

SMUA153 SERIES
150W U-Bracket Power Supply for Medical Equipment


- Wide Operating Voltage, 90 to 260 VAC, 47 to 63 Hz
- Single Output
- Crowbar Mode Over Voltage Protection
- Input to Output : 2MOPP
- High ESD immunity
- Suitable professional healthcare facility
- Active Power Factor Correction
- Internal EMI filter

5 Year Warranty

Approvals:

Single Output

Model Number	Output Voltage	Max. Output Current	Total Regulation	Maximum Output Power
SMUA153-S05	12 VDC	12.5 A	±5%	150W
SMUA153-S08	24 VDC	6.25 A	±3%	150W

Electrical Characteristics

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Safety Approvals Input Voltage Range	Safety Approval & Specification in Label	100		240	VAC
Operate Voltage Range		90		260	VAC
Input Frequency	Sine wave	47		63	Hz
Power Factor Correction		0.95		1	
Output Power Range	See Rating Chart			150	W
Low Line Input Current	Full load, Vin=100VAC	1.74	1.76		A
High Line Input Current	Full load, Vin=240VAC	0.71	0.73		A
Low Line Input Inrush Current	Full load, 25°C, Cool start, Vin=100VAC			50	A
High Line Input Inrush Current	Full load, 25°C, Cool start, Vin=240VAC			120	A
Safety Ground Leakage Current	Vin=240VAC, Fi=60Hz			0.1	mA
Efficiency	Full Load, Vin=230VAC	84		86	%
Line Regulation	Full Load, Vin=100~120VAC or 200~240VAC	0.5		1	%
Over Voltage Protection		112		132	%
Over Load Protection	Recovers automatically after fault condition is removed	110		150	%
Time of Transient Response	Io=Full Load to Half Load, Vin=110VAC			4	ms
Hold-Up Time	Full Load, Vin=110VAC			20	ms
Start Up Time	Full Load, Vin=100~240VAC			3	s
Insulation Resistance		50			MΩ
Ripple & Noise (Peak to Peak)				1	%
Temperature Coefficient	All output			±0.04	%/°C
Dielectric Withstanding Voltage(P-S)	Primary to Secondary, limit current<10mA			4000	VAC
Dielectric Withstanding Voltage(P-G)	Primary to PE, limit current<10mA			1500	VAC
EMC Emission	Compliance to EN55011(CISPR11), EN60601-1-2	B			Class

Environmental

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Operating Temperature	Derate linearly from 100% load at 50 to 50% load at 70	-10		70	°C
Storage Temperature	10~95% RH	-40		85	°C
Operating Humidity	non-condensing	0		95%	RH
Storage Humidity		0		95%	RH
Electro Static Discharge	Air Discharge, IEC61000-4-2			15	KV
Electro Static Discharge	Contact Discharge, IEC61000-4-2			8	KV
Mean Time Between Failure	Operation Temperature at 25 J, Calculated per MIL-HDBK-217F	200K			h
Operating Altitude (Elevation)	All Condition			3000	m
Vibration	10~500Hz, 10min./1cycle, 60min.each along X, Y, Z axes			5	G
Surge Voltage	Line-Neutral			1	KV
Surge Voltage	Line-PE & Neutral-PE			2	KV

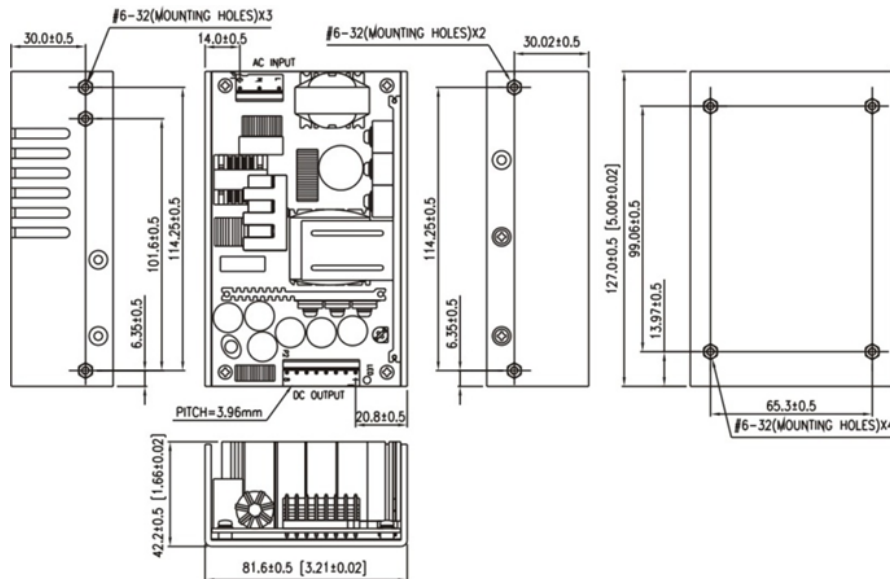
Mechanical Diagram and PIN Out

PIN Out Chart

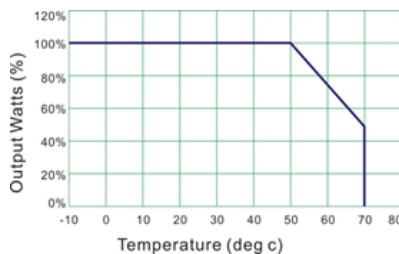
MODEL	PIN	1	2	3	4	5	6	7	8
SMUA153-SXX	Vout	Vout	Vout	Vout	RNT	RNT	RNT	RNT	RTN

Note:

1. Dimensions are shown in mm.
2. Weight: 560g approx.
3. Input connector mates with Molex housing 09-50-3051 and Molex 2478 series crimp terminal.
4. Output connector mates with Molex housing 09-50-3081 and Molex 2478 series crimp terminal or DINKLE#DT-2GN-B01W-04P and DINKLE#ESK750V-04P.



Derating Chart



1. Operating Temperature: -10 to 70°C
2. Derate linearly from 100% load at 50°C to 50% load at 70°C