# **H HiTRON**

# UNIVERSAL INPUT HARMONIC CORRECTION(PFC) AC-DC INTELLIGENT BATTERY CHARGER 2000 WATTS SINGLE OUTPUT HIBA2000 SERIES



- MICROPROCESSOR CONTROLLED POWER MANAGEMENT
- **2 STAGE CHARGING**
- WIDE OPERATING TEMPERATURE
- **REVERSE POLARITY/UNDER VOLTAGE/ OVER VOLTAGE/OVER TEMP. PROTECTION**
- LED LOADING INDICATOR FOR POWER & **CHARGER STATUS**
- CANBus/RS485/RS422 INTERFACE

## SPECIFICATION

**INPUT SPECIFICATION OUTPUT SPECIFICATION** Input Voltage: 90-264Vac. Output Voltage: See Ratings Chart. Power Factor: Meet Harmonic Correction IEC 61000-3-2. Output Current: See Ratings Chart. Power Factor typ. 0.98. Output Power: 2000W. Input Connector: 3 prong LT-262B or YP16L 20A/250V. Output Connector: PB-50(50A/600V). Input Frequency: 47-63Hz. Line Regulation: Typ. ±0.5%. Inrush Current: 15A(rms) at 230Vac; Noise & Ripple: Typ. 1% peak-peak. 40A (peak) at 230Vac. Cut-off Current: Software programming. Input Current: Typ. 14.8A at 115Vac / 9.6A at 230Vac. Over Voltage Protection (OVP): Built-in. Under Voltage Protection: Available. Current Sharing: Available. Dielectric Withstand: Meet IEC 60950-1. Output Reverse polarity Protection: Available. EMI: Meet CISPR EN55022A/CISPR EN55014-1. Over Current Protection (OCP): Software programming. Hold-up Time: Typ. 25ms at 115Vac/ 20mS at 230Vac. Charging Indicator: Green means Battery Full. Remote ON/OFF: Available. Red means Fail. Over Temp. Protection (OTP): By NTC, thermostat & Green/Red means Charring. Temp. sensor Leakage Current: Typ. 0.82mA at 230Vac. overload or short circuit. No-Load Power: 15.1Watt at 115Vac/ 13.3Watt at 230Vac.

#### GENERAL SPECIFICATION

Efficiency: 88.5% at 230Vac. Switching Frequency: 55KHz. Circuit Topology: Full-bridge circuit. Safety Standard: Meet IEC 60950-1/EN60335-1& EN60335-2-29 Class L Battery Type: Lead-acid/ Ultra-capacitor/Li-Ion/LiFePO4. Charge Mode: CV+CC. CANBus/RS485/RS422 Interface.

**Overload Protection (OLP):** Fully protected against output

**Operating Temperature:** -20 °C to +60 °C de-rate linearly from 100% power at +50 °C to 60% power at +60  $^{\circ}$ C. (Refer to de-rating chart). **Storage Temperature: -**40°C to +85 °C. Cooling: Built-in dual internal DC ball bearing fans with smart fan speed control. Power Density: 7.2 Watts/ cubic inch.

NOTE: (1)All measurement are at nominal input, full load and +25°C unless otherwise specifications (2)Due to requests in market and advances in technology, specifications subject to change without notification.

(3)Derating is needed under low input voltage. Please refer to the derating chart.

# **OUTPUT VOLTAGE / CURRENT RATINGS CHART**

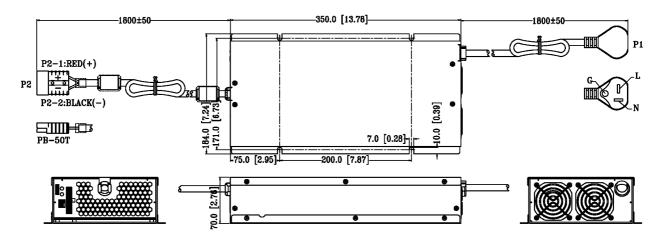
### SINGLE OUTPUT

MODEL NO.	<b>VO1 ★</b> ⊙≡			
	Min.	Тур.	Volt.	Max.
HIBA2000-S540370	0A	37.0A	54.0V	37.0A
HIBA2000-S584343	0A	34.3A	58.4V	34.3A
HIBA2000-S828242	0A	24.2A	82.8V	24.2A

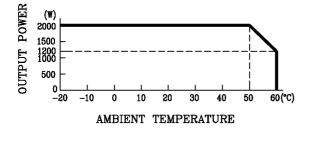
Symbol: "★" OVP built-in. "≡" Load Sharing. "⊙" Installed with Or-ing diode.

## **MECHANICAL DIMENSIONS: MM [INCHES]**

WEIGHT: 4.2kgs (9.26lb)

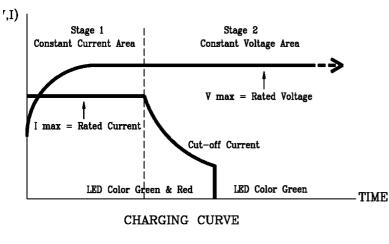


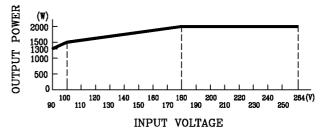
#### **DERATING CHART**



(When I/P  $\geq$  180VAC)

#### **CHARGING CURVE**





#### **INPUT & OUTPUT CONNECTORS PIN ASSIGNMENT**

ASSIGNMENT	PIN NO.	
AC-LINE	P1-L	
AC-NEUTRAL	P1-N	
AC-GROUND	P1-G	
VO1	P2-1	
DC COM	P2-2	

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