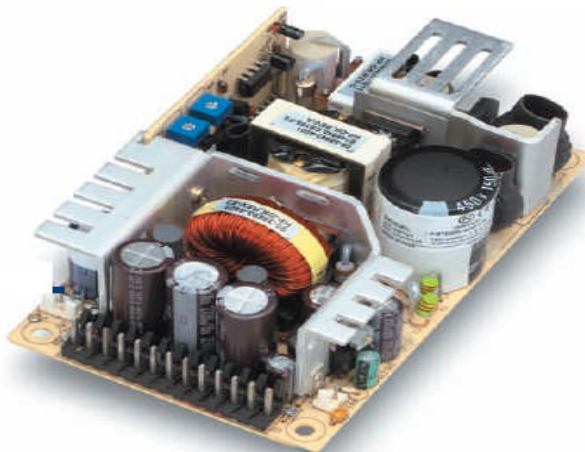


HPS85 Series

85W single, dual, triple & quad output AC/DC Power Supplies

EOS Power's Versatile brand HPS85 power supplies are single, triple and quad output AC/DC fixed frequency (70kHz) power supplies for scores of electronic product applications including LAN/WAN, industrial, multimedia, computing and general electronics products. All popular DC outputs are supported to include 3.3, 5, 12, 15, 24 and 48 volts. Housed in a industry standard 5.0" x 3.0" x 1.663" package the HPS85 is ideal for designer's seeking a robust, plug and play power supply solution from a proven US supplier.

With the HPS85 open frame power supply output power is 55 watts convection cooled and up to 85 watts with 20CFM air flow. HPS85 family has universal 90-264v AC inputs and supports 120-370v DC inputs. Efficiency rating is 75%. The HPS85 is ideal for 1U (1.75") height and smaller applications where space is a premium and thermal management is key. Metal cover kit is optional. HPS85 family is RoHs compliant and our factory is ISO 14001 environmentally approved.



Features :

- > Low cost 85W industry standard package
- > EN55022-B. FCC Part 15 level B
- > UL, c-UL and NEMKO safety approvals
- > Quad output in 3x5x4" package
- > 3.3V output model
- > Fixed switching frequency

Model Number	Output	Output Voltage	Output current Max ¹ Fan ² Peak ³		
HPS85-1001	V1	3.3V	11.0A	17.0A	17.0A
HPS85-1002	V1	5V	11.0A	17.0A	17.0A
HPS85-1003	V1	12V	4.6A	7.1A	7.1A
HPS85-1004	V1	15V	3.7A	5.7A	5.7A
HPS85-1005	V1	24V	2.3A	3.6A	3.6A
HPS85-1006	V1	48V	1.14A	1.8A	1.8A
HPS85-2001	V1 V2	5V 12V	7.0A 3.5A	8.0A 4.0A	8.0A 4.0A
HPS85-3001	V1 V2 V3	5V 12V -12V	7.0A 2.5A 0.3A	8.5A 3.0A 0.5A	8.5A 3.0A 0.5A
HPS85-3002	V1 V2 V3	5V 15V -15V	7.0A 2.2A 0.3A	8.5A 2.5A 0.5A	8.5A 2.5A 0.5A
HPS85-4001	V1 V2 V3 V4	3.3V 5V 12V -12V	8.0A 7.0A 2.0A 0.4A	10.0A 8.0A 2.8A 0.4A	10.0A 8.0A 2.8A 0.4A
ACC-HPS85-3 Metal cover kit accessory					

1. Continuous output power limited to 40 W w/ convection cooling
2. Continuous output power is limited to 50W w/ 6CFM fan cooling
3. Peak loading can be applied for 60 secs with <5% duty cycle

MECHANICAL SPECIFICATIONS	
AC Input Connector J12	Housing Molex 09-50-8031
DC Output connector J3	Single: Molex 09-50-8111 Dual: Molex 09-50-8121 Triple / Quad: Molex 09-50-8131
Safety Earth J1	Amp 826708-1
5V Sense J4	Amp 640440-2
3.3V Sense J5	Amp 640440-2
Fan 12V J8	Amp 640440-2
Weight	20 oz (400g)
Size	5.0" x 3.0" x 1.663"

ENVIRONMENTAL SPECIFICATIONS		
Operating Temperature	Full Power ¹²³ Derate to 50% load	0 to 50° C 51 to 70° C
Storage Temperature		-40 to 85° C
Cooling	Convection Fan	55W 85W
Relative humidity	Non condensing	5% to 95%, max
MTBF	Demonstrated	> 150,000 hrs
Switching Frequency		70kHz, Fixed

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**Versatile
POWER**

INPUT CONNECTOR J2	
Pin 1	Live
Pin 2	NC
Pin 3	Neutral

Safety Earth J1	
Pin 1	Earth

Sense Connector J4	
Pin 1	5V Sense

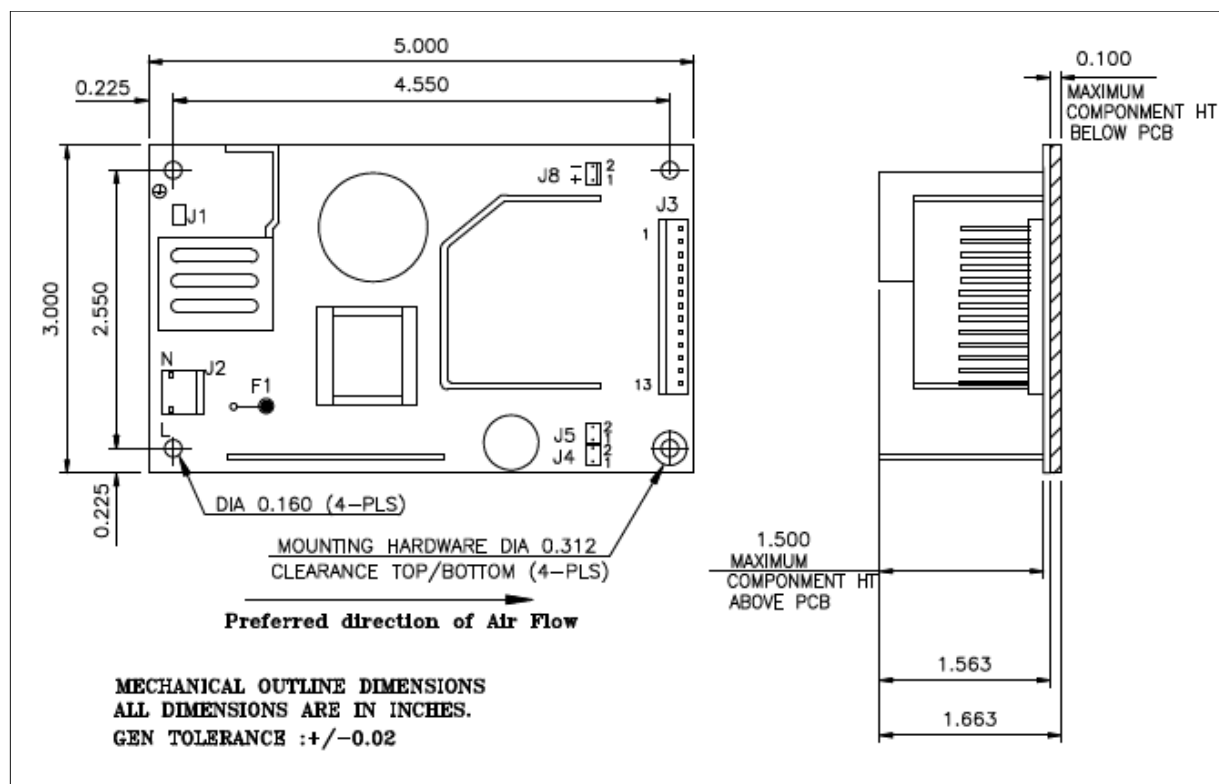
Sense Connector J5	
Pin 1	3.3V Sense
Pin 2	0V Sense

Fan Connector J8	
Pin 1	-Fan
Pin 2	+Fan

OUTPUT SPECIFICATIONS		
Output Power	Convection 20CFM Fan	55W 85W
Hold Up Time	115V/230V at 40W	12ms/70ms
Total Regulation	V1 V2, V3	±2% ±5%
Transient Response 25% step at 0.1A/μs	Voltage deviation Recovery time	5%, max <1ms
OVP	V1 only 5V	135%, +15%
Short Circuit Protection	Auto Recovery	Short Term
Ripple and Noise ¹	Peak to Peak	Greater of 50mV or 1%
Output Rise Time		<2.0s
Minimum Load	Main Output	10%

OUTPUT CONNECTOR J3				
Pin	Single	Dual	Triple	Quad
1	NC	NC	V3	V4
2	NC	Return	Return	Return
3	V1	V2	V2	V3
4,5,6	V1	V1	V1	V2
7, 8, 9, 10	Return	Return	Return	Return
11, 12, 13	V1	V1	V1	V1

1- Ripple and noise measured at J2 with 10μF tantalum and 0.1μ ceramic shunt caps



All EOS power supplies have UL, CSA and Nemko safety compliance and medical versions meet UL60601-1 standards. All our products are RoHs compliant. Visit us at www.eospower.com. EOS brand power supplies and patents are owned exclusively by EOS Power. All Rights Reserved.



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INPUT SPECIFICATIONS		
Input Voltage	Universal	90-264 VAC 120-370 VDC
Efficiency		75% Typical
Input Frequency		47-63 Hz
Input Current	Full Load at low line	1.9 Arms, max
Inrush Current	High Line, cold start	32A, max
Leakage Current		<1.0mA

EMC AND SAFETY SPECIFICATIONS	
CE Mark	Complies with the LVD
EMC	EN5022-B, CISPR22-B, FCC Part 15 Class B, EN50082-1
Harmonic Current	EN61000-3-2 Class A
Agency Approvals	NEMKO , UL, c-UL
Safety Standards	IEC60950, EN60950, UL1950
Safety file numbers	NEMKO:P05204862 UL: E136019
Isolation Voltage	Input to output 3000VAC Input to earth 1500VAS