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## Features

- Universal AC input / full range
- 3 pole AC inlet IEC320-C14, class I power unit
- No load power consumption <0.3 W
- Energy efficiency level VI
- Comply with EISA 200//DoE
- Protections: Short circuit / overload / over voltage
- Fully enclosed plastic case
- -20 ~ +70 °C working temperature
- LED indicator for power on
- Dual output available (optional)

## A-CUBE-PSU



## Specification

Order no.	A-CUBE-PSU		
Safety model no.	GP25A13D		
Dc voltage note.2	5 V	12 V	-12 V
Rated set current	2.5 A	1 A	0.3 A
Current range	0.5 ~ 2.5 A	0.2 ~ 1 A	0.1 ~ 0.3 A
Rated power	28 W		
Output	Ripple & noise (max.) note.3	60 mVp-p	120 mVp-p
	Voltage tolerance note.4	±5.0%	-5.0% ~ +5.0%
	Line regulation note.5	±1.0%	±1.0%
	Load regulation note.6	±5.0%	±3.0%
	Setup, rise, hold up time	800 ms, 50 ms, 20 ms / 30 VAC 1200 ms, 50 ms, 16 ms / 115 VAC at full load	
Input	Voltage range note.7	90 ~ 264 VAC	135 ~ 370 VDC
	Frequency range	47 ~ 63 Hz	
	Efficiency (typ.)	80%	
	AC current	0.8 A / 100 VAC	0.4 A / 230 VAC
	Inrush current (max.)	cold start 30 A / 115 VAC	60 A / 230 VAC
	Leakage current (max.)	0.75 mA / 240 VAC	

# A-CUBE-PSU

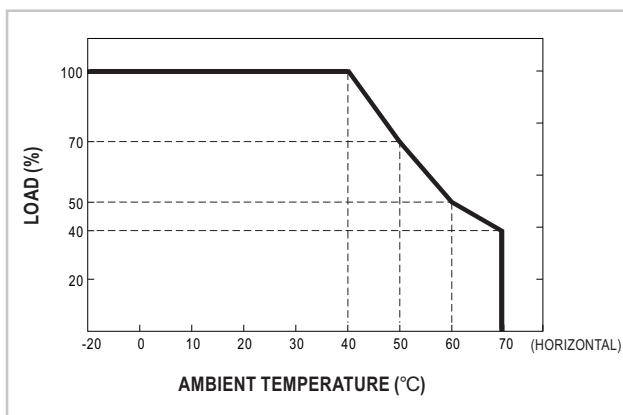
Order no.		A-CUBE-PSU		
Protection	Overload	110 ~ 160% rated output power		
		Protection type: Hiccup mode, recovers automatically after fault condition is removed		
Protection	Over voltage	110 ~ 140% rated output voltage		
		Protection type: clamp by zener diode (5 V only), output short		
Environment	Working temp.	-20 ~ +70°C (Refer to "Derating curve")		
	Working humidity	20% ~ 90% RH non-condensing		
	Storage temp., humidity	-20 ~ +85°C, 10 ~ 95% RH non-condensing		
	Temp. coefficient	±0.03% / °C (-20 ~ 40°C)		
	Vibration	10 ~ 500 Hz, 2 G 10 min./1cycle, period for 60 min. each along X, Y, Z axes		
Safety & EMC (Note. 8)	Safety standards	IEC60950-1, UL60950-1, CSA22.2, EN60950-1 approved		
	Withstand voltage	I/P-O/P:4242VDC , I/P-FG:2121VDC		
	Isolation resistance	I/P-O/P,I/P-FG:100 M Ohms / 500 VDC / 25°C/ 70% RH		
	EMC emission	<b>Parameter</b>	<b>Standard</b>	<b>Test Level / Note</b>
		Conducted emission	EN55032 (CISPR32), FCC PART 15/ CISPR22, CAN ICES-3(B)/NMB-3(B)	Class B
		Radiated emission	EN55032 (CISPR32), FCC PART 15/ CISPR22, CAN ICES-3(B)/NMB-3(B)	Class B
		Harmonic current	EN61000-3-2	Class A
		Voltage flicker	EN61000-3-3	—
	Emc immunity	<b>Parameter</b>	<b>Standard</b>	<b>Test Level / Note</b>
		ESD	EN61000-4-2	Level 3, 8 KV air; Level 2, 4 KV contact
RF field susceptibility		EN61000-4-3	Level 2, 3 V/m	
EFT bursts		EN61000-4-4	Level 2, 1 KV	
Surge susceptibility		EN61000-4-5	Level 3, 1 KV/L-N, 2 KV/L, N-PE	
Conducted susceptibility		EN61000-4-6	Level 2, 3 V	
Voltage dips, interruption		EN61000-4-11	>95% dip 0.5 periods, 30% dip 25 periods, >95% interruptions 250 periods	

# A-CUBE-PSU

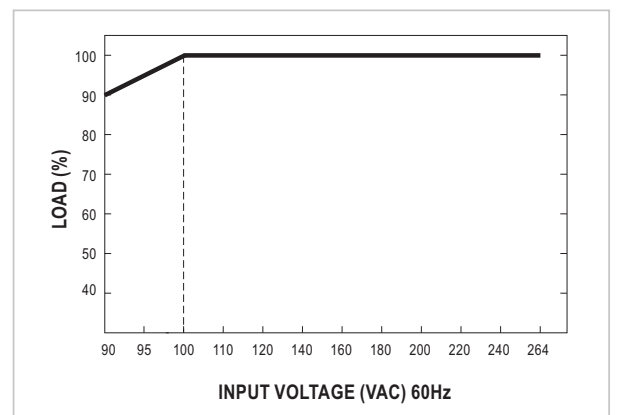
Order no.	A-CUBE-PSU	
Others	Life	3 years : 100% load 40°C, 8 hours /day
	MTBF	620 K hrs min. MIL-HDBK-217F (25°C)
	Dimension	107.5*67*36 mm (L*W*H)
	Packing	0.3 kg ; 54 pcs/ 20 kg / carton
Connector	Plug	see page 4
	Cable	see page 4

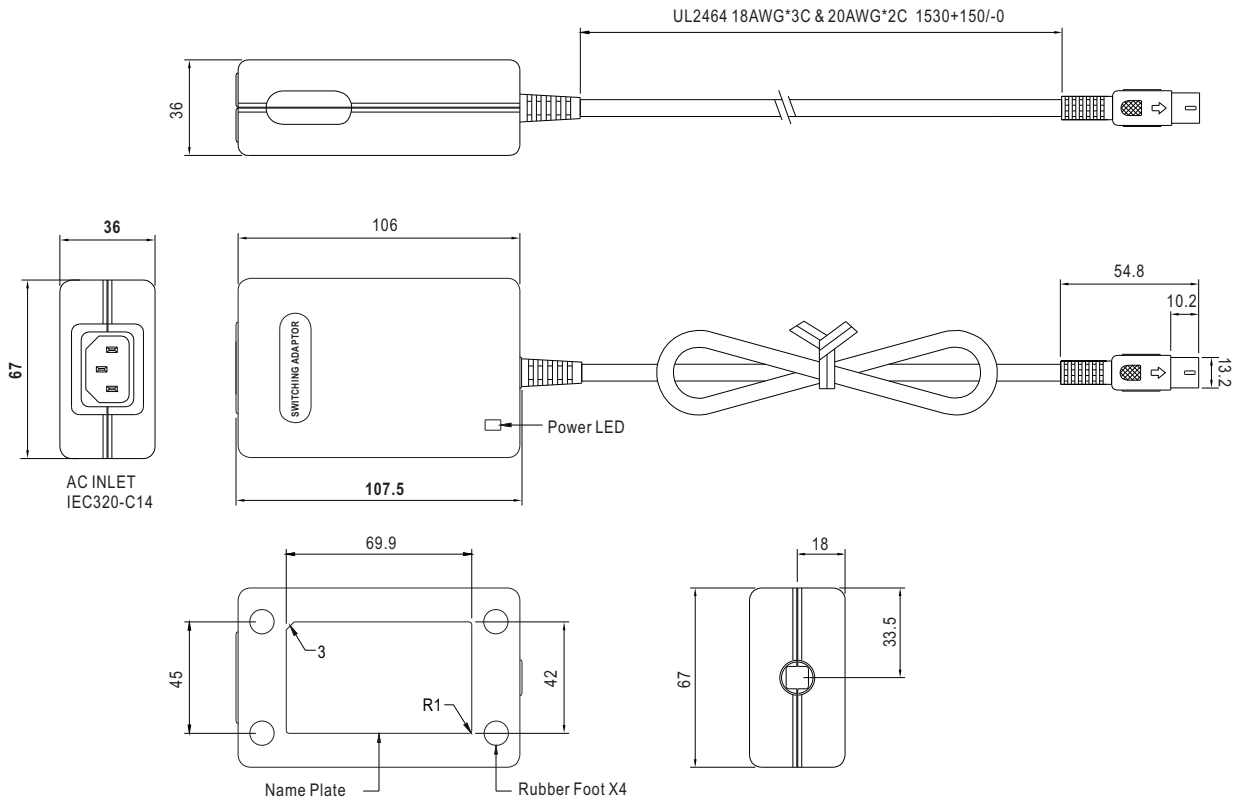
- Note
1. All parameters are specified at 230 VAC input, rated load, 25°C 70% RH ambient.
  2. DC voltage: the output voltage set at point measure by plug terminal & 50% load.
  3. Ripple & noise are measured at 20 MHz by using a 12" twisted pair terminated with a 0.1µf & 47µf capacitor.
  4. Tolerance: includes set up tolerance, line regulation, load regulation.
  5. Line regulation is measured from low line to high line at rated load.
  6. When measured between the light load (20% of rated load) and full load, the load regulation is within ±5% whereas the cross regulation is within ±15%.
  7. Derating may be needed under low input voltages. Please check the static characteristics for more details.
  8. The power supply is considered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies".

## Derating Curve



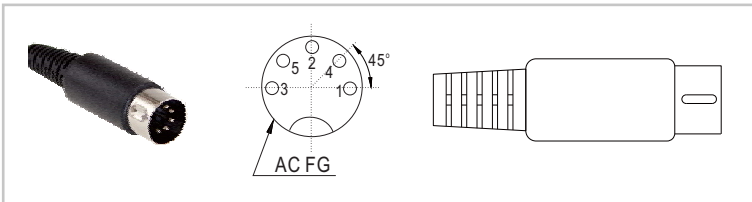
## Static Characteristics





DC Output Plug

DIN 5 Pin (male)



Standard plug: R1B

Pin Assignment	
PIN No.	Output
1	COM
2	COM
3	+5 VDC
4	-Vout
5	+Vout

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