



INVERTER 3600 WATTS



DESCRIPTION

The Model INT3600W function DC to AC inverter with auto line-to-battery transfer and integrated charging system serves as an extended run, line interactive UPS or a standalone power source. Supplies up to 3600 watts of continuous 230V AC power from a 36 volt DC source. When hardwire input AC cable is energized, regulated commercial power passes through to connected equipment and the battery set is recharged via 3 stage, 30 amp charging system. Built-in voltage regulation adjusts brownouts and over voltages back to usable levels without using battery power. In UPS mode, the system responds to blackouts and brownouts with an uninterrupted transfer to battery-derived AC output. Includes a set of high current DC input terminals for simple installation. Reliable large transformer design with efficient output and frequency control powers resistive electronic loads or large inductive motors, compressors and other items with high current needs on start-up. The model supports an unlimited amount of runtime with any number of user-supplied batteries connected. Highly adaptable to a variety of applications and site conditions with adjustable charger settings for wet / gel battery types and selectable line to battery power transfer voltages.

TYPICAL APPLICATIONS

- Extended Run UPS - Configure as a UPS for long-term battery support of telecom systems, security alarms, computer systems and various other motorized and electronic loads.
- Standalone Power - Alternative power source for use in off-grid, backwoods, alternative energy and export applications where commercial power is not continuously available.

OVERVIEW

- 36V DC to 230V AC / 50 Hz power inverter; hardwire input and output
- 3600 watts continuous output (7200 watts peak)
- 3 stage, 30 amp selectable wet/dry cell battery charger
- Auto line to battery transfer enables UPS protection during blackouts
- Line interactive AC voltage regulation corrects brownouts and over voltages without using battery power
- Compatible with marine, automotive, telecom, computer, emergency and a variety of other applications

FEATURES

- Functions as an extended run, line interactive UPS system or standalone power supply
- Built-in voltage regulation corrects site brownouts and over voltages without using battery power
- Includes hardwire AC input and auto-transfer to enable battery charging and automatic UPS support for blackouts & brownouts
- 3600 watts continuous output power; provides up to twice this rating for momentary startup of inductive loads
- Battery runtime is dependent upon the size and number of user-supplied batteries in 36-volt configuration
- Hardwire input and output connections supported, DC input terminals for 36V battery connection
- Converts 36 volt DC to 230 volt AC
- Frequency control for operating stability
- Advanced 30 amp, 3-stage battery charger and selector switch for gel or wet cell batteries
- Reset table circuit breaker protects APS against system overload
- Switch allows user to select between off, auto-invert and charge-only settings
- 6 diagnostic LEDs indicate AC present, on battery, overload, & battery voltage level (high, medium, & low)
- Configuration switches to allow the user to select the high and low voltage for the unit to automatically transfer from AC power to battery backup
- Coated internal circuit boards offer continuous operation in humid environments (0-95%, non-condensing)
- RJ45 port allows connection of the remote switch
- Allows unlimited runtime capability by allowing the use any number of user-supplied batteries

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SPECIFICATION

SYSTEM OVERVIEW

System overview:	Reliable 36VDC to 230VAC power inverter system serves as an automotive inverter, a battery charger and an uninterruptible power supply. Extended runtime capable with any number of user supplied batteries. 3600 watts continuous / 7200 watts peak. Requires hardwire input & output connection.
Voltage compatibility:	36VDC / 230VAC
Frequency compatibility:	60 Hz

OUTPUT

Output watt capacity (watts):	Continuous - 3600 watts, Overpower (up to 1 hour) - 5400 watts, Double-Boost wattage (up to 10 seconds) - 7200 watts
Output nominal voltage:	AC OUTPUT: 230VAC nominal, DC CHARGER OUTPUT (DC): 36VDC nominal POWER (AC): Maintains PWM sine wave output voltage of 230VAC (+/-
Output voltage regulation:	LINE POWER (AC): Maintains 230V nominal sine wave output. INVERTER 5%). DC CHARGER OUTPUT (See battery recharge rate section)
Output frequency regulation:	50 Hz (+/- 0.3 Hz)
Outlet quantity / type:	Hardwire AC output
Overload protection:	Includes 12A input breaker dedicated to the charging system and 20A output breaker for AC output loads.

INPUT

Maximum input amps / watts:	DC INPUT: Full continuous load - 114A at 36VDC. AC INPUT: 30 amps at 230VAC with full inverter and charger load
Input connection type:	DC INPUT: Set of DC battery terminals. AC INPUT: Hardwire via built in junction box with cover plate
Input cord length:	DC INPUT: User supplies cabling. 8 gauge or larger recommended. AC INPUT: user supplies hardwire input cabling
Recommended electrical service:	DC INPUT: Requires 36VDC input source capable of delivering 114A for the required duration (when used at full continuous capacity). For automotive applications, professional hardwire installation with 300A minimum battery system fusing is recommended.

BATTERY

DC system voltage:	DC input operating range 30-45VDC.
Battery recharge rate:	Includes selectable 30 amp DC charging system with selectable profiles for vented wet cell and sealed gel cell batteries. Optional use battery equalize charge function equalizes the charge level when used with multiple batteries (see manual for detailed charger information).
Expandable battery runtime:	Runtime is expandable with any number of user supplied wet or gel type batteries

VOLTAGE REGULATION

Voltage regulation description:	Includes automatic voltage regulation to correct brownouts and overvoltages back to usable levels
Overvoltage correction:	Overvoltages are automatically reduced by 10%
Brownout correction:	Brownouts are automatically boosted by 10%

LEDS ALARMS & SWITCHES

Front panel LEDs:	Set of 6 LEDs offer continuous status information on load percentage (6 levels reported) and battery charge level (7 levels reported)
Switches:	3 position on/off/remote switch enables simple on/off power control plus "auto/remote" setting that enables distant on/off control of the inverter system when used in conjunction with optional APSPVREMOTE accessory when used in inverter mode. In AC uninterruptible power mode, "auto/remote" setting enables automatic transfer from line power to battery power - to maintain continuous AC power to connected loads.

SURGE / NOISE SUPPRESSION

AC surge suppression:	AC surge suppression not included
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PHYSICAL

Unit weight (lbs):	61
Unit weight (kg):	27.7
Unit Dimensions (HWD/in):	7.25 x 8.5 x 16.25
Unit Dimensions (HWD/cm):	18.4 x 21.6 x 41.3
Shipping Dimensions (HWD/in):	13.5 x 15 x 21.5
Shipping Dimensions (HWD/cm):	34.3 x 38.1 x 54.6
Material of construction:	Polycarbonate
Form factors supported:	Mounting slots enable permanent placement of inverter on any horizontal surface (see manual for additional mounting information)
Cooling method:	Fan

ENVIRONMENTAL

Operating Temperature:	32-104 Fahrenheit / 0-40 Celsius
Relative Humidity:	0-95% non-condensing

LINE / BATTERY TRANSFER

Transfer time from line power to battery mode:	4-6 milliseconds
Low voltage transfer to battery power:	User configurable to 144V, 163V, 182V & 201V
High voltage transfer to battery power:	User configurable to 259-278V

WARRANTY

Product warranty:	(Outside the U.S. and Canada, call for warranty information)
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SPECIAL FEATURES

Appearance:	Black color
Load Sensing:	Optional load sense function enables automatic inverter shutoff and startup as connected equipment is powered off and on. Front panel load sense potentiometer can be set to shutoff or turn on inverter power in response to loads of any level, up to 150 watts.

BATTERY PACK ACCESSORY (optional)

Battery Pack Accessory (optional):	98-121 sealed lead acid battery (optional)
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GREEN ENERGY LLC / GESOLAR FZ LLC

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