

# SU-KAM POWER SYSTEMS LTD. TECHNICAL SPECIFICATIONS

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MODEL: 650VA/12VDC DIGITAL HOME UPS ASTRIX-650

**CAPACITY** => 650 VA MAINS UPS MODE (SWITCH POSITION TOWARDS UPS MODE)

MAINS A.C LOW CUT =>  $185 \pm 10 \text{ V}$ 

MAINS A.C LOW CUT RECOVERY =>  $190 \pm 10 \text{ V}$ 

MAINS A.C HIGH CUT => 265  $\pm$  10 V

MAINS A.C HIGH CUT RECOVERY =>  $260 \pm 10V$ 

**CHANGE OVER TIME \*** 

MAINS TO INVERTER ~ <15ms

MAINS W-UPS MODE (SWITCH POSITION TOWARDS W-UPS MODE)

MAINS A.C LOW CUT =>  $105 \pm 10 \text{ V}$ 

MAINS A.C LOW CUT RECOVERY =>  $120 \pm 10 \text{ V}$ 

MAINS A.C HIGH CUT => 285  $\pm$  10 V

MAINS A.C HIGH CUT RECOVERY => 275  $\pm$  10 V

**CHANGE OVER TIME \*** 

MAINS TO INVERTER ~ <40ms

**INVERTER MODE** 

OUTPUT VOLTAGE RANGE WITH SPECIFIED LOAD => 175 V -260 V

**OUTPUT FREQUENCY** 

INVERTER OUTPUT FREQUENCY =>  $50.0 \pm 0.1$  Hz MAINS OUTPUT FREQUENCY => SAME AS INPUT

**OUTPUT WAVE FORM** 

OUTPUT WAVE FORM IN MAINS MODE => SAME AS INPUT

OUTPUT WAVE FORM IN INVERTER MODE => QUASI SINE WAVE

WITH SOFT START

NO LOAD CURRENT => <2.2A

FULL LOAD AT => 40.0 A  $\pm$  2.0 A DC CURRENT

**BATTERY LOWER VOLTAGE CUT** => 10.2 V ± 0.2V (Depending on Load)

Prepared By: Approved By:



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#### **BATTERY CHARGING**

PWM CONTROLLED SCR CHARGING WITH SOFT START OVER FULL RANGE OF MAINS 140V TO

280 V.

MAXIMUM CHARGING CURRENT LIMIT  $\Rightarrow$  9.0 A  $\pm$  1.0 A

MINIMUM CHARGING CURRENT LIMIT  $\Rightarrow$  1.5 A  $\pm$  0.5 A (FLOAT CHARGE)

TOP CHARGING VOLTAGE LIMIT  $\Rightarrow$  14.2 V  $\pm$  0.2 V

BATTERY CHARGED UPPER VOLTAGE LIMIT  $\Rightarrow$  13.6 V  $\pm$  0.2 V (FLOAT VOLTAGE)

## OVER LOAD AND SHORT CIRCUIT PROTECTION

 OVERLOAD PROTECTION WITH
 105%-120% LOAD (5-40 SEC)

 8-TIMES AUTO-RESET FEATURE
 120%-150% LOAD (2-10 SEC)

 150%-200% LOAD (1-4 SEC)

SHORT CIRCUIT PROTECTION WITH >300% LOAD (FEW MSEC)
4-TIMES AUTO-RESET FEATURE O/P L/N SHORT (FEW MSEC)

#### LED DISPLAY OF DIFFERENT MESSAGES AND FAULTY CONDITIONS

MAINS ON (CONTINUES ON) / MAINS FUSE BLOWN (BLINKING)
BATTERY CHARGING / CHARGED
INVERTER ON
BATTERY LOW
OVER LOAD/SHORT CIRCUIT

## OTHER FEATURES

INVERTER ON/OFF SWITCH SENSING
MAINS FUSE BLOWN SENSING
AUTOMATIC SWITCHING FROM MAINS TO INVERTER AND VICE VERSA.
INDICATION OF SYSTEM PROTECTION CONDITIONS WITH DIFFERENT TONE THROUGH BUZZER

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