

HPS90 Single Output Hybrid Power Supply

Features

- Super low noise DC voltage output
- Remarkable isolation, low leakage
- Improved efficiency
- High input regulation / extreme input noise rejection
- High load regulation / super low output impedance
- Extruded aluminum enclosure, anodized natural silver & black
- High glossy black or silver acrylic front and backplate
- Cooling by free air convection
- Gold plated and Swiss made 5 pole female XLR receptacle for DC output allows "Star-quad" wiring and flexible DC cable selection

Applications (powering of)

- Audio components: streamer, DAC, phono, headphone amplifier, PC USB & LAN card
- IT equipment: mini-PC (Raspberry), router, switch, access point, NAS
- Test and measurement systems
- Anything requires very clean DC voltage source

Description

HPS90 hybrid linear power supplies are equipped with 90VA medical grade, low leakage switch mode power supplies that guarantee high isolation between primer and seconder side. The input CLC filter with nanocrystalline choke and output's properly damped LC post-filter ensure clean raw voltage for the linear regulator stage. The unique push-pull transistor output stage is controlled by a low noise operational amplifier that works with minimal noise gain and from post filtered precision bandgap references. The perfect input noise rejection and very low output resistance relies on the bootstrapped voltage regulator architecture. On the bottom side of the improved FR4 printed circuits board (PCB) small surface mounted components (SMD) and on top side bigger through hole components (THD) are combined for optimal layout and minimal trace length.

Model encoding example: HPS90-12-5S0-BSB







SPECIFICATION					
INPUT	Voltage range	90-240 VAC			
	Frequency	50/60 Hz			
	Fuse	2 AT, 20 x 5 mm			
	Connector	IEC C14 inlet			
OUTPUT	Part Number	HPS90-12-5S0	HPS75-19-3S5		
	Nominal Voltage	12 V	19 V		
	Rated Current	5 A	3,5 A		
	Protection	Overload protection, 110% of rated output current			
	Noise	<2 μV typical @ bandwidth: 20 Hz to 20 kHz			
	Initial accuracy	<1% typical, 2% max			
	Temperature coefficient	<1 mV/C°			
	Line regulation	<-100 dB(V/V) @ 1 kHz			
	Load regulation	<-40 dB(V/A) @ 1 kHz			
	Connector type	Neutrik NC5FAH 5 pole XLR female, gold plated contact			
	Connector pinout	(+): Pin1 & Pin3; (-): Pin2 & Pin4; Not connected: Pin5; PE: Pin6			
ENVIRONMENT	Working temperature	-10 C° to +40 C°			
	Working Humidity	20 to 90% RH, non-condensing			
OTHERS	Indicator	RGB LED, color and intensity adjustable in 3 steps by internal DIP switches			
	Working principle	Filtered medical grade SMPS followed by a bootstrapped series regulator			
	Dimension	110 x 68 x 206 mm [Width x Height x Depth] (with foots)			
	Weight	1.050 grams			

