

Powerland's 42/50W "Pickle-Mate" Series LED

drivers offer dual-channel, flicker-free, programmable and widerange dimmable output current LED Driver with less than 5% current ripple at 108~305Vac universal input.

The output currents of this series are adjustable at 0-1400mA with dual complementary constant current outputs for color temperature tuning, and designed for 0(0.5)-10V/PWM/Rest dimming applications. Two output channels can also be parallelled together for single channel output applications with all-round dimming capability. It also offers optional 12V auxiliary power which is isolated from main output.

Applications

- Indoor color-temperature-tuning LED lights
- LED lights with flexible current settings
- Downlights, high bay and low bay lights, spot lights, LED troffers





Specifications

Model	Max. Output Power	Input Voltage	Output Voltage Range	Max. Output Current	Efficiency	Max. Case Temperature	THD	Power Factor	Dimensions
PLD042-2SCF992-1250A	42W	108~305Vac	27~45V	1250mA in total	86.5%	90°C	<20%	>0.9	400-20-20
PLD050-2SCF992-1400A	50W	108~305Vac	27~45V	1400mA in total	87.0%	90°C	<20%	>0.9	160x30x26mm

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

Features

- Flicker-free with < 5% current ripple
- > 50,000 hours lifetime at 75°C Tcase
- > 5 years warranty at 75°C Tcase
- Dual outputs for color temperature tuning through Bluetooth
- All-round dimming capability
- Wired and wireless programmable
- Isolated 12V/100mA auxiliary power output
- Isolated 0-10V/PWM dimming /External resistor/Wireless Dimming

- MESH Bluetooth/BLT SIG5.0
- Universal input voltage: 108~305Vac
- Isolated 12V/100mA auxiliary power output
- Safety according to UL8750 & UL1310 & EN61347-2-13
- UL Class 2 output
- EMC according to FCC Part 15 Class A
- Lightning, OVP, SCP, OTP & Open Circuit Protection

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



Electrical Specifications

Model	PLD042-2SCF992PB-1250A	PLD050-2SCF992PB-1400A				
Output Voltage	27~45V	27~45V				
Current Programmable	Bluetooth & Wire	Bluetooth & Wire				
Color Temperature Tuning	Dual-channel complimentary through Bluetooth	Dual-channel complimentary through Bluetooth				
Output Current Programmable Range	0~1250mA+1250~0mA	0~1400mA+1400~0mA				
Dimming	Isolated 0-10V/PWM/External Resistor/Wireless Dimming	Isolated 0-10V/PWM/External Resistor/Wireless Dimming				
Output Power	42W	50W				
Max. Current Ripple	±5%	±5%				
Input Voltage Range	108~305Vac	108~305Vac				
Frequency Range	47~63Hz	47~63Hz				
Max. Input Current	0.5A @ 25°C 120Vac input & full load 0.3A @ 25°C 230Vac input & full load 0.27A @ 25°C 277Vac input & full load	0.6A @ 25°C 120Vac input & full load 0.3A @ 25°C 230Vac input & full load 0.27A @ 25°C 277Vac input & full load				
Max. Input Power	52W	62W				
Power Factor	>0.96 @ 120Vac & 80~100% full load >0.94 @ 230Vac & 80~100% full load >0.92 @ 277Vac & 80~100% full load	>0.96 @ 120Vac & 80~100% full load >0.94 @ 230Vac & 80~100% full load >0.92 @ 277Vac & 80~100% full load				
Ingress Protection	IP20	IP65				
Efficiency	86.5%	87.0%				
Max. Open Circuit Voltage	59.5V	59.5V				
THD	<20% @ 120Vac/230Vac/277Vac & 80~100% full load					
Protections	OVP, OCP, SCP, OTP & Open Circuit Protection					
Environmental Protection	UL Dry & Damp					
Working Temperature	-20~+50°C					
Max. Case Temperature	90°C					
Surge Protection	Line to L	Line 1kV				
ANSI Surge Type	1.2/50µs Combina	ion Wave (w/t 2Ω)				
Agency Approbations	UL8750 & UL1310 class 2 & EN61347-2-13					
Electromagnetic Compliance	FCC Part15 Class A					
Isolation	Primary to Secondary: 3750Vac / 10mAMax / 60seconds					
Case & Terminal Type	Metal & Wire					
Dimension	160x30x26mm					
Mounting Length	160mm					
Overall Length	168mm					
	168	mm				
Weight	0.24					

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