

ATX LED AL-PSE-4NR

Distribution panel for 4 x 96 Watts Class 2 Power and DALI data

[Product Description - AL-PSE-4NR](#)

This structured wiring panel device in the SML format provides Class 2 power from 4 Class 2 inputs to 4 power outputs. Ideal for up to 60 light fixtures and up to 32 Light switches.

No output can exceed the power supplied by any one input – input power is NOT consolidated, therefore regardless of the number of supplies attached, the output current remains Class 2 assuming that the input power supply is class 2 (100 watts) per NEC 2017 requirements.

It has four DIN4 type power inputs (designed for the AL-PS-51v96w supplies), directly connected to KF type connector outputs. It is housed in a case ideal for structured wiring panels.

It uses quick connect 5 pin, 5 amp rated output connectors. The inputs are the DIN 4 connectors. Voltage range is 44 to 56 volts.. Earth connection is provided for static discharge management.

Ideally matched with 4 pcs of the AL-PS-51v96w, the AL-PSE-4NR is a member of the ATX SML family for quick installation in Media Panels.

LED status display

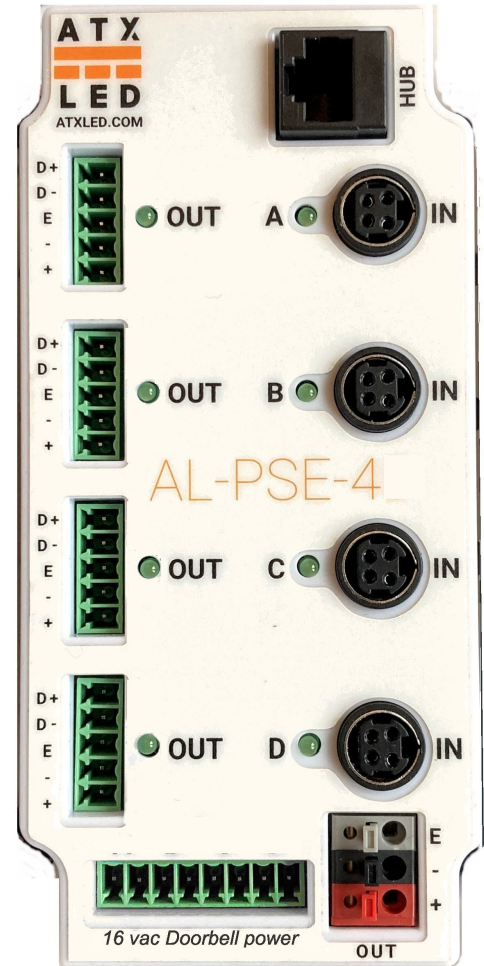
There are 2 LEDs per channel. Each input LED is the presence of voltage on inputs A thru D. Each output (left) LED indicates available current to that output. With no load, it is fully bright. As the load reaches the Class 2 limit of 2 amps – the LED will go off.

Power Supply status

The 4 input voltages are monitored by an external device like the AL-DALI-Pi using pins 4 and 5 of the RJ45 connector.

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sml Format

This device is a member of the ATX LED sml family for Structured Media Panels. This allows 8 devices in a 14x14 panel. Other devices include our 51v 96w power supply, AL-DALI-8 distribution panels, ATX LED Hub, general purpose IO modules, Internet routers and managed PoE Switch.

Specifications

Power source	DIN4 connectors for the AL-PSU-51v96w (4)
AL-WS switch output power	4 positions CUI TBP02P1-381-05-BE (Power, Earth, DABus)
PoE switch output power	1 KF246 type with power from output D
DALI interface	RJ45 connector has power from any input, and the DALI bus signals
Input voltage range	44v to 56 volts (24 volt model available on request)
Current Limit	This device relies on the Class 2 current limit from the power source. For example, the AL-PS-51v96w.
Internal Power consumption	50 milliwatts standby
Failover Redundancy	Not available on this model – please see AL-PSE-4D
Doorbell power	24 VDC, 300 mA current limited
Protection	Reverse protection and static protection
Operating Temperature	0°C ~ 50°C
Size	70 mm x 147mm x 30mm
Mounting tabs	2x 10mm interleaving tabs on the 70mm side
Horizontal between tabs	76.2mm
Vertical between tabs	127mm
Hot Swap	Yes – can unplug and connect input power live
Earth Ground	Connection for earth grounding
Mouting Kit	Leviton 47615-NYL push pins (2 included)
DIN Rail	Din Rail adapters are available.

POE (51v) general purpose Power output

The KF246 connector (Red, Black, Gray) is provided to source 51 volts for 802.3at and similar PoE switches. This output is shared with the D output and is intended to be used to power a PoE switch or other device. Red is +51v, black is -51v, gray is earth ground.

Earth Grounding

Earth grounding is recommended for static discharge of people using the wall switches. In a proper installation with the AL-PS-51v96w power supply – the 120vac power socket should have an earth ground. That earth ground flows thru the DIN4 connector to the outputs. In cases where the AL-PS-51v96w is not used – connect an awg18 wire from the gray connector to an earth ground.

Redundancy

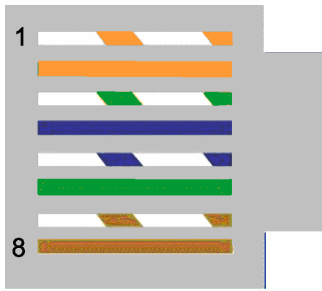
Not available on this model. Contact us for an upgrade to AL-PSE-4D or AL-PSE-4

AL-51v96w Power Brick

The AL-51v96w power supply was designed for use with the AL-PSE-4NR, AL-PSE-4 or AL-PSE-4D

Monitored Power

The 4 power input feed a summing circuit that outputs a monitor voltage on pin 5 of the RJ45. A smart device like the ATX LED Hub can read this voltage and determine the number and location of the attaché power supplies for failover, alerts and load shedding.



Pin	A
1	DALI +
2	DALI - (gnd)
3	NC
4	+ V (350 mA)
5	Monitor Signal
6	Ground
7	Ground
8	Ground

Min. DIN 4 Pin

(female)



Pin Assignment

PIN No.	Output
1	+Vo
2	-Vo
3	+Vo
4	-Vo

