

## Model # APS3024SW-LCD

### 1-Ph, 230V, 50/60Hz, 3000W/24VDC Combined Inverter/Charger with Pure Sine Wave Output and LCD Display

#### Key Features

- 24V DC or 230V AC input; 230V, 50 Hz output (hardwired)
- 3000 watts continuous output, 6000 watts peak output
- Microprocessor controlled Smart UPS & Solar operational mode
- 4-Step Progressive Charging & 7-Battery Type Selector
- Fully compatible for Solar/Wind solutions for Hybrid configuration
- Pure sine wave output with large LCD display
- High Efficiency Using Line-Interactive Circuit Topology (Full Bridge Topology)
- Quiet, high efficiency operation, high surge capacity and low idle current
- CE Safety



#### Product Description

Provide Pure Sine Wave power for all your alternative energy needs with the Magnizon APS-3024SW-LCD. This inverter/charger supplies 3000 watts of continuous 230V /50Hz AC power. Reliable large pure copper based transformer design and frequency controlled power, very much compatible to all varieties of loads: resistive loads such as refrigerators, motors, pumps, compressors and laser printers as well as electronic loads like TV's, Computers, power tool and battery chargers. Smart micro controller based 3-stage charging system properly charge and maintain battery bank. The charge rate is selectable so you can use a variety of battery sizes and types to fit your back up time requirements.

#### Applications

- Well designed for hybrid applications where solar/wind energy systems connected along with grid or generator sets without using any relay and control mechanism.
- Versatile inverter/charger with pure sine wave system with seamless transfer switching serves as an automotive inverter for RVs, trucks, standalone alternative power source with high end back up times with various battery technologies (VRLA, GEL, Deep cycle, Ni-Cd and many more)
- Off-grid and On-grid applications.
- Telecom and ATM applications.
- Remote closets and small computer room applications.
- Petrochemical application
- Critical applications where ever higher reliability is needed
- Medical & lifesaving equipment's
- SMB requirements

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### Specification

Model No	APS-3024SW-LCD
Nominal Power	3000Watts
Input Wave Form	Sine wave (Utility or Generator)
Nominal Voltage	230V AC
Low Voltage Trip	154V +/- 4%
Low Voltage Re engage	164V +/- 4%
High Voltage Trip	253V +/- 4%
High Voltage Re engage	243V +/- 4%
Max Input AC Voltage	270V
Nominal Input Frequency	50Hz or 60Hz (Auto detect)
Low frequency trip	47Hz for 50Hz, 57Hz for 60Hz
High frequency trip	55Hz for 50Hz, 65Hz for 60Hz
Output Wave form(bypass mode)	Same as Input
Overload protection	Circuit breaker
Short circuit protection	Circuit breaker
Efficiency on line transfer mode	0.95
Line transfer time	10 mSec Typical
Bypass without Battery connected	Yes
Max bypass current	40Amp
Inverter Specification / Output	
Output Wave form	Pure Sine wave
Output continuous power in Watts	3000
Output continuous power in VA	3000
Power Factor	1
Nominal Output Voltage RMS	230V AC (L-N)
Output Voltage regulation	+/-10% rms
Output frequency	50Hz +/-0.3Hz or 60Hz+/-0.3Hz
Nominal Efficiency	>88%
Surge rating	9000
Short circuit protection	Yes, fault after 10sec
Inverter Specification / Input	
Nominal Input Voltage Dc	24V
Minimum start voltage Dc	20V
Low battery Alarm	21V
Low battery trip	20V
High Voltage alarm	32V
Power Saver	Below 25Watts when enabled
Power Saver	Same switched On/Off remote
Input connection type	Terminal block with secure enclosure
Charger Mode Specification	
AC input Voltage Range	164-253V AC
Output Voltage (DC)	Depends on battery type
Battery Charge current	45Amp
Battery initial Voltage for start up	0-31.4V DC
Over charge protection shutdown	31.4V DC

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Charger curves (4 stage constant current) battery type 4 Step digital controlled progressive charge		
Battery Type	Boost Voltage (Per battery)	Float Voltage (Per Battery)
Gel USA	14.00	13.70
AGM.1	14.10	13.40
AGM.2	14.60	13.70
Sealed Lead acid	14.40	13.60
Gel Euro	14.40	13.80
Open Lead acid	14.80	13.30
Calcium	15.10	13.60
De-sulphation	15.5 for 4hrs	
Remote control/RS232/USB	Yes. Optional	
Size (in mm)	442x218x179	
Weight	23kgs	
Warranty	2 Year limited warranty Extendable up to 4 years	
Safety	EMC/CE/ROHS/ISO9001/ISO14001	
Certification/Conformity		
Disturbance at Mains Terminals	EN61000-6-3:2007+ A1: 2011+ AC:2012	
Radiated Disturbance	EN61000-6-3:2007+ A1: 2011+ AC:2012	
Harmonic Current Emission	EN61000-3-12: 2011	
Voltage fluctuations & flickering	EN61000-3-11: 2000	
Electrostatic Discharge (ESD)	IEC 6100-4-2:2008	
Radio-frequency & continuous radiated disturbances	IEC 6100-4-3:2006 + A1:2007 + A2:2010	
EFT/B Immunity	IEC 6100-4-4:2012	
Surge immunity	IEC 6100-4-5:2014	
Conducted RF immunity	IEC 6100-4-6:2013	
Power frequency magnetic field	IEC 6100-4-8:2009	
Voltage DIP, >95% reduction	IEC 6100-4-11:2004	
Voltage DIP, >30% reduction	IEC 6100-4-11:2004	
Voltage Interruption	IEC 6100-4-11:2004	