

Powerland's 120W Programmable Series offers digital programmable drivers with wide-range adjustable output current, together with 12V/20mA auxiliary output (optional) for smart lighting.

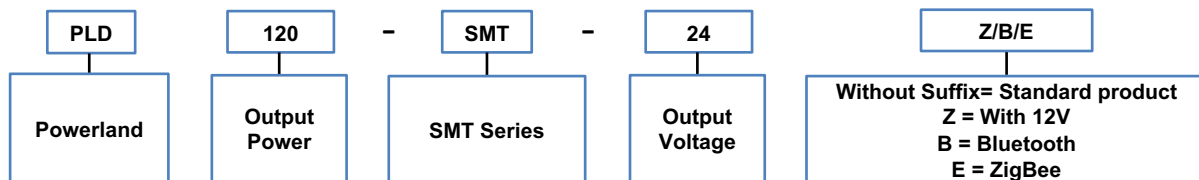
The output current of this series are programmable, and designed for 0(0.5)-10V/PWM/Rset/DMX (upon request) ultra-deep dimming applications. Bluetooth and ZigBee dimming are provided in B and E versions, respectively.



Applications

- Cost-effective outdoor & indoor LED lights
- LED lights with flexible current settings
- Street lights, high bay and low bay lights, LED troffers
- Wireless dimming lights

Model Name Definition



Specifications

Model	Max. Output Power	Input Voltage	Output Voltage Range	Max. Output Current	Efficiency	Max. Case Temperature	THD	Power Factor	Dimensions
PLD120-SMR-24(Z/B/E)	120W	90~305Vac	12~30V	5A	89.0%	90°C	<20%	>0.97	227x49x40.5mm
PLD120-SMR-36(Z/B/E)	120W	90~305Vac	23~45V	3.3A	90.0%	90°C	<20%	>0.97	227x49x40.5mm
PLD120-SMR-48(Z/B/E)	120W	90~305Vac	29~58.8V	2.5A	90.0%	90°C	<20%	>0.97	227x49x40.5mm
PLD120-SMR-86(Z/B/E)	120W	90~305Vac	35~86V	1.68A	91.0%	90°C	<20%	>0.97	227x49x40.5mm
PLD120-SMR-114(Z/B/E)	120W	90~305Vac	47~114V	1.26A	91.0%	90°C	<20%	>0.97	227x49x40.5mm
PLD120-SMR-170(Z/B/E)	120W	90~305Vac	72~170V	0.84A	91.0%	90°C	<20%	>0.97	227x49x40.5mm
PLDC-CSCA	Powerland LED drivers programmer (accessory)								

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

Features

- Deep dimming down to 5%
- 12V/20mA auxiliary output (optional)
- Constant current & constant voltage output
- Output current & output voltage programmable
- Compatible with 0(0.5)-10V, PWM, external resistor, DMX (upon request) dimming
- Support wireless dimming (Bluetooth or ZigBee protocol)
- Universal input voltage: 90~305Vac
- > 70,000 hours lifetime at 75°C Tcase
- > 7 years warranty at 75°C Tcase
- Min. operating temperature @ -40°C
- Safety according to UL8750 & EN61347-2-13
- Surge voltage rating: L-N 4kV, L/N-Earth 4kV
- EMC according to FCC Part 15 Class A
- Lightning, OVP, SCP, OTP & Open Circuit Protection

Electrical Specifications

Model	PLD120-SMR-24(Z/B/E)	PLD120-SMR-36(Z/B/E)	PLD120-SMR-48(Z/B/E)	PLD120-SMR-86(Z/B/E)	PLD120-SMR-114(Z/B/E)	PLD120-SMR-170(Z/B/E)
Output Voltage	12~30V	23~45V	29~58.8V	35~86V	47~114V	72~170V
Current Programmable	Yes	Yes	Yes	Yes	Yes	Yes
Max Output Current	5A	3.3A	2.5A	1.68A	1.26A	0.84A
Output AUX Power Voltage (Optional)	12V	12V	12V	12V	12V	12V
Output AUX Power Current (Optional)	0-20mA	0-20mA	0-20mA	0-20mA	0-20mA	0-20mA
Dimming	0(0.5)~10V, PWM, External Resistor, DMX (upon request)					
Wireless Dimming	B Version: Bluetooth; E Version: ZigBee					
Output Power	120W	120W	120W	120W	120W	120W
Max. Current Ripple	500mA	350mA	250mA	180mA	150mA	100mA
Max. Voltage Ripple	± 0.5%	± 0.5%	± 0.5%	± 0.5%	± 0.5%	± 0.5%
Voltage Range	90~305Vac	90~305Vac	90~305Vac	90~305Vac	90~305Vac	90~305Vac
Frequency Range	47~63Hz	47~63Hz	47~63Hz	47~63Hz	47~63Hz	47~63Hz
Max. Input Current	1.6A	1.6A	1.6A	1.6A	1.6A	1.6A
Max. Input Power	140W	140W	140W	140W	140W	140W
Power Factor	>0.97 @ 115Vac & 80~100% full load, >0.90 @ 277Vac & 80~100% full load					
Efficiency	89.0%	90.0%	90.0%	91.0%	91.0%	91.0%
Max. Open Circuit Voltage	50V	63V	73V	100V	148V	200V
Ingress Protection	IP67					
THD	<20% @ 100~277Vac & 80~100% full load					
Protections	OVP, OCP, SCP, OTP & Open Circuit Protection					
Environmental Protection	UL Dry & Damp & Wet					
Working Temperature	-40~+70°C					
Max. Case Temperature	90°C					
Surge Protection	L-N 4kV, L/N-Earth 4kV					
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 A					
Isolation	Primary to Secondary: 3750Vac / 10mAMax / 60seconds					
Dimension	227x49x40.5mm					
Mounting Length	240mm					
Overall Length	253mm					
Weight	0.92kg					
Life Time	>70,000 hours @ full load, 75°C Tcase					

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