



# AL-AT-DR1 Constant Current LED driver with PoE 802.3af and 802.3at



### Product Description - AL-AT-DR-1 – PoE powered LED driver

This LED driver in a compact module can be installed 328 ft away from a PoE injector or switch using Cat-5e cable. No licensed electrician is required for installation. Just two wires with AWG 18 or AWG 20 up to 100 ft long connect to up to 28 watts of LED with constant current. The AL-AT-DR1 series has low standby power, and is configurable for 300ma, 600 or 700 ma LED current requirements. The wide output voltage range of 9 to 50 volts fits the NEC / NFPA codes for low voltage wiring and allows any LED fixture to be used.

Intended for use with any 802.3at, 802.3af or passive Poe injector or switch, the output current automatically adjust to match the PoE source. With 802.3af switches – 300 ma ( 12 watts) , with 802.3at switches 600 ma ( 20 watts). Thus power can be controlled for 10 watt or 20 watts via a managed PoE switch.

PIR and Dusk/Dawn controls are provided, and inrush turn on current is limited, two types of 802.3af keep alive.

### Specifications for AL-AT-DR1

Power input	44 to 56 volts 802.3af or 802.3at or Passive PoE
Input Connector	RJ45 standard connector
Output Voltage	9v to 50v 35 watts max
Hot Swap	LED load can be disconnected under power
PIR control	5v power, 2v or greater to turn on.
Dusk / Dawn control	Use a DPW85 or similar phototransistor
802.3af keep alive	300 mw standby load for keep-alive – 802.3af standard a) dummy load via internal load - LED is off b) active load into the LED – LED is on with 300 mw
Output current	Jumper Options 300 ma , 600 ma, 700 ma
LED output connector	Luminaire
Pinout 802.3af / 802.3at	Pins 1,2 and 3,6 provide power either polarity Automatic power detection feature: a) with 802.3af max current 300 ma = 12 watts b) with 802.3at max current 700ma = 20 watts
Pinout passive PoE	Optional passive PoE input with 0 mw standby, higher efficiency than 802.3af/at
Protection	Reverse, short and static protection
Operating Temperature	0°C ~ 50°C



### Specifications for AL-AT-DR1-OEM

Power input	44 to 56 volts 802.3af or 802.3at or Passive PoE
Input Connector	ZHR10 connector cable provided
Power output	9v to 50 volts 30 watts max
802.3af keep alive	1k resistor on 5v/ground needed
PIR control	5v power, 2v or greater to turn on.
Dusk / Dawn sensor	Use a DPW85 or similar phototransistor
Dusk / Dawn	External 30k resistor and 1N4148 needed
Inrush limiter	External 180k and 1 uf Capacitor needed
Output current	Programmable 600 or 800 ma
Bridge PCB option	Provides all external components
Pinout 802.3af / 802.3at	Pins 1,2 and 3,6 provide power - either polarity
Pinout passive PoE	Pins 4,5+ and 7,8- : 0 mw standby and higher efficiency
Operating Temperature	0°C ~ 50°C
Hot Swap	Not supported

