

## Model # APS3048SW-LCD

**1-Ph, 230V, 50/60Hz, 3000W/48VDC Combined Inverter/Charger with Pure Sine Wave Output and LCD display**

### Key Features:

- 48V 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-3048SW-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

## Product Specifications:

<b>Model No</b>	<b>APS-3048SW-LCD</b>
<b>Nominal Power</b>	<b>3000Watts</b>
<b>Input Wave Form</b>	Sine wave (Utility or Generator)
<b>Nominal Voltage</b>	230V AC
<b>Low Voltage Trip</b>	154V +/- 4%
<b>Low Voltage Re engage</b>	164V +/- 4%
<b>High Voltage Trip</b>	253V +/- 4%
<b>High Voltage Re engage</b>	243V +/- 4%
<b>Max Input AC Voltage</b>	270V
<b>Nominal Input Frequency</b>	50Hz or 60Hz (Auto detect)
<b>Low frequency trip</b>	47Hz for 50Hz, 57Hz for 60Hz
<b>High frequency trip</b>	55Hz for 50Hz, 65Hz for 60Hz
<b>Output Wave form(bypass mode)</b>	Same as Input
<b>Overload protection</b>	Circuit breaker
<b>Short circuit protection</b>	Circuit breaker
<b>Efficiency on line transfer mode</b>	0.95
<b>Line transfer time</b>	10 mSec Typical
<b>Bypass without Battery connected</b>	Yes
<b>Max bypass current</b>	40Amp
<b>Inverter Specification / Output</b>	
<b>Output Wave form</b>	Pure Sine wave
<b>Output continuous power in Watts</b>	3000
<b>Output continuous power in VA</b>	3000
<b>Power Factor</b>	1
<b>Nominal Output Voltage RMS</b>	230V AC (L-N)
<b>Output Voltage regulation</b>	+/-10% rms
<b>Output frequency</b>	50Hz +/-0.3Hz or 60Hz+/-0.3Hz
<b>Nominal Efficiency</b>	>88%
<b>Surge rating</b>	9000
<b>Short circuit protection</b>	Yes, fault after 10sec
<b>Inverter Specification / Input</b>	
<b>Nominal Input Voltage Dc</b>	48V
<b>Minimum start voltage Dc</b>	40V
<b>Low battery Alarm</b>	42V
<b>Low battery trip</b>	40V
<b>High Voltage alarm</b>	64V
<b>Power Saver</b>	Below 25Watts when enabled
<b>Power Saver</b>	Same switched On/Off remote
<b>Input connection type</b>	Terminal block with secure enclosure
<b>Charger Mode Specification</b>	
<b>AC input Voltage Range</b>	164-253V AC
<b>Output Voltage (DC)</b>	Depends on battery type
<b>Battery Charge current</b>	30Amp
<b>Battery initial Voltage for start up</b>	0-31.4V DC
<b>Over charge protection shutdown</b>	31.4V DC

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	

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