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AL-PS-51v96w v2  
AL-PS-48v96w v2  
AL-PS-36v96w v2  
AL-PS-24v96w v2

Strict Class 2

Structured Media UL 1310  
low voltage Power Supply

ideal for Lighting or PoE  
96 watts @ 51 volts  
legacy 48v or 24v options

V2 ETL listed E5032139



### Product Description - AL-PS-51v96w power supply

This power supply is designed for Class 2 applications, with ETL IEC 62368-1 listing, high power factor and cool operation. 8 power supplies fit into a standard 47605-14 14 x 14 structured media panel using push pins and a 3 x 5 inch hole spacing. A vented cover is recommended. There are also 47605 models with 21, 28 and 42 inches.

As a member of the ATX LED sml® family, this device is used to power low voltage Class 2 loads, limited to 100 watts per NEC 2017 code. It can be combined into load balanced and failover solutions using other sml family devices, or used stand alone.

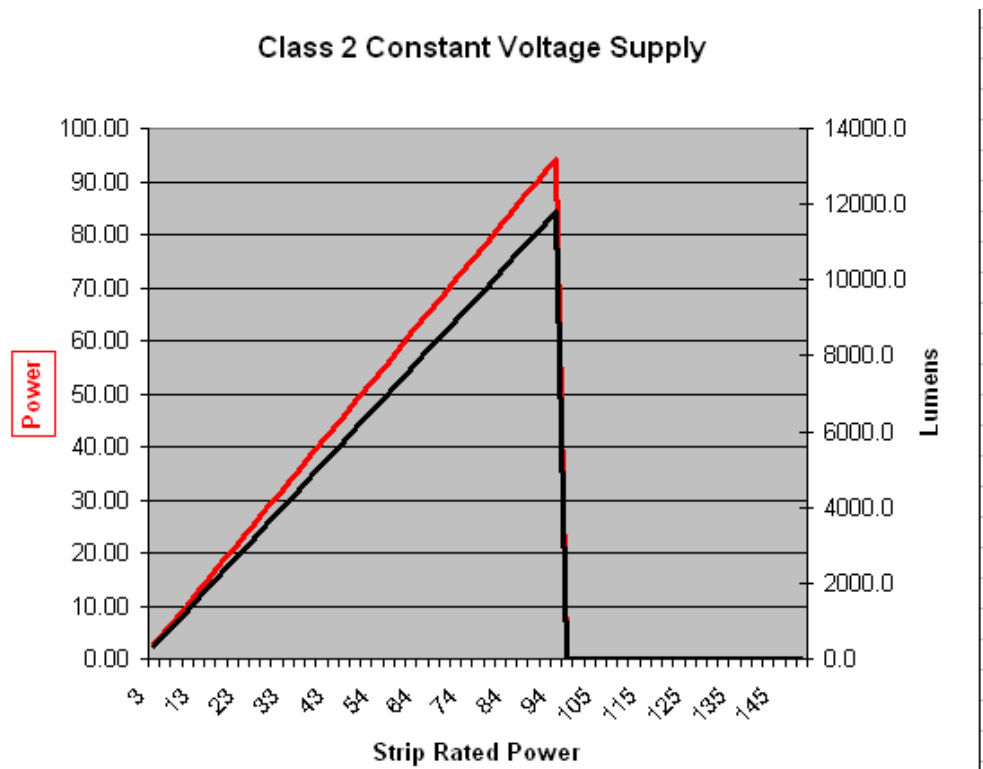
It has a C14 inlet and a C13 outlet allowing daisy chaining with limited 120v outlets in a structured media box.

It should not be used in applications requiring more than 1.88 Amps @ 51v = 96 watts.

## Specifications

120vac connection	C14 and C13 male / female connector Line, Neutral, Earth Ground
NRTL	ETL UL 1310, UL 62368-1, Class 2, LPS
DC Output connector	DIN 4 pin, +voltage, -voltage, earth ground
Output voltage	51v $\pm$ 2%, over voltage protection 48v, 36v, 24v options
Power Factor	0.95 or greater
Input voltage range	100v to 250v , 50-60 Hz
Input Wattage	104 watts maximum at full load – 92%
Standby power consumption	DoE Class 6,
Conversion efficiency	92% at full load
Inrush	Inrush current limited
Operating Temperature	0°C ~ 50°C
Size	70 mm x 147mm x 30mm plus 2x 10mm tabs on the 70mm side
Push Pins	Leviton 47615-nyl
Dimming	None – see other products for dimming
FCC and interference	All outputs are RF filtered for minimal Interference
Size between tabs	76.2 mm x 127 mm






When overloaded by a LED strip with excessive length,  
a Constant Voltage supply shuts down

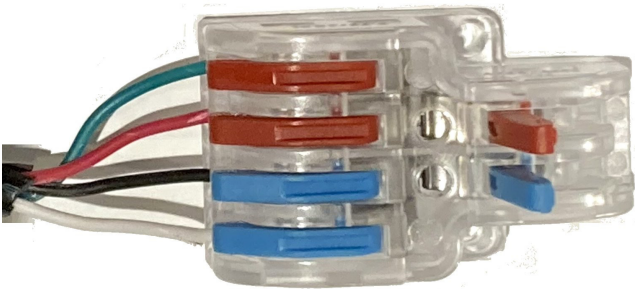
The AL-PS-51v96w V1 and V2 are  
Constant Voltage,  
the output will shut down to 0v

# DC Cable Options

Min. DIN 4 Pin		Pin Assignment	
(female)		PIN No.	Output
		1	+Vo
		2	-Vo
		3	+Vo
		4	-Vo

Shield is Earth Ground

## DF42 connector



# DC Cable Options

DC Cable Function	Model Name	Photo	Specs
<p>DIN4 both ends</p> <p>from PSU to PSE</p> <p>Fits</p> <p>AL-PSE-4 AL-PSE-2Din AL-GATS</p>	DIN4–DIN4		<p>30 cm</p> <p>AWG20</p> <p>5 wires</p> <p>+, + -, - Earth</p> <p>2x DIN4</p>
<p>DIN4 to 2.1mm</p> <p>Fits</p> <p>Generic PoE Switch</p>	DIN4–2.1		<p>60 cm</p> <p>AWG20</p> <p>4 wires</p> <p>+, + -, -</p> <p>1x DIN4 1x 2.1mm</p>
<p>DIN4 to DF42</p> <p>Allows the PSE to be Bypassed</p> <p>Wago earth not shown in Photo</p>	DIN4–DF42		<p>23 cm</p> <p>AWG20</p> <p>5 wires</p> <p>+, + -, - Earth</p> <p>1x DIN4 1x DF42 1x Wago</p>

# AC Cable Options



Function	Model Name	Photo	Specs
Main In Cable to 120 vac outlet C13 is right angle	C13 to 5-15P  AL-PS-C13P		70 cm 3x awg18
Short Jumper brick to brick Both are Right Angle	C13 to C14  AL-PS-C13C14-20		25 cm 3x awg18
Long Jumper brick to brick Both are Right Angle	C13 to C14  AL-PS-C13C14-40		40 cm 3x awg18
Mains Out – for other devices	C14 to 5-15R  AL-PS-C14R		23 cm 3x awg18

## Ordering part numbers

Model	Peak Current	AC Cable	DC Cable	Used With
AL-PS-51v96w-a1	1.9A	Main	DIN4	AL-GATS-10 PoE
AL-PS-51v96w-b1	1.9A	Jumper	DIN4	AL-PSE-4D
AL-PS-51v96w-a2	1.9A	Main	2.1mm	Generic PoE
AL-PS-51v96w-a3	1.9A	Main	DF-42U	Stand Alone
AL-PS-51v96w-b3	1.9A	Jumper	DF-42U	Multi PSU
AL-PS-51v96w-00	1.9A	none	none	No cables
AL-PS-48v96w-a3	2A	Main	DF-42U	48v
AL-PS-36v96w-a3	2.3A	Main	DF-42U	Landscape
AL-PS-24v96w-a3	4A	Main	DF-42U	24v
AL-PS-C13C14-20		X		25 cm
AL-PS-C13C14-40		X		40 cm
AL-PS-C13P		X		70 cm
AL-PS-C14R		X		25 cm
AL-PS-DINDIN			X	25 cm
AL-PS-DIN-2.1			X	60 cm
AL-PS-DIN-DF42			X	25 cm