



DC-AC Inverter/ Charger ⚡ Modified Sine Wave

Model
SAM-1500C-12
12 VDC - 115 VAC

Design Features

- Integrated 1500W Modified Sine Wave Inverter, 30A Transfer switch, and 2 Stage 12 VDC, 15A Battery Charger.
- High efficiency, lightweight, and compact for easy installation
- Separate ON/OFF control for Inverter and Battery Charger for selectable operation as inverter, charger or UPS function
- 4 color LED indicators to monitor operational status
- Load controlled fan for efficient cooling when required
- Allows use of higher capacity external 12V battery bank for longer backup time
- Neutral to Ground Bond Switching Relay for grounding compliance
- Electronic protections including GFCI when in Inverter Mode
- Ideal for RV's, Trucks and remote housing

MODEL NO. SAM-1500C-12		
OUTPUT - INVERTER MODE	CONTINUOUS ACTIVE OUTPUT POWER	1500W (Power Factor = 1)
	MAXIMUM SURGE POWER	3000W (<1 sec; Power Factor = 1)
	NOMINAL OUTPUT VOLTAGE	115 VAC, +10% / -5%
	OUTPUT FREQUENCY	60 Hz ± 5%
	PEAK EFFICIENCY	90% (@ 50% load)
	INVERTER ON/OFF CONTROL	By front panel Switch
OUTPUT - GRID PASS THROUGH	NOMINAL VOLTAGE, FREQUENCY OF GRID	120 VAC, 60 Hz
	MAXIMUM POWER	1500W (Power Factor = 1; Battery fully charged)
INPUT - BATTERY	BATTERY SYSTEM VOLTAGE	12V (10.5V to 15.5V ± 0.5V)
	DC CURRENT DRAW FROM BATTERY AT RATED OUTPUT POWER	150A
	DC NO LOAD CURRENT DRAW IN INVERTER MODE	0.65A to 0.85A
INPUT - GRID	NOMINAL VOLTAGE, FREQUENCY	120 VAC, 60 Hz
	MAXIMUM AC INPUT CURRENT - GRID PASS THROUGH	15A (Protected by 15A breaker)
TRANSFER SPECIFICATIONS	CURRENT RATING OF TRANSFER RELAY	30A
	TRANSFER TIME FROM GRID TO INVERTER	2 to 3 seconds
	TRANSFER TIME FROM INVERTER TO GRID	Up to 1 second
BATTERY CHARGER	CHARGING ALGORITHM	2 Stage Charger - Bulk & Float
	FLOAT VOLTAGE	13.8V ± 0.3V
	BULK CHARGE/MAX. CHARGING CURRENT	15A
	MAXIMUM AC INPUT CURRENT	< 5A
	AC INPUT POWER FACTOR	0.6
	VOLTAGE & CURRENT RATING OF FUSE/BREAKER	125V/250V, 5A
	CHARGER ON/OFF CONTROL	By front panel Switch
PROTECTIONS	OVERLOAD SHUTDOWN	Yes. Manual reset.
	LOW BATTERY INPUT (VOLTAGE) ALARM	10.8 ± 0.3V
	LOW BATTERY (INPUT) VOLTAGE SHUTDOWN	10.5 ± 0.3V
	BATTERY (INPUT) OVER VOLTAGE SHUTDOWN	> 15.5V
	COOLING - LOAD CONTROLLED FAN	Inverter Mode: ON at 85W Charging Mode: ON at charging current > 3A ± 1A
	OVER TEMPERATURE SHUTDOWN	Yes. Auto reset
	GROUND FAULT SHUTDOWN	Yes. Manual Reset.
CONNECTIONS	DC INPUT	Nut & Bolt, M9
	AC INPUT / AC OUTPUT	6 foot cord with NEMA5-15P Plug / 2 x NEMA5-15R Outlets
	LED DISPLAY	GREEN "Inverter"; GREEN "Charger"; RED "Fault"; YELLOW "Input Fault"
GENERAL	OPERATING TEMPERATURE RANGE (MIN. TO MAX.)	0°C to 25°C / 32°F to 77°F at 100% loading; 26°C to 35°C / 78.8°F to 95°F at 80% loading
	OPERATING HUMIDITY	< 80%; Non-condensing
	DIMENSIONS (W X D X H)	202 x 345 x 84 mm / 7.95 x 13.58 x 3.30 in
	WEIGHT	4.0 kg / 8.82 lb