

## STFA31 SERIES



## 30W Open Frame Power Supply for I.T. Equipment

- Wide Input Voltage 90 to 264 VAC, 47 to 63Hz
- Single Output
- Output voltage available from 5 to 48 VDC
- Molex Connector (2 pins)
- Input connector mates with Molex housing 09-50-3031 and Molex 2478 series crimp terminal
- Output connector mates with Molex housing 09-50-3041 and Molex 2478 series crimp terminal
- Input Surge Current, Over Voltage and Overload Protection
- All units are 100% burned in and tested
- Size: 1.5 "x4"x 0.83"

2 Year Warranty

Approvals:      

### Single Output

Model Number	Output Voltage	Output Current	Total Regulation	Maximum Output Power
STFA31-S02	5 ~ 6 VDC	4.00 - 3.33 A	5%	20W
STFA31-S03	6 ~ 8 VDC	3.83 - 2.87 A	5%	23W
STFA31-S04	8 ~ 11 VDC	3.38 - 2.45 A	5%	27W
STFA31-S05	11 ~ 13 VDC	2.73 - 2.30 A	5%	30W
STFA31-S06	13 ~ 16 VDC	2.30 - 1.88 A	5%	30W
STFA31-S07	16 ~ 21 VDC	1.88 - 1.43 A	5%	30W
STFA31-S08	21 ~ 27 VDC	1.43 - 1.11 A	3%	30W
STFA31-S09	27 ~ 33 VDC	1.11 - 0.91 A	3%	30W
STFA31-S10	33 ~ 40 VDC	0.91 - 0.75 A	3%	30W
STFA31-S11	40 ~ 48 VDC	0.75 - 0.62 A	3%	30W

### Electrical Characteristics

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Input Voltage	Operating Voltage	90		264	VAC
Input Frequency		47		63	Hz
Output Power Range	Vin=90 to 264VAC	0		30	W
Input Current (Low Line)	Io=Full load, Vin=115VAC			0.8	A
Input Current (High Line)	Io=Full load, Vin=230VAC			0.5	A
Low Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=115VAC		12	15	A
High Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=230VAC		26	30	A
Efficiency	Io=Full Load, Vin=230VAC	78	84	88	%
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	12			mS
Start Up Time	Io=Full Load, Vin=100VAC			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
Power Consumption	No Load, Vin=240VAC			0.3	W

### Conditions

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Operating Temperature		0	40	70	°C
Storage Temperature		-40		85	°C
Relative Humidity		5		95	%
Operating Temperature at 25°C, Calculated per MIL-HDBK-217F		0.1M			Hrs
De-rate linearly from 100% load at 40°C to 50% 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	B	CLASS
EMI requirements for FCC PART-15	Vin=110VAC	B	CLASS

## Mechanical

### PIN CHART

PIN	1	2	3	4
MODEL				
STFA31-SXX	OUT	OUT	RTN	RTN

### Note:

1. Dimensions are shown in inches or mm.
2. Weight: 85gs approx.
3. Input connector mates with Molex housing 09-50-3031 and Molex 2478 series crimp terminal.
4. Output connector mates with Molex housing 09-50-3041 and Molex 2478 series crimp terminal

