

# SUU81 SERIES

## 80W U-bracket Switching Power Supplies For I.T.E.

### Description:

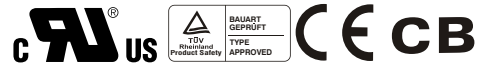
The SUU81 series of compact, open frame constructed, AC/DC switching mode power supplies provide 80 Watts of continuous output power. They are suited for use in based systems, portable equipments and many other applications. All models meet FCC Part-15 class B and CISPR-22 class B emission Limits and are designed to comply with UL/c-UL (UL 60950-1:2<sup>nd</sup> Edition), TUV/Bauart (EN 60950-1:2<sup>nd</sup> Edition) and new CE requirements. All units are 100% burned in and tested.

### Features:

- Wide Operating Voltage 90 to 260 VAC, 47 to 63 Hz
- Internal EMI filter
- Dual and Triple Output
- 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
- Input Surge Current, Over Voltage and Over Load protection
- Over Voltage Protection (Crowbar Design)
- Active Power Factor Correction
- Class I
- 2 year warranty



### Safety Approvals :



### Electrical Characteristics:

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Vin	Safety Approvals Input Voltage Range		100		240	VAC
	Operate Voltage Range		90		260	VAC
fin	Input Frequency		47		63	Hz
PF	Power Factor Correction	Io=Full load, Vin=90~260VAC	0.95	0.97	1.0	
Po	Output Power Range	Vin=90 to 260 VAC	0		80	W
Vo	Output Voltage Range		See rating Chart			V
Io	Output Current Range		See rating Chart			A
Iil	Input Current (Low Line)	Io=Full load, Vin=115VAC			1.2	A
Iih	Input Current (High Line)	Io=Full load, Vin=230VAC			0.6	A
Irl	Low Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=115VAC		39	45	A
Irh	High Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=230VAC		78	90	A
Eff	Efficiency	Io=Full load, Vin=230VAC	70	80	85	%
REG-i	Line Regulation	Io=Full load		0.5	1	%
REG-o	Load Regulation	Vin=230VAC		5	7	%
OVP	Over Voltage Protection		112		132	%
OCP	Over Current Protection		110		150	%
Ttr	Time of Transient Response	Io=Full load to Half Load, Vin=100VAC			4	mS
Thold	Hold-Up Time	Io=Full load, Vin=110VAC	16			mS
Ts	Start Up Time	Io=Full load, Vin=100VAC			2	S
* Vp-p	Ripple & Noise (Peak to Peak)	Full load, Vin=90VAC		0.5	1	%
Ilk	Safety Ground Leakage Current	Io=Full load, Vin=240VAC		0.5	0.75	mA
TC	Temperature Coefficient	All output	-0.04		0.04	%/°C

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

### Environmental :

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
ToPer	Operating Temperature		0	50	70	°C
Tstg	Storage Temperature		-40		85	°C
Ho	Operating Humidity		0		95	%
Hr	Storage Humidity		0		75	%
MTBF	Operating Temperature at 25°C, Calculated per MIL-HDBK-217F		0.1M			Hrs
Pd	Derate linearly from 100% load at 50°C to 50% load at 70°C					

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### Safety Specifications:

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Vps	Dielectric Withstanding Voltage for Primary to secondary	Primary to secondary	4242			VDC
Vpg	Dielectric Withstanding Voltage for Primary to Ground	Primary to ground	2121			VDC
Ris	Isolation Resistance	Test Voltage=500VDC	50			M Ω
CISPR	EMI requirements for CISPR-22	Vin=220VAC	B			CLASS
FCC	EMI requirements for FCC PART-15	Vin=110VAC	B			CLASS

### Output Voltage And Current Rating Chart ( Multi Output ) :

Model Number	Output#1				Output#2				Output#3				Maximum Output Power
	Vonom	Iomin	Iomax	Regmax	Vonom	Iomin	Iomax	Regmax	Vonom	Iomin	Iomax	Regmax	
SUU81-200	+3.3V	1.2A	12A	7%	+12V	0.5A	5A	5%					80W
SUU81-201	+5V	1.2A	12A	5%	+12V	0.5A	5A	5%					80W
SUU81-202	+5V	1.2A	12A	5%	+15V	0.5A	5A	5%					80W
SUU81-203	+5V	1.2A	12A	5%	+24V	0.3A	3A	5%					80W
SUU81-204	+3.3V	1.2A	12A	7%	+5V	0.5A	5A	5%					64.6W
SUU81-215	+5V	1.2A	12A	5%					-24V	0A	2A	5%	80W
SUU81-300	+3.3V	1.2A	12A	7%	+12V	0.5A	5A	5%	-12V	0A	0.8A	5%	80W
SUU81-300-1	+3.3V	1.2A	12A	7%	+12V	0.5A	5A	5%	+12V	0A	0.8A	5%	80W
SUU81-301	+5V	1.2A	12A	5%	+12V	0.5A	5A	5%	-5V	0A	0.8A	5%	80W
SUU81-301-1	+5V	1.2A	12A	5%	+12V	0.5A	5A	5%	+5V	0A	0.8A	5%	80W
SUU81-302	+5V	1.2A	12A	5%	+12V	0.5A	5A	5%	-12V	0A	0.8A	5%	80W
SUU81-302-1	+5V	1.2A	12A	5%	+12V	0.5A	5A	5%	+12V	0A	0.8A	5%	80W
SUU81-303	+5V	1.2A	12A	5%	+15V	0.5A	5A	5%	-15V	0A	0.8A	5%	80W
SUU81-303-1	+5V	1.2A	12A	5%	+15V	0.5A	5A	5%	+15V	0A	0.8A	5%	80W
SUU81-304	+5V	1.2A	12A	5%	+24V	0.3A	3A	5%	-24V	0A	0.8A	5%	80W
SUU81-304-1	+5V	1.2A	12A	5%	+24V	0.3A	3A	5%	+24V	0A	0.8A	5%	80W
SUU81-305	+5V	1.2A	12A	5%	+24V	0.3A	3A	5%	-12V	0A	0.8A	5%	80W
SUU81-305-1	+5V	1.2A	12A	5%	+24V	0.3A	3A	5%	+12V	0A	0.8A	5%	80W
SUU81-306	+3.3V	1.2A	12A	7%	+12V	0.5A	5A	5%	-5V	0A	0.8A	5%	80W
SUU81-306-1	+3.3V	1.2A	12A	7%	+12V	0.5A	5A	5%	+5V	0A	0.8A	5%	80W
SUU81-307	+5V	1.2A	12A	5%	+10V	0.5A	5A	5%	-10V	0A	1.0A	5%	80W
SUU81-307-1	+5V	1.2A	12A	5%	+10V	0.5A	5A	5%	+10V	0A	1.0A	5%	80W
SUU81-308	+3.3V	1.2A	12A	7%	+5V	0.5A	5A	5%	-12V	0A	1.0A	5%	76.6W
SUU81-308-1	+3.3V	1.2A	12A	7%	+5V	0.5A	5A	5%	+12V	0A	1.0A	5%	76.6W

### PIN CHART

MODEL	PIN	1	2	3	4	5	6	7	8	9	10	11	12	13
SUU81-215-13PIN	N/C	N/C	Vo1	Vo1	Vo1	Vo1	COM	COM	COM	Vo3	COM	COM	N/C	
SUU81-2XX-13PIN	Vo2	Vo2	Vo1	Vo1	Vo1	Vo1	COM	COM	COM	N/C	COM	COM	N/C	
SUU81-3XX-13PIN	Vo2	Vo2	Vo1	Vo1	Vo1	Vo1	COM	COM	COM	Vo3	COM	COM	N/C	

Note: Vo1:Output#1 Vo2:Output#2 Vo3:Output#3

### Note:

1. Dimensions are shown in mm.
2. Weight: 480gs approx.
3. Input connector mates with Molex housing 09-50-3031 and Molex 2478 series crimp terminal.
4. Output connector mates with Molex housing 09-50-3131 and Molex 2478 series crimp terminal.

### Mechanical Specifications :

