

Powerland's 42/50W 0-10V Dimming and Current

DIP Settable Series offers constant current LED drivers with wide-range dimmable output current and 90~305/108~305Vac universal input.

The output current of this series is settable with a built-in DIP switch for four-level driving current range, and designed for 0-10V dimming applications.



Applications

- Indoor LED lights
- LED lights with flexible current settings
- Downlights, spotlights, LED troffers



Specifications

Model	Max. Output Power	Input Voltage	Output Voltage Range	Max. Output Current	Efficiency	Max. Case Temperature	THD	Power Factor	Dimensions
PLD042-1SCF55AS-900	42W	90~305Vac	27~55V	900mA	89.0%	90°C	<20%	>0.95	95x70x32mm
PLD050-1SCF55AS-2100	50W	90~305Vac	16~40V	2100mA	87.0%	90°C	<20%	>0.95	95x70x32mm
PLD050-1SCF55AS-1200	50W	108~305Vac	25~40V	1200mA	88.0%	90°C	<20%	>0.95	95x70x32mm

* Based on 25°C ambient temperature, rated input voltage, and full load.

** Refer to the next page for detailed specifications for this series of LED drivers.

Features

- 100,000 hours lifetime at 65°C Tcase
- 5 years warranty at 50°C Tcase
- Constant current output
- Compatible with 0-10V dimming
- Output current settable with DIP switches
- Universal input voltage: 90~305/108~305Vac
- Safety according to UL8750 & EN61347-2-13
- EMC according to FCC Part 15 Class B
- Lightning, OVP, SCP, OTP & Open Circuit Protection

Electrical Specifications

Model	PLD042-1SCF55AS-900	PLD050-1SCF55AS-2100	PLD050-1SCF55AS-1200
Dimming	0-10V Dimming	0-10V Dimming	0-10V Dimming
Output Power	42W	50W	50W
Current Setting DIP Switches	Yes	Yes	Yes
Output Current Setting & Voltage Range	900mA: 27~46V 800mA: 27~50V 700mA: 27~55V 600mA: 27~55V	2100mA: 16~24V 1750mA: 16~28V 1400mA: 18~36V 1050mA: 18~40V	1200mA: 25~40V 1000mA: 25~40V 800mA: 25~40V 600mA: 25~40V
Max. Current Ripple	± 30%	± 30%	± 30%
Voltage Range	90~305Vac	90~305Vac	108~305Vac
Frequency Range	47~63Hz	47~63Hz	47~63Hz
Max. Input Current	0.6A	0.75A	0.55A
Max. Input Power	50W	60W	59W
Power Factor	>0.95 @ 115Vac & 80~100% load, >0.90 @ 277Vac & 80~100% load		
Efficiency	89.0%	87.0%	88.0%
Max. Open Circuit Voltage	70V	70V	70V
Ingress Protection	IP64		
THD	<20% @ 120Vac & 80~100% load		
Protections	OVP, OCP, SCP, OTP & Open Circuit Protection		
Environmental Protection	UL Dry & Damp		
Working Temperature	-20~+60°C		
Max. Case Temperature	90°C		
Surge Protection	1kV		
ANSI Surge Type	1.2/50µs Combination Wave (w/t 2Ω)		
Agency Approbations	UL8750 & EN61347-2-13		
Electromagnetic Compliance	Per Title 47 CFR Part 15 Class B		
Isolation	Primary to Secondary: 3750Vac / 10mA _{Max} / 60seconds		
Dimension	95x70x32mm		
Mounting Length	85mm		
Overall Length	95mm		
Weight	0.27kg	0.34kg	0.34kg
Life Time	100,000 hours @ full load, 65°C T _{case}		

* Unless otherwise noted, the data are based on 25°C ambient temperature, 230Vac input voltage, and full load.