

Powerland's 42/50W "Pickle-Plus" Series LED drivers offer flicker-free, programmable and wide-range 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 600-1400mA which is programmed through Bluetooth (BLT SIG5.0), and designed for 0(0.5)-10V/PWM/Rest dimming applications, complying with UL8750 2^{th} edition. It also offers optional 12V auxiliary power which is isolated from main output.

Applications

- Indoor 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
PLD042-1SCF992PB-XXX	42W	108~305Vac	27~45V	1250mA	87.0%	90°C	<20%	>0.9	160x30x26mm
PLD050-1SCF992PB-XXX	50W	108~305Vac	27~45V	1400mA	87.0%	90°C	<20%	>0.9	100x30x2011111

^{*} XXX stands for output current, e.g. 1400 stands for 1400mA. XXX=600~1400.

Features

- Flicker-free with < 5% current ripple
- > 50,000 hours lifetime at 75°C Tcase
- > 5 years warranty at 75°C Tcase
- Constant current output
- Wired and wireless programmable
- 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

^{**} 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.



Electrical Specifications

Model	PLD042-1SCF992PB-XXX	PLD050-1SCF992PB-XXX				
Output Voltage	27~45V	27~45V				
Current Programmable	Bluetooth & Wire	Bluetooth & Wire				
Output Current Programmable Range	600~1250mA	700~1400mA				
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	0.6A @ 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				
Efficiency	87.0%	87.0%				
Max. Open Circuit Voltage	59.5V	59.5V				
Ingress Protection	IP20	IP65				
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 Line 1kV					
ANSI Surge Type	1.2/50μs Combination Wave (w/t 2Ω)					
Agency Approbations	UL8750 & UL1310 class 2 & EN61347-2-13					
Electromagnetic Compliance	FCC Part1	15 Class A				
Isolation	Primary to Secondary: 3750Vac / 10mAN	Max / 60seconds (3second for production)				
Case & Terminal Type	Metal & Wire					
Dimension	160x30x26mm					
Mounting Length	160mm					
Overall Length	168mm					
Weight	0.26kg					
Life Time	>50,000 hours @ full load, 75°C Tcase					

^{*} Note: XXX stands for output current, e.g. 1250 stands for 1250mA. XXX in PLD042-1SCF992PB-XXX=600~1250, XXX in PLD050-1SCF992PB-XXX=700~1400.

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