.72
Unit Weight (lbs.)	31.5
Unit Weight (kg)	14.29
Cooling Method	Fan
Material of Construction	Powder coated Steel

Receptacle Color	Grey
Form Factors Supported	Mounting slots enable permanent placement of inverter on any horizontal surface (see manual for additional mounting information)
ENVIRONMENTAL	
Relative Humidity	0-95% non-condensing
LINE / BATTERY TRANSFER	
Transfer Time (Line Power to Battery Mode)	16 ms. maximum
Low Voltage Transfer to Battery Power	170 VAC (+/- 3%) DEFAULT OR 190V +/-3% (user-selectable)
High Voltage Transfer to Battery Power	264 VAC +/- 3%
SPECIAL FEATURES	
Load Sensing	100W
Remote Control Capability	Yes
CERTIFICATIONS	
Approvals	Tested to EN62040-1 (CE), EN62040-2 (EMC), RoHS
WARRANTY	
Product Warranty Period (U.S. & Canada)	2-year limited warranty
Product Warranty Period (International)	2-year limited warranty
Product Warranty Period (Mexico)	2-year limited warranty
Product Warranty Period (Puerto Rico)	2-year limited warranty