

## **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 black
- High glossy black acrylic front and backplate
- Cooling by free air convection
- Gold plated and Swiss made 4 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 35VA industrial grade switch mode power supplies that guarantee high isolation between primer and seconder side. The input CLC " $\pi$ " 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: HPS35-05-4S5-BBB

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1st digit: Front = Black; 2nd digit: Case = Black; 3rd digit: Back plate = Black
Rated Current = 4.5 [A]; Output type = S (Single)
Output Voltage = 5 [V]
SMPS's rated wattage = 35 [W]
Series name = HPS (Hybrid Power Supply = SMPS with Filtering + Linear PS)
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SPECIFICATION									
INPUT	Voltage range	90-240 VAC							
	Frequency	50/60 Hz							
	Fuse	750 mAT (Time lag, slow), 20 x 5 mm							
	Connector	IEC C14 inlet							
OUTPUT	Part Number	HPS35- 05-4S5	HPS35- 06-3S0	HPS35- 09-3S0	HPS35- 12-2S5	HPS35- 15-1S5	HPS35- 18-1S5	HPS35- 19-1S5	HPS35- 24-1S3
	Nominal Voltage	5 V	6 V	9 V	12 V	15 V	18 V	19 V	24 V
	Rated Current	4.5 A	3.0 A	3.0 A	2.5 A	1.5 A	1.5 A	1.5 A	1.3 A
	Protection	Overload protection, >120% of rated output current							
	Noise	<2 μV typical @ bandwidth: 20 Hz to 20 kHz							
	Initial accuracy	<0.5% typical, 1% max							
	Temperature coeff.	<1 mV/C°							
	Line regulation	<-100 dB(V/V) @ 1 kHz							
	Load regulation	<-40 dB(V/A) @ 1 kHz							
	Connector type	Neutrik NC4FAH 4 pole XLR female, gold plated contact							
	Connector pinout	(+): Pin1 & Pin3; (-): Pin2 & Pin4; PE: Pin5							
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 industrial grade SMPS followed by a bootstrapped series regulator							
	Dimension	110 x 68 x 166 mm [Width x Height x Depth] (with foots)							
	Weight	800 grams							

