## **STUA101 SERIES**

## **100W U-Bracket Power Supply for I.T. Equipment**



- Wide Input Voltage 90 to 260 VAC, 47 to 63Hz
- Single Output
- Output voltage available from 3 to 50 VDC
- Input Surge Current and Overload protection
- Over Voltage Protection (Crowbar Design)
- Class I Insulation
- Active Power Factor Correction
- Input connector mates with Molex housing 09-50-3031 and Molex 2478 series crimp terminal
- Output connector mates with Molex housing 09-50-3131 and Molex 2478 series crimp terminal
- Size: 3.2"x5"x1.38"

### 2 Year Warranty

# Approvals: Rons

Single Output										
Product Number	Output Voltage	Output Current	Total Regulation	Maximum Output Power						
STUA101-S01	3 - 5 VDC	18.00 - 10.80 A	5%	54W						
STUA101-S02	5 - 6 VDC	14.00 - 11.66 A	5%	70W						
STUA101-S03	6 - 9 VDC	13.33 - 8.88 A	5%	80W						
STUA101-S04	9 - 11 VDC	11.11 - 9.09 A	5%	100W						
STUA101-S05	11 - 13 VDC	9.09 - 7.69 A	3%	100W						
STUA101-S06	13 - 16 VDC	7.69 - 6.25 A	3%	100W						
STUA101-S07	16 - 21 VDC	6.25 - 4.76 A	3%	100W						
STUA101-S08	21 - 27 VDC	4.76 - 3.70 A	2%	100W						
STUA101-S09	27 - 33 VDC	3.70 - 3.03 A	2%	100W						
STUA101-S10	33 - 40 VDC	3.03 - 2.50 A	2%	100W						
STUA101-S11	40 - 50 VDC	2.50 - 2.00 A	2%	100W						

Electrical Characteristics									
Parameter	Test Conditions	Min.	Тур.	Max.	Unit				
Input Voltage	Voltage Operating Voltage			260	VAC				
Input Frequency		47		63	Hz				
Power Factor Correction	Io = Full load, Vin = 90-260VAC	0.95	0.91	1.0					
Output Power Range	Vin=90 to 264VAC	0		100	W				
Input Current (Low Line)	Io=Full load, Vin=115VAC			2.0	А				
Input Current (High Line)	Io=Full load, Vin=230VAC			1.0	А				
Low Line Inrush Current	lo=Full load, 25°C, Cool start, Vin=115VAC		44	50	А				
High Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=230VAC		85	100	А				
Efficiency	Io=Full Load, Vin=230VAC	70	80	85	%				
Line Regulation	Io=Full Load		0.5	1	%				
Load Regulation	Vin=230VAC		3	5	%				
Over Voltage Protection		112		132	%				
Over Current Protection		110		150	%				
Transient Response	Io=Full Load to Half Load, Vin=100VAC			4	mS				
Hold-Up Time	Io=Full Load, Vin=110VAC	16			mS				
Start Up Time	Io=Full Load, Vin=100VAC	0.3	1	2	S				
* Ripple & Noise (Peak to Peak)	Full Load, Vin=90VAC		0.5	1	%				
Safety Ground Leakage Current	Io=Full Load, Vin=240VAC		0.4	0.75	mA				
Temperature Coefficient	All output	-0.04		0.04	%/°C				

\* Note: The Ripple & Noise which is under 3.3VDC at 2% max

Conditions											
Parameter	Test Conditions	Min.	Тур.	Max.	Unit						
Operating Temperature		0	50	70	°C						
Storage Temperature		-40		85	°C						
Relative Humidity		5		95	%						
Operating Temperature at 25°C, Calculated	0.1M			Hrs							
De-rate linearly from 100% load at 50°C to 5	0% load at 70°C										

### **Approvals and Compliance**

Parameter	Test Conditions	Min.	Unit
Dielectric Withstanding Voltage for Primary to secondary	Primary to secondary	4242	VDC
Dielectric Withstanding Voltage for Primary to Ground	Primary to ground	2121	VDC
Isolation Resistance	Test Voltage=500VDC	50	MΩ
EMI requirements for CISPR-22	Vin=220VAC	В	CLASS
EMI requirements for FCC PART-15	Vin=110VAC	В	CLASS

### Mechanical

PIN CHART													
PIN MODEL	1	2	3	4	5	6	7	8	9	10	11	12	13
STUA101-SXX-13pin	OUT	OUT	OUT	OUT	OUT	OUT	RTN	RTN	RTN	RTN	RTN	RTN	N/C

#### Note:

- 1. Dimensions are shown in inches or mm.
- 2. Weight: 475gs approx.
- Input connector mates with Molex housing 09-50-3031 and Molex 2478 series crimp terminal.
- 4. Output connector mates with Molex housing 09-50-3131 and Molex 2478 series crimp terminal

