

SPU65 series

80W Desk Top Type
I.T.E. Power Supplies

Features:

- Wide Operating Voltage 90 to 264 VAC, 47 to 63 Hz
- IEC-320-C14 Input Inlet
- Single to Quad Output
- Optional Output Connector (See page appendix)
- Over Voltage Protection (Crowbar Design)
- DoE 6
- Class I
- 3 year warranty



Electrical Characteristics:

Vin	Safety Approvals Input Voltage Range		100~240VAC
	Operate Voltage Range		90~264VAC
fin	Input Frequency		47~63Hz
Po	Output Power Range		See rating chart
Vo	Output Voltage Range		See rating chart
Io	Output Current Range		See rating chart
Iil	Input Current (Low Line)	Io=Full load, Vin=100VAC	1.9A
Iih	Input Current (High Line)	Io=Full load, Vin=240VAC	1.9A
Ir	Low Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=115VAC	30A (max.)
	High Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=230VAC	65A (max.)
Eff	Efficiency	Io=Full Load, Vin=230VAC	75~90%
REG-i	Line Regulation	Io=Full Load	0.5~1%
REG-o	Load Regulation	Vin=230VAC	3~7%
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	4mS (max.)
Th	Hold-Up Time	Io=Full Load, Vin=110VAC	12mS (min.)
Ts	Start Up Time	Io=Full Load, Vin=100VAC	2S (max.)
Vp-p	Ripple & Noise(Peak to Peak)	Full Load, Vin=90VAC	1% (max.)
Ilk	Safety Ground Leakage Current	Vin=240VAC/60Hz	0.75mA (max.)
TC	Temperature Coefficient	All output	±0.04%/°C
Pno	No-Load Power Consumption	No load, Vin=230VAC	See rating chart
Vps	Dielectric Withstanding Voltage for Primary to secondary	Primary to secondary	4242VDC (min.)
Vpg	Dielectric Withstanding Voltage for Primary to PE	Primary to PE	2414VDC (min.)
Ris	Isolation Resistance	Test Voltage=500VDC	50MΩ (min.)

Application:

- POS System
- AV Equipment
- Industrial PC
- Note PC
- Charger

Safety Approvals:



UL/c-UL(UL 60950-1:2nd Edition)
TUV/GS(EN 60950-1:2nd Edition)

The SPU65-105(12V),
SPU65-107(16V),
SPU65-201 are
available on KC mark
(Korea Certification).

The SPU65-109 is
available on NRCan mark.

Environmental

To	Operating Temperature	See derating curve
Ts	Storage Temperature	-40~85°C
Ho	Operating Humidity	0~95%
Hr	Storage Humidity	0~95%
MTBF	Operating Temperature at 25°C, Calculated per MIL-HDBK-217F	0.1M Hrs (min.)
Pd	Models without Level V : Derate linearly from 100% load at 25°C to 50% load at 70°C	
	Models comply with Level V : Derate linearly from 100% load at 40°C to 50% load at 70°C	



Output Voltage And Current Rating Chart (Single Output) :

Model Number	Output Voltage	Output Current	Total Regulation	Max. Output Power	Pno (max.)	DoE 6
SPU65-101	3 ~ 5 VDC	16.60 ~ 10.00 A	7%	50W	0.3W	
SPU65-102	5 ~ 6 VDC	13.00 ~ 10.80 A	7%	65W	0.3W	
SPU65-103	6 ~ 8 VDC	11.60 ~ 8.70 A	5%	69.6W	0.3W	
SPU65-104	8 ~ 11 VDC	9.37 ~ 6.81 A	5%	75W	0.3W	
SPU65-105	11 ~ 13 VDC	6.66 ~ 6.15 A	5%	80W	0.5W	Ⓢ
SPU65-106	13 ~ 16 VDC	6.15 ~ 5.00 A	5%	80W	0.5W	Ⓢ
SPU65-107	16 ~ 21 VDC	5.00 ~ 3.80 A	5%	80W	0.5W	Ⓢ
SPU65-108	21 ~ 27 VDC	3.80 ~ 2.96 A	5%	80W	0.5W	Ⓢ
SPU65-109	27 ~ 33 VDC	2.96 ~ 2.42 A	3%	80W	0.5W	Ⓢ
SPU65-110	33 ~ 40 VDC	2.42 ~ 2.00 A	3%	80W	0.5W	Ⓢ
SPU65-111	40 ~ 48 VDC	2.00 ~ 1.66 A	3%	80W	0.5W	Ⓢ

The SPU65-105-11V: 73.26W(max.)

Output Voltage And Current Rating Chart (Multi Output) :

Model Number	Output #1				Output #2				Output #3				Output #4				Max. Output Power	Pno (max.)
	Vonom	lomin	lomag	Regmax	Vonom	lomin	lomag	Regmax	Vonom	lomin	lomag	Regmax	Vonom	lomin	lomag	Regmax		
SPU65-200	+3.3V	0.7A	7A	7%	+12V	0.55A	2.75A	5%									56.1W	3W
SPU65-201	+5V	0.7A	7A	5%	+12V	0.6A	3A	5%									65W	3W
SPU65-202	+5V	1.4A	7A	5%	+15V	0.6A	3A	5%									65W	3W
SPU65-203	+5V	1.4A	7A	5%	+24V	0.3A	2A	5%									65W	3W
SPU65-204	+3.3V	1.4A	7A	7%	+5V	0.6A	3A	5%									38.1W	3W
SPU65-215	+5V	1.4A	7A	5%					-24V	0.4A	2A	5%					65W	3W
SPU65-300	+3.3V	1.4A	7A	7%	+12V	0.6A	3A	5%	-12V	0.1A	0.8A	5%					65W	3W
SPU65-301	+5V	0.6A	6A	5%	+12V	0.3A	3A	5%	-5V	0A	0.8A	5%					65W	3W
SPU65-302	+5V	0.6A	6A	5%	+12V	0.3A	3A	5%	-12V	0A	0.8A	5%					65W	3W
SPU65-303	+5V	0.6A	6A	5%	+15V	0.6A	3A	5%	-15V	0A	0.8A	5%					65W	3W
SPU65-304	+5V	0.7A	7A	5%	+24V	0.2A	2A	5%	-24V	0A	0.8A	5%					65W	3W
SPU65-305	+5V	0.6A	6A	5%	+24V	0.2A	2A	5%	-12V	0A	0.8A	5%					65W	3W
SPU65-306	+3.3V	0.7A	7A	7%	+12V	0.6A	3A	5%	-5V	0A	0.8A	5%					63.1W	3W
SPU65-403	+5V	0.6A	3.5A	5%	+24V	0.1A	1.5A	5%	+12V	0A	0.25A	5%	-12V	0A	0.15A	5%	65W	3W

SPU65-101~106 are required to use AWG#16X5C/4FT output cable.

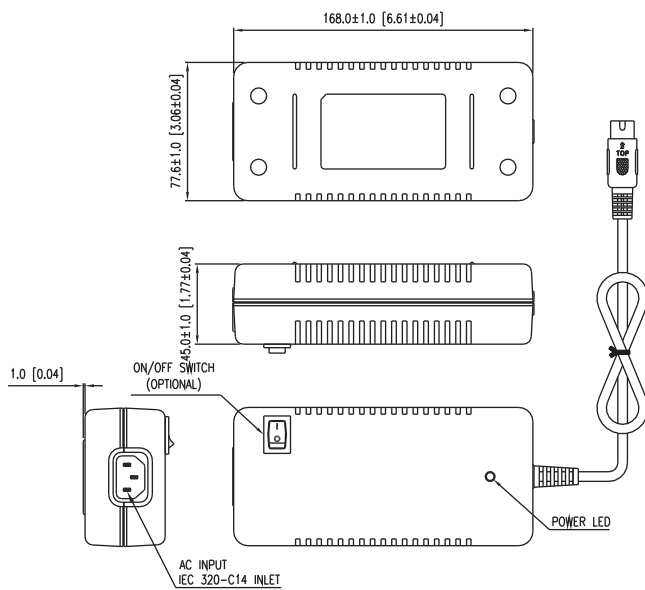
SPU65-107 are required to use AWG#18X2C/4FT output cable.

SPU65-108~109 are required to use AWG#18X2C/6FT output cable.

SPU65-110~111 are required to use AWG#20X2C/6FT output cable.

The electrical characteristics will be changed by modified output cable.

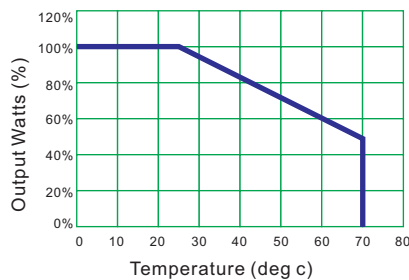
Mechanical Specifications:



Note:

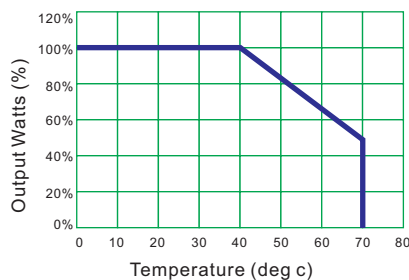
1. Dimensions are shown in mm.
2. Weight: 450-700gs approx.
3. Optional output connector: See page Appendix.

Derating Curve : (without Level V)



1. Operating Temperature: 0 to 70°C
2. Derate linearly from 100% load at 25°C to 50% load at 70°C

Derating Curve : (comply with Level V)



1. Operating Temperature: 0 to 70°C
2. Derate linearly from 100% load at 40°C to 50% load at 70°C