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AL-PSE-24D / AL-PSE-12D Power over Ethernet injector for LED power and DALI data

[Product Description - AL-PSE-24D](#)

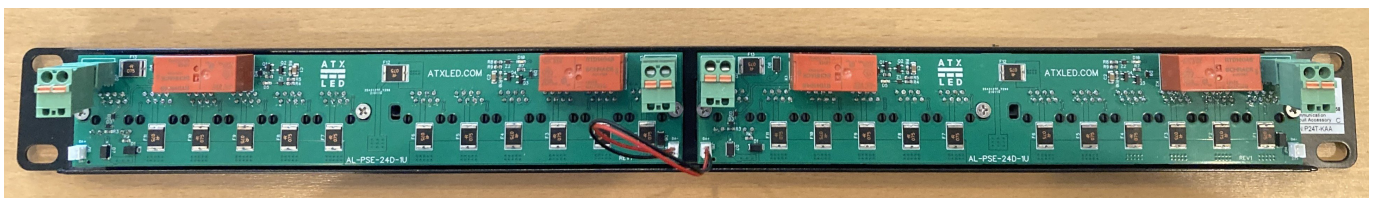
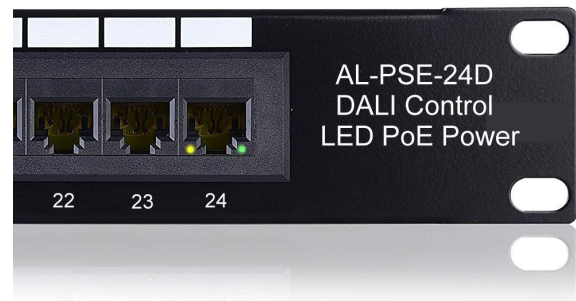
This rack mounted DALI plus Power panel provides fused power and DALI data to lights and switches. It has two power inputs, a DALI power supply, failover detection and power failover management. It is housed in a familiar case for rack mounting.

This Power Module has 24 RJ45 connectors. Each RJ-45 is fuse protected to .75 amps (38 watts) for NEC Class 2 operation.. Dual DC inputs are configured for load balancing and lossless Relay failover. The device has input power for up to 10 amps (500 watts) . Typically used with one or two Meanwell 350 or 500 watt power supplies – from 48 to 56 volts – we suggest adjusting the output to 51 volts.

Connect an AL-DALI-Pi Home Automation DALI gateway to allow App and voice control of the entire house with up to 63 switches and 400 lights – use either RJ45 #12 or #24 for the Hub / Gateway.

Failover Power

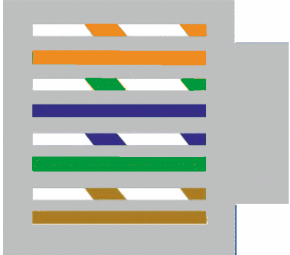
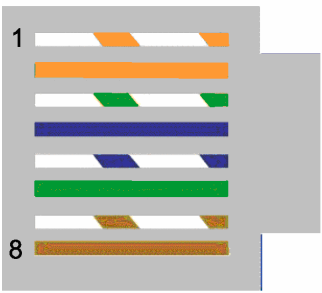
The Power Distribution panel has 2 inputs – apply a matched set of 48 (max 56v) power supplies to each input. Power from each input is sent normally to the bank of 6 closest RJ45's. Should either power supply fail, a relay will route the power to all 24 inputs. The matched power supplies can be either rated for full system power each, or using the Failover detection provided, they could be ½ of the rated power. The voltages do not need to match – but they should be spec'd with matching power output. Note: See our UPS/Solar module for intentionally mismatched power inputs



Specifications

Power source and load	Dual spring loaded connectors AWG 24 to AWG 16 KF 3.81 2P with screw down
Power loads	24 RJ45 connectors – see pinout below 750 mA self resetting fuse per port
Failover power inputs	High Current Relays from 2 DC power inputs assures all outputs are live
Quick Connection	5 mm Phoenix connectors for quick and high current connections.
Input voltage range	36v to 57 volts (for Relay activation)
Dali Bus power	External
LED status	2 LEDs Green = power, Amber = DALI
Internal Power consumption	None during normal operation
Protection	Reverse protection and static protection
Operating Temperature	0°C ~ 50°C
Size	1U 19 inches
Hot Swap	Yes – can unplug and connect power and/or data with power applied.
Fuse protection	PTC self resetting fuses with .75 Amps per each of 24 outputs
Failover Detection	Logic detects the failure and switches the power
RJ45 #1 and RJ45 #13	These two RJ45 show the power status on an LED, and have pins 4 and 5 with Diode Failover not relay failover
Option	Ask about our UPS model with 3 rd input for Battery or Solar backup available in 12 port 10 inch wall mount also
Interconnect jumper	DALI interconnect with 2 pin ZHR connector on each side

RJ45 connector pinout

 <p>RJ45 #12 and #24</p>	<table border="1"> <thead> <tr> <th>Pin</th> <th>#12 and #24</th> </tr> </thead> <tbody> <tr><td>1</td><td>DALI +</td></tr> <tr><td>2</td><td>DALI – (gnd)</td></tr> <tr><td>3</td><td>NC</td></tr> <tr><td>4</td><td>+ Voltage A</td></tr> <tr><td>5</td><td>+ Voltage B</td></tr> <tr><td>6</td><td></td></tr> <tr><td>7</td><td>Ground</td></tr> <tr><td>8</td><td>Ground</td></tr> </tbody> </table>	Pin	#12 and #24	1	DALI +	2	DALI – (gnd)	3	NC	4	+ Voltage A	5	+ Voltage B	6		7	Ground	8	Ground										
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Wiring Instructions: Each panel has 2 power inputs

Power Supply	Connect to KF 5.0 connector				LED Status
A	Left			Right	#24 Green
B		Left Center	Center	Right	#12 Green