

3000W Pure Sine Inverter (38330)

Owner's Manual





For safe and optimum performance, the Nature Power 3000W Pure Sine Inverter must be used properly. Carefully read and follow all instructions and guidelines in this manual and give special attention to the **CAUTION** and **WARNING** statements.

PLEASE KEEP THIS MANUAL FOR FUTURE REFERENCE

Disclaimer

While every precaution has been taken to ensure the accuracy of the contents of this guide, **Nature Power** assumes no responsibility for errors or omissions. Note as well that specifications and product functionality may change without notice.

Important

Please be sure to read and save the entire manual before using your **Nature Power Inverter.**Misuse may result in damage to the unit and/or cause harm or serious injury. Read manual in its entirety before using the unit and save manual for future reference.

Product Numbers

38330 - Nature Power 3000W Pure Sine Inverter

Service Contact Information

Email: info@naturepowerproducts.com

Phone: 1-800-588-0590

Web: www.naturepowerproducts.com

IMPORTANT SAFETY INFORMATION

This section contains important safety information for the unit. Each time, before using the unit, READ ALL instructions and cautionary markings on or provided with the unit, and all appropriate sections of this guide.

The unit contains no user-serviceable parts. See Warranty section for how to handle product issues.

<u>DANGER:</u> Fire and/or Chemical Burn Hazard. Failure to follow these instructions can result in death or serious injury!

- Do not cover or obstruct any air vent openings and/or install in a zero-clearance compartment.
- When working with electrical equipment or lead acid batteries, have someone nearby in case of an emergency.
- Study and follow all the battery manufacturer's specific precautions when installing, using and servicing the battery connected to the inverter.
- Wear eye protection and gloves.
- Avoid touching your eyes while using this unit.
- Keep fresh water and soap on hand in the event battery acid comes in contact with eyes. If this occurs, cleanse right away with soap and water for a minimum of 15 minutes and seek medical attention.
- Batteries produce explosive gases. **DO NOT** smoke or have an open spark or fire near the system.
- · Keep unit away from moist or damp areas.
- Avoid dropping any metal tool or object on the battery. Doing so could create a spark or short circuit
 which goes through the battery or another electrical tool that may create an explosion.

DANGER: Shock Hazard. Keep away from children!

- Avoid moisture. Never expose unit to snow, water etc.
- Unit provides 120 VAC, treat the AC output the same as regular wall AC sockets at home.

DANGER: Explosion hazard!

- DO NOT use the unit in the vicinity of flammable fumes or gases (such as propane tanks or large engines).
- AVOID covering the ventilation openings. Always operate unit in an open area.
- Prolonged contact to high heat or freezing temperatures will decrease the working life of the unit.

FCC INFORMATION

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generate, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

LIMITATIONS ON USE

Do not use in connection with life support systems or other medical equipment or devices.

Table of Contents

INTRODUCTION	5
PRODUCT DESCRIPTION	5
INSTALLATION	6
UNIT OPERATION	10
FEATURE SETTING	13
TROUBLESHOOTING	14
SPECIFICATIONS	14
WARRANTY	16

1. INTRODUCTION

Thank you for purchasing the **Nature Power 3000W Pure Sine Inverter**. With our state of the art, easy to use design, this product will offer you reliable service by providing AC power for your home, cabin, boat, RV or Trailer and recharge your battery automatically when utility AC is available. The sinewave output inverter can run many AC-powered appliances when you need AC power anywhere. The multi-stage battery charger will charge different types of batteries. The transfer switch will automatically switch the load to the battery power when the utility power is interrupted.

Feature Highlights

- The inverter provides true sinewave output power for your microwave, entertainment system, computer and other loads. The AC output power is identical to the AC power provided by the utility grid. It can handle sensitive loads such as dimmer switches and appliances with speed controls
- High surge power to start difficult load like sump pumps, refrigerators, or A/C compressors.
- The battery charger has high output, multi-stage charging capability to minimize charging time.
 The Power Factor Corrected (PFC) input minimizes AC input current required for charging.
- Optional Battery Temperature Sensor (BTS) is available and used to sense the battery temperature to correct charging voltage to ensure the battery is fully charged.
- A Manual Equalization Mode is built-in to improve the life and performance of flooded batteries.
- The charger can charge dead batteries as low as 3 volts.
- During utility mode, the built-in AC load sensing circuit will automatically reduce charging current if there is a high demand on AC load. This avoids the tripping of the shore circuit breaker.

2. PRODUCT DESCRIPTION

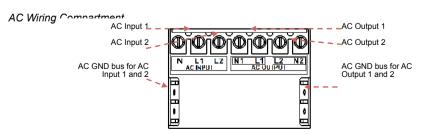
The Nature Power 3000W Pure Sine Inverter includes the items list below.

- · Inverter-Charger base unit
- Remote Display
- 25 ft (7.6 m) remote display cable
- Owner's manual (P/N: MU IC1230)

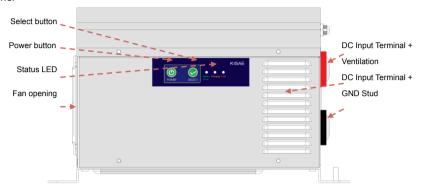
Understanding the unit features

Front Panel

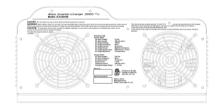




Control Panel



Rear Panel



3. INSTALLATION

<u>DANGER</u>: All wiring should be done by a certified technician or electrician to ensure adherence to the applicable electrical safety wiring regulations and installation codes. Failure to follow these instructions can damage the unit and could also result in personal injury or loss of life.

CAUTION:

Before beginning unit installation, please consider the following:

- The unit should be used or stored in an indoor area away from direct sunlight, heat, moisture
 or conductive contaminants.
- When placing the unit, allow a minimum of three inches of space around the unit for optimal ventilation.

Preparing for Installation

Before you begin the installation, be sure to review the Important Safety Instruction on page 3 of this manual and be aware of all safety and electrical codes which must be met in your area. AC Input of the inverter charger can be supplied from either a split-phase or a dual-input AC Source. See below to understand more about the unit before you start your installation.

Input AC Source from Split-Phase:

The split-phase AC source has 2 lines, 1 neutral and 1 ground. The two 120Vac lines are 180 degree out of phase with each other with a total of 240Vac when measured from line to line. The

voltage between each line to neutral is 120Vac.

Input AC Source from Dual Input:

The dual input has 2 line inputs, 1 neutral and 1 ground. The two 120Vac lines are in phase and must come from the same source.

AC Loads:

In Inverter mode, the unit's AC Output L1 and L2 lines are connected together to provide 120Vac on both lines.

In Pass-Through mode, the AC source connected to the unit's AC input is passed through to the AC Output (load).

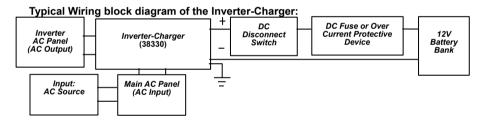
DANGER: Electrical Shock Hazard. Do not connect 240VAC load to the AC Output of the unit.

AC Output Neutral Bonding:

Each AC source must have its neutral conductor bonded to ground.

When the Nature Power Inverter-Charger is running in Inverter mode, the internal neutral-toground bonding system is enabled. The unit will act as an AC source and will automatically connect the AC Output Neutral (N1 & N2) circuit to safety ground.

When the unit is running in Pass-Through mode, the internal neutral-to-ground bonding system is disabled. The unit will not act as an AC source and the AC Output (N1 & N2) to safety ground is disconnected inside the unit. Therefore, the AC Input source that is connected to the Inverter-Charger should have its own neutral-to-ground connection. If not, have an electrician look into bonding the AC source's neutral to ground at your AC source.



12V Battery Bank:

- The use of a deep cycle battery is highly recommended for power inverter application.
- For battery size, you need to identify what you wish to operate, and for how long. Nature Power recommends that you purchase as much battery capacity as possible. See more on Estimated Run Times in Section 4.

DC Cable:

- All DC cables used require multi-strand insulated cable.
- The DC cables must be copper and must be rated 105°C minimum.
- Based on National Electrical Code, cable size of 4/0 AWG is required for cable length < 5 ft. Use
 of smaller gauge cable or longer cable length may cause the inverter to shutdown under heavy
 load and may also melt the cable insulation and catch fire and can result in death or serious
 injury.

DC Grounding:

- The chassis of the unit has to be grounded properly.
- For Marine application, the DC grounding cable size may be one size smaller than the minimum size conductor required for the DC current carrying conductors, providing the overcurrent protection device in the DC positive conductor is rated no greater than 135% of the capacity of the DC grounding conductor, and the conductor is no smaller than #16AWG.
- For Recreational Vehicle application, the unit has to be grounded to the vehicle chassis with a

minimum #8 AWG copper conductor with either green insulator or bare wire.

Important: The unit is grounded through the ground stud of the unit located near the DC Input terminal

DC Fuse or Over Current Protective Device:

- A DC-rated fuse and a DC-rated over-current protective device connected along the DC positive line is required.
- Based on the National Electrical Code requirement, a fuse or circuit breaker with a minimum of 350 Adc is required.
- Based on the size of your 12V Battery Bank, determine the overall short circuit current rating of the battery bank from the battery manufacturer. The fuse or circuit breaker chosen must be able to withstand the short circuit current that may be generated by the battery bank.
- For Marine application, the over current protective device needs to be installed within 7 inches (17.8cm) from the battery positive terminals.

DC Disconnect Switch:

- Select a DC Disconnect Switch with the same or higher rating of the selected fuse or over current protective device.
- The DC Disconnect Switch is used to disconnect the DC power between the unit and the battery bank during service, maintenance or trouble shooting.

Main AC Panel (wire size and breaker size):

- For Dual AC Input, #6 AWG AC Input wire is required.
- For Split Phase AC Input, #10 AWG AC Input Wire is required for all the AC connections between the AC source and the AC Input port.
- To meet CSA, UL and electrical code requirements and to protect system wiring, the AC input line must be provided with an overcurrent protection device for which a 30A branch circuit breaker is required to connect each AC Line to the unit's AC Input.

Important: Follow the electrical and/or building code when you connect the unit to any AC source.

Inverter AC Panel (wire size and breaker size):

- #10 AWG wire is required for all AC Output connections based on the full 30A pass-through rating between the unit and the AC Inverter AC Panel.
- To meet CSA, UL and electrical code requirements and to protect system wiring, the AC input line must be provided with an overcurrent protection device for which a maximum 30A branch circuit breaker is required to connect each AC Output Line to the unit's AC Output. If an AC Output wire of smaller than #10 AWG is used, then the overcurrent protection device will have to be smaller. Follow the electrical and or building code to choose your protection device rating.

Installing the Inverter-Charger System WARNING: Electrical Shock Hazard

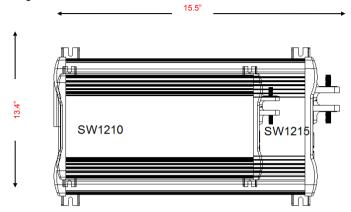
The unit 'On/Off' switch does not disconnect the DC power from the battery. Use the DC Disconnect Switch or disconnect the DC input cable connection to disconnect the DC power from the battery before working on any circuits connected to the unit. Use the AC circuit breaker to disconnect any AC power to the unit before servicing. Failure to follow these instructions can result in death or serious injury.

Installation:

- Choose an appropriate mounting location. The unit should be installed away from the battery in a separate well ventilated compartment. Do not install the unit in any compartment containing flammable gases or liquids like gasoline or in the battery compartment where they may be explosive hydrogen gas from the batteries present.
- The length and size of the DC cables will affect unit performance.
- For indoor use, the unit can be mounted in any direction except with the fan panel (panel with fan opening) facing upwards or downwards.
- The location to install the unit has to have a normal air temperature between 0°C 60°C

(32°F-140°F). The cooler the better, or overheating may result.

- Use the mounting template below to mark the positions of the mounting screws.
- Drill the 4 mounting holes and place the Inverter-Charger in position and fasten the unit to the mounting surface.



AC Input Wire Connection:

<u>DANGER</u>: Make sure all the AC wiring being connected to the unit is physically disconnected or by opening the circuit breaker from the electrical sources. All wiring must be done in accordance with local and national electrical wiring codes.

<u>CAUTION:</u> The terminal block is split into AC Input and AC Output sections. Damage will occur to unit if it is wired incorrectly.

- The AC and DC wire cannot be mixed together in the same conduit.
- The AC input and AC Output wire should be separated out through the two AC knockouts located at the bottom of the unit.
- Remove AC compartment cover by unscrewing the four screws located on the four corners of the AC compartment cover.
- There are two ground bus locations inside the AC Wiring Compartment. The ground bus located
 at the left hand side of the AC compartment is intended for use with AC Input ground wire. The
 right hand side ground bus is intended for use with AC Output ground wire.
- Remove the left hand side AC knockout. Install the strain-relief clamp in the AC knockout.
- Run the AC input wire through the strain relief clamp.
- Connect AC Input wire Line 1 to L1, Neutral to N and Line 2 to L2 of the terminals and Ground to ground bus.
- Secure the strain-relief clamp.

AC Output Wire Connection:

- Similar procedure as connecting the AC Input wire: remove the right hand side AC knockout.
 Install the strain-relief clamp in the AC knockout.
- Run the AC output wire through the strain relief clamp.
- For Line for Dual Output, connect AC output wire Line 1 to L1, Neutral 1 to N1 and Line 2 to L2, Neutral 2 to N2 of the terminals and Ground to the ground bus.
- Secure the strain relief clamp.
- Place the AC compartment cover and secure with the four screws.

Unit Chassis Grounding Connection:

<u>DANGER</u>: The unit chassis has to be grounded properly. Never operate the Inverter-Charger without proper grounding. Failure to do so may result in death or serious injury.

- Connect the grounding cable's ring terminal to the unit ground screw.
- Connect the other side of the cable to the common grounding point.

DC Input Connection:

<u>CAUTION</u>: Reversing the DC Input terminal will damage the unit and it cannot be repaired. Damage caused by reverse polarity connection is not covered by the warranty.

- Connect one end of the negative DC input cable to the Inverter-Charger DC negative terminal.
 Connect the other end of the negative DC input cable to the battery negative terminal.
- Make sure the DC Disconnect Switch is in the OFF position.
- Connect one end of the positive DC input cable to the Inverter-Charger DC positive terminal.
 Connect the other end of the positive DC input cable to one of the terminals of the DC Disconnect Switch.
- Connect a DC input cable between the other terminal of the DC Disconnect Switch and one side
 of the terminal of the fuse holder.
- Connect a DC input cable between the other terminal of the fuse holder and the battery positive terminal.
- · Install the selected fuse to the fuse holder.
- Turn DC Disconnect Switch to ON position.

Remote Display Connection:

- Install the RJ12 standard cable to your desired location. Please note polarity.
- Connect one end of the RJ12 cable to one of the two Remote ports on the unit and the other end
 of the cable to the Display Panel. Please note the polarity.

Optional Battery Temperature Sensor Connection:

- Insert the RJ12 plug from the battery temperature sensor to the Inverter-Charger's Battery Temperature Sensor port. Please note the polarity
- Select the battery for which you would like to monitor the temperature, connect the Battery Temperature Sensor to the negative terminals of this battery.

Test the Installation:

- Switch DC disconnect switch and all AC circuit breaker to ON to provide DC power to the unit.
- The LED display will turn on. If AC input source is available, 'Status' LED turns green. This
 indicates the unit is running in by-pass mode meaning AC output is running from the AC input
 source.
- Disconnecting the AC input source by turning OFF the 30A branch breaker will change the 'Status' LED on the Display to amber color.
- Plug in a small AC load like a 40W table lamp or small appliance to the AC socket to verify AC is available
- The unit is successfully installed and functioning properly.

4. UNIT OPERATION

Auto Backup Mode (Factory default setting):

The unit is fully automatic. When utility power is available, the unit is running in AC bypass mode. AC output is supplied from the utility. The internal AC charger is ON and will automatically top up the battery bank that is connected to the unit. When there is a power failure from the utility or an AC source is not available, the unit will run on battery power and the unit will generate sinewave AC output to maintain and operate the load continuously.

Factory default setting:

Charger: ON
Inverter: ON
Power Save: OFF
Battery Type: AGM
Charger Current: 150A
Fault Alarm: ON
Display Brightness: 80%
Background Light Timer:3 minutes

Non-Backup Mode

Same as Auto Backup Mode but when there is a power failure of the utility or the AC input source is not available, the inverter will not turn ON automatically. You are required to manually turn ON the inverter.

Setting:

Same setting as factory default but with Inverter set to OFF.

Understanding the Display Functions:





LED Indicator functions on unit display and remote display:

LD IIIdicator i	unctions on unit display	and remote display.
LED	Main Unit and	Function/Status
Indicator	Remote Display	
Battery	Green ON	Battery Power Mode (inverter mode). Remote LCD
Power	(solid)	Display shows:
		- Battery DC Voltage and Current
		- Inverter AC Output Voltage and Current
		e.g. DC: 12.5V 30A
		AC: 120V 2.7A
		Press '+' or '-' key to check AC Output Power.
		e.g. System Power
		0.33 KW
Charging	Green ON	Pass-Through Mode (AC mode). Battery is fully charged.
	(solid)	Remote LCD Display shows:
		- AC Input Voltage and Current
		 Battery DC Voltage and charging current
		e.g. AC: 120V 15A
		DC: 12.0V 5A
		Press '+' or '-' key to check charging stage.
		e.g. Charge Stage
		Float
		Press '+' or '-' key to check AC Input Power.
		e.g. System Power
		1.80 KW

	Green ON (flashing)	Pass-Through Mode (AC mode). Battery Charging is in progress. Remote LCD Display shows: - Battery DC Voltage and charging current - AC Input Voltage and Current e.g. AC: 120V 20A DC: 12.0V 50A Press '+' or '-' key to check charging stage. e.g. Charge Stage ABS Press '+' or '-' key to check AC Input Power. e.g. System Power 2.4 KW
Fault	Red ON (solid)	Unit has shutdown. Display shows error code and error message. - Low battery shutdown e.g. FAULT: E01 Low Battery

Understanding the Push Button Functions on Unit:

A beeping sound will occur every time that any button on the unit is triggered.

Button	Function
Power	Turns unit On/Off. Press and hold for 1 second to turn unit On/Off
1	Reset the unit: Press once to reset the unit. This may be required when an error is detected on the unit

Understanding the Push Button Functions on Remote Display:
A beeping sound will occur every time any button on the unit is triggered.

Button	Function	
0	Turns LCD display On/Off. Press and hold for 2 seconds to turn display On/Off.	
	Display shows unit model number and revision.	
	e.g. NATURE 38330	
	POWER REV 1.0	
Enter	Save the selected setting or go to the next stage	
+	Scroll up on the menu	
-	Scroll down on the menu	
EXIT	Exiting or entering the feature setting mode	

Understanding the Error Codes:

Code	Condition	Corrective Action
Fault: E01 Low Battery	Battery voltage is too low and unit has shutdown	Recharge battery immediately and restart unit.
Fault: E02 High Battery	unit has shutdown	Check battery voltage or determine if any external charger with high voltage output is connected to the battery bank
Fault: E03 Temp Protect	and unit has shutdown	Wait for 15 minutes before restarting. Check if any object has blocked the air flow of the unit. Check environmental temperature.

Fault: E04	Inverter AC Output has	Check AC load connected and restart the
AC Over Load	overload	unit.
Fault: E05	Inverter output is short circuited	Check load connected to the AC output
Short Protect	and has shutdown	and restart the unit.
Fault: E06	Inverter output voltage is too	Check unit and load and restart the unit.
INV Over Load	high or too low and has	
	shutdown	
Fault: E07		Check battery. Check ventilation in
Batt Over Load	shutdown	battery compartment. Check
		environmental temperature.
Fault: E08		Check battery. Check ventilation in
BTS Protect		battery compartment. Check
	shutdown shortly.	environmental temperature.

Estimated Run Times

Following run times are estimates for reference, based on using different battery bank sizes. Actual run times may vary.

	Estin	nate run time o	n different 12V	Battery Bank S	Size
AC Load	60AH	120AH	180AH	240AH	300AH
50 W	11 hrs.	22 hrs.	33 hrs.	44 hrs.	55 hrs.
100 W	5 hrs.	11.5 hrs.	17 hrs.	23 hrs.	29 hrs.
200 W	2.5 hrs.	5 hrs.	8 hrs.	11 hrs.	13.5 hrs.
500 W	49 mins	2 hrs.	3 hrs.	4 hrs.	5 hrs.
1000 W	15 mins	49 mins	1.5 hrs.	2 hrs.	2.5 hrs.
1500 W	8 mins	27 mins	49 mins	1 hr	1.5 hrs
2000 W	N.R.	15 mins	34 mins	49 mins	1 hrs
2500 W	N.R.	11 mins	25 mins	37 mins	49 mins
3000 W	N.R.	N.R.	17 mins	27 mins	37 mins
Note: N.R Not Recommended					

5. FEATURE SETTING

To understand more about the unit features, read the following section and follow the instructions to make changes to the desired setting.

Enter Feature Menu for unit setting

To enter feature setting mode, on remote display, press and hold 'EXIT' button for 5 seconds. The feature setting menu will display on the screen with the following sequence:

Charger: On/Off Turns Battery Charger On/

Off

Inverter: On/Off Turns Power Inverter On/Off

Power Save: 0, 5, 10, 15, 20, 50W Lowers power draw when low power loads are connected to

inverter

Battery Type: AGM, GEL, Flooded Select the battery type you are using

Set Current: 40 – 150A (5A step) Set charger current
Fault Alarm: On/Off Sound or silence of fault

alarm

Brightness: 10-100% (10% step) Set brightness of LCD

display

Backlight Timer: 1 – 9 minutes (1 minute step) Set time that LCD

backlight stavs on

Use the '+' and '-' button to scroll between feature setting menu.

Press 'ENTER' button to go to the selected feature and you can now make changes on the selected feature to your desired setting.

Use the '+' and '-' button to scroll between different set values or setting. Once the desired values or setting is chosen, press 'ENTER' button to save the setting or press 'EXIT' button to quit the setting without saving.

6. TROUBLESHOOTING

To troubleshoot the unit, please note the error code displayed on the main unit and review "Understanding the Error Codes" in section 4.

Problem	Symptom	Solution
No output	The unit is off	Turn unit ON by following the instruction in
voltage. Status		Section 4 to turn unit ON
LED is off.	No power to unit	Check DC fuse, DC Disconnect switch (if
		installed) and check if Branch breaker is
		either blown or turned OFF
	Battery voltage is low (<7Vdc)	Use a charger to boost battery voltage to
		above 7V and unit can be restarted.
No AC output.	30A Circuit Breaker is tripped	Check load and reset the breaker
Status LED is		
Green		
No Output.	30A Circuit Breaker is tripped	Check load and reset the breaker
Status LED is	Check error code on display	Verify the error condition and make
Amber		correction
	Check AC Load Sense setting	AC Load connected must be below the AC
		Load sense setting

7. SPECIFICATIONS

Note: Specifications are subject to change without notice.

Specification	Nature Power 3000W Pure Sine Inverter
Inverter	
AC Output Power	3000W
AC Output Current	25A
AC Surge Power (Peak)	6000W (5 seconds)
AC Output Voltage/Frequency	120 VAC / 60 Hz
AC Output Waveform	True Sinewave (<3% THD)
Nominal DC Input Voltage	12.5 VDC

No Load battery draw	< 3 A(nominal, <1A with load sense
DC Input Voltage operating range	10.5 – 15.5 VDC
Under Voltage Alarm	11.0/12.1 VDC
Under Voltage Alarm Recovery	11.3/12.3 VDC
Under Voltage Shutdown	10.5/11.8 VDC
Under Voltage Recovery	12.0/12.6 VDC
Over Voltage Shutdown	15.5 VDC
AC Transfer Switch	
Transfer Time	< 20 ms
Transfer Relay Rating	30A
AC Input Source Setting	15, 20, 30A
AC Output Port 1 (HW Connector)	30A
AC Output Port 2 (HW Connector, GFCI, CB)	30A 15A
AC Output Fort 2 (TIVV Confidence, GFCI, CB)	20A
AC Output Port 3 (GFCI & CB)	15A
Remote Display	20A
Display Panel Port	RJ12
LCD Display	AC Input, Output Voltage & Current
200 Diophay	DC Input, Output Voltage & Current
Battery Temperature Sensor Port	Error code & status
BTS Port	RJ12
	Nature Power P/N: BTS-10K
Battery Temperature Sensor (optional)	Nature Power P/N. BTS-Tok
Charger	7 44 4 1 1 1 1 2 2
Charging Voltage Range	7 – 14.4 VDC
Floated Voltage Range	13.4 – 13.8 VDC
Equalization Voltage (Flooded battery)	16.0 VDC
Charger Current (max)	150A
Charger Current Setting	40A – 150A
Battery Type	Gel, Flooded, AGM
Charge Control	Bulk/Absorption/Flooded
Efficiency	>80%
Safety and Environmental	
Conformance	Conforms to UL 458 Certified to CSA C22.2 no. 107.1
A ganay Markings	cETLus
Agency Markings	
Operating Temperature	0°C to 40°C (32°F to 104°F) -20°C to 60°C (-4°F to 140°F)

Relative Humidity	5-90% noncondensing
Operating Altitude	Up to 9,843ft (3000m) above sea level
Weights and Dimensions	
Weights	<mark>?????</mark>
Dimensions	??????

8. WARRANTY

One Year Limited Warranty

The limited warranty program is the only one that applies to this unit, and it sets forth all the responsibilities of Nature Power. There is no other warranty, other than those described herein. Any implied warranty of merchantability of fitness for a particular purpose on this unit is limited in duration to the duration of this warranty.

This unit is warranted, to the original purchaser only, to be free of defects in materials and workmanship for one year from the date of purchase without additional charge. The warranty does not extend to subsequent purchasers or users.

Manufacturer will not be responsible for any amount of damage in excess of the retail purchase price of the unit under any circumstances. Incidental and consequential damages are specifically excluded from coverage under this warranty.

This unit is not intended for commercial use. This warranty does not apply to damage to units from misuse or incorrect installation/connection. Misuse includes wiring or connecting to improper polarity power sources.

RETURN/REPAIR POLICY:

If you are experiencing any problems with your unit, please contact our customer service department at info@naturepowerproducts.com or Phone 1-800-588-0590 before returning product to retail store. After speaking to a customer service representative, if products are deemed nonworking or malfunctioning, the product may be returned to the purchasing store within 30 days of original purchase. Any defective unit that is returned to manufacturer within 30 days of the date of purchase will be replaced free of charge.

If such a unit is returned more than 30 days but less than one year from the purchase date, manufacturer will repair the unit or, at its option, replace it, free of charge. If the unit is repaired, new or reconditioned replacement parts may be used, at manufacturer's option. A unit may be replaced with a new or reconditioned unit of the same or comparable design. The repaired or replaced unit will then be warranted under these terms for the remainder of the warranty period. The customer is responsible for the shipping charges on all returned items.

LIMITATIONS:

This warranty does not cover accessories, such as adapters and batteries, damage or defects result from normal wear and tear (including chips, scratches, abrasions, discoloration or fading due to usage or exposure to sunlight), accidents, damage during shipping to our service facility, alterations, unauthorized use or repair, neglect, misuse, abuse, failure to follow instructions for care and maintenance, fire and flood.

If your problem is not covered by his warranty, call our Customer Service Department at info@naturepowerproducts.com or 1-800-588-0590 for general information if applicable.

