

Delivering leading edge, innovative power solutions for more than **30** years....

Model:GT-A2000-SVVVXXX

July 16, 2019

2000W Battery Charger for Lead-acid/ Ultra-capacitor/Li-Ion/LiFePO4 Battery Types

Information

Model Number GT-A2000-SVVVXXX

Description GT-A2000 is a single phase 2000W intelligent battery charger featuring an LED indicator for power loading and charger status. The charger is a single output employing an advanced microprocessor-controlled power management system to control the two stage battery charging technique as well as other functionality such as OCP and the CANBUS/RS485/RS422 interface

Model Picture



Agency

Documents

CE

EC-Declaration https://www.globtek.com/pdf/ec_declaration/a0Oa000000Mgu6GEAR

RoHS/RoHS2

Declaration https://www.globtek.com/pdf/rohs_cert/a0Oa000000Mgu6GEAR

REACH

Declaration https://www.globtek.com/pdf/iso_certificates/REACH.pdf

Conflict

Minerals <https://www.globtek.com/pdf/conflict-minerals.pdf>

Declaration

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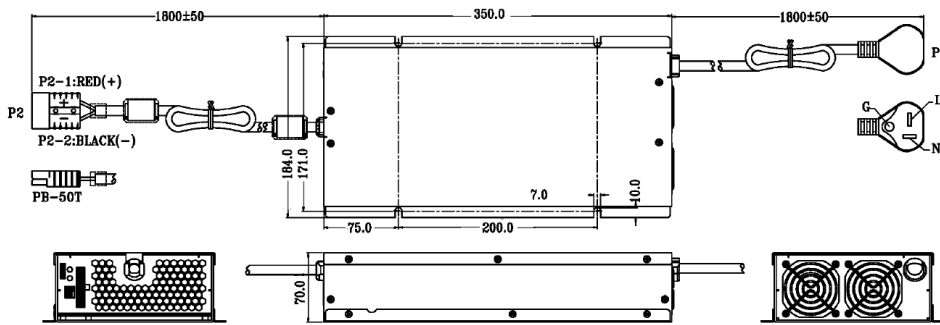
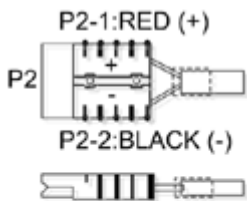
Model Parameters

Type	Enclosed-Metal
Technology	Li-Ion Battery Charger
Category	ITE Power Supply
Input Voltage	90-264Vac (47 – 63Hz)
I/P Amps (A)	14.8A Typ.@115Vac
Wattage (W)	2000.0
Vout Range (V)	54.0-82.8
Efficiency Level	
Ingress Protection	
Size (mm)	350*70*184

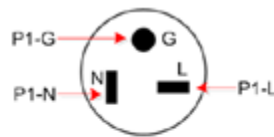
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ENCLOSURE

DC Output Receptical (P2) & Pin Assignment

DC Output Pins

VO1	P2-1
DC.COM	P2-2

AC Input Recepticle (P1) & Pin Assignment

AC Input Pins

AC-Line	P1-L
AC-Neutral	P1-N
AC-Ground (PE)	P1-G

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RATING TABLE

Model Number	Voltage	Amps(A)	Watts(W)	RFQ
GT-A2000-S54037054	V	37	1,998.00	RFQ
GT-A2000-S58434358.4	V	34.3	2,003.12	RFQ
GT-A2000-S82824282.3	V	24.2	1,991.66	RFQ

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SPECIFICATIONS

Features:

Constant Voltage / Constant Current Charge Mode
Lead-acid/ Ultra-capacitor/Li-Ion/LiFePO4 Battery Types
CANBus/ RS485 / RS422 Interface
Optional Remote on/off and Current Sharing

Input Specifications

Input Voltage 90-264Vac (See de-rating chart) (250 – 375VDC contact Globtek)
Fuse Internal Line and Neutral
Frequency 47-63Hz
Inrush current 40A (peak @ 230Vac)
Input current 14.8A typ. @ 115Vac / 9.6A typ. @ 230Vac
No-Load Power 15.1 Watt @ 115Vac / 13.3 Watt @ 230Vac
Efficiency 88.5% typ. @ full load @ 230Vac
Power Factor 0.98 typ. (meets EN61000-3-2)
Conducted EMI CISPR EN55022A
Radiated EMI CISPR EN55014-1
Harmonic distortion Meets IEC 61000-3-2
Isolation Meets IEC 60950-1
Leakage current 0.82mA typ. @ 230Vac
Hold-up Time typ. 25mS @ 115Vac / 20mS @ 230Vac
Remote ON/OFF Available (Contact Globtek)
Thermal Protection NTC/thermostat and Temperature sensor
MTBF 100,000 hours (MIL-HDBK-217F @ 25°C)

Output Specifications

Number of Outputs One
Normal Output Voltage See Rating Chart
Normal Output Current See Rating Chart
Output Power 2000 Watts
Line Regulation typ. $\pm 5\%$
Noise & Ripple typ. 1% pk-pk – bandwidth limited to 20MHz
Over Voltage Protection (OVP) Built In
Over Current Protection (OCP) Programmable
Over Load Protection (OLP) fully protected
Current Sharing Available (Master slave with system rack) (contact Globtek)
Reverse Polarity Protection Available (Contact Globtek)
Switching Frequency 55KHz
Charging LED Indicator Solid RED = Fail / GREEN / RED = Charging / Solid GREEN = Battery charged

Environmental Specification

Storage Temperature -40°C to +85°C
Operating Temperature -20°C to +60°C (See de-rating chart)
Cooling Internal fan with intelligent speed control
Audible noise 47.0db max
Humidity 20 to 90% non-condensing
Shock/Vibration 5Grms, 1 Hour, Six Degree-of-freedom random
Surge Immunity EN-6000-4-5 (Differential $\pm 1KV$ Level 3) (Common mode $\pm 2KV$ Level 3)

PROPRIETARY INFORMATION

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<http://en.globtek.com/datasheet/id/a00a000000Mgu6G>

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ESD Immunity EN-61000-4-2 (4KV Contact Level 2) (8KV Air Discharge Level 3)
Altitude 2000 Meters

Safety @ Regulatory

IEC 60950-1 / EN 60335-1 / EN60335-2-29 Class 1

Conducted EMI CISPR EN55022A

Radiated EMI CISPR EN55014-1

Harmonic distortion Meets IEC 61000-3-2

Enclosure

Enclosed Metal

Size: 350*184*70 mm

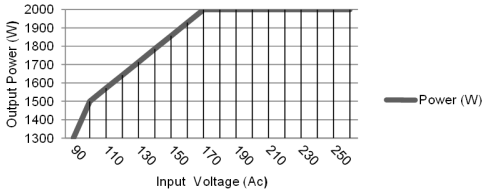
Weight: 4.2kgs

Markings: Label and/or Pad Printed and/or Molded in the case

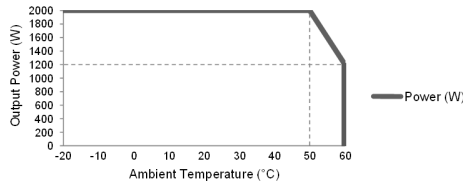
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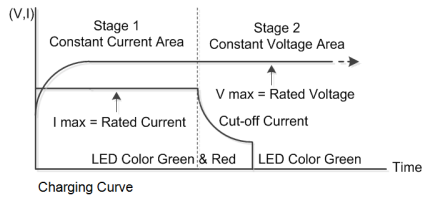
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DERATING CURVE


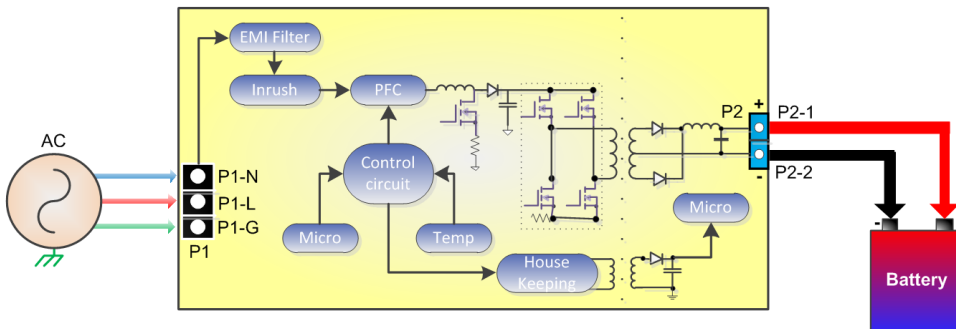
Output Power Versus AC input voltage de-rating chart



Output Power Versus Ambient Temperature de-rating chart



Charging Curve

Simplified block diagram


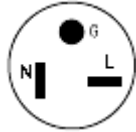
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Input Configuration

Description 3 prong LT-262B or YP16L 20A/250V





Connector Standard NEMA 6-20P up angle 3P plug
Maximum Current rating 20A
Maximum Voltage 250V
Number of Poles and Wires 2 poles, 3 wires
Available Wire Thickness 12 through 18AWG
Outer Mold Material 35P PVC
Blade Material Nickel coated Brass
Flamability Rating UL 94V-0
color black is standard but any color available

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Approvals

Logo	Description
	CE Mark: tested to comply with EN55022:2006/A1:2007 Class B, EN610003-2, EN610003-3 including EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6N EN61000-4-11; EMI: Complies with EN55011 CLASS B and FCC Part 15B - On label or Molded in case
	WEEE: Complies with EU 2012/19/EU (http://ec.europa.eu/environment/waste/wEEE/index_en.htm) Mark is on the label or Molded in the case