

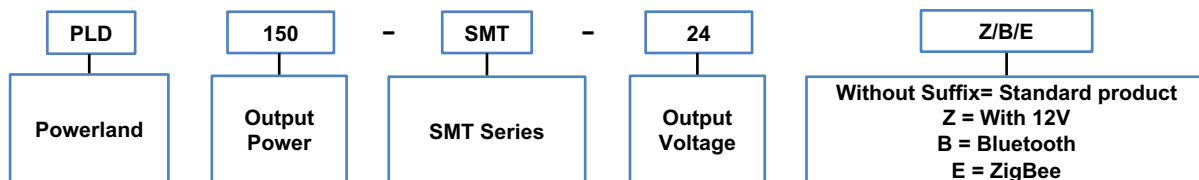
Powerland's 150W Programmable Series offers high-ambient-temperature digital programmable drivers with wide-range adjustable output current, together with 12V/100mA auxiliary output (optional) for smart lighting.

The output current of this series are programmable, and designed for 0(0.05)-10V/PWM/Rset/Clock/DMX (upon request) ultra-deep dimming applications. Bluetooth and ZigBee dimming are provided in B and E versions, respectively.

Applications

- Ultra-Hostile-Environmental (UHE) LED lighting
- 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
PLD150-SMT-24(Z/B/E)	150W	90~305Vac	16~24V	7.5A	92.5%	90°C	<20%	>0.95	200x68x42.5mm
PLD150-SMT-36(Z/B/E)	150W	90~305Vac	24~36V	5A	92.5%	90°C	<20%	>0.95	200x68x42.5mm
PLD150-SMT-42(Z/B/E)	150W	90~305Vac	28~42V	4.3A	92.5%	90°C	<20%	>0.95	200x68x42.5mm
PLD150-SMT-48(Z/B/E)	150W	90~305Vac	32~48V	3.75A	92.5%	90°C	<20%	>0.95	200x68x42.5mm
PLD150-SMT-58(Z/B/E)	150W	90~305Vac	29~58V	2.6A	92.5%	90°C	<20%	>0.95	230x68x42.5mm
PLD150-SMT-95(Z/B/E)	150W	90~305Vac	47~95V	1.89A	93.5%	90°C	<20%	>0.95	230x68x42.5mm
PLD150-SMT-142(Z/B/E)	150W	90~305Vac	71~142V	1.26A	94.0%	90°C	<20%	>0.95	230x68x42.5mm
PLD150-SMT-190(Z/B/E)	150W	90~305Vac	95~190V	0.95A	94.0%	90°C	<20%	>0.95	230x68x42.5mm
PLD150-SMT-285(Z/B/E)	150W	90~305Vac	142~285V	0.63A	94.5%	90°C	<20%	>0.95	230x68x42.5mm
PLDC-CSCA	Powerland LED drivers programmer (accessory)								

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

Features

- 80°C ambient temperature operation (selected models)
- Ultra-deep dimming down to 0.5%, compatible with DMX (upon request)
- 12V/100mA auxiliary output (optional)
- Constant current & constant voltage output
- Output current & output voltage programmable
- Compatible with 0(0.05)-10V, PWM, external resistor, clock, 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 5.5kV, L/N-Earth 11kV
- EMC according to FCC Part 15 Class B (Class A with 12V Aux)
- Lightning, OVP, SCP, OTP & Open Circuit Protection



80°C Ambient Temperature Operation

Electrical Specifications

Model	PLD150-SMT -24(Z/B/E)	PLD150-SMT -36(Z/B/E)	PLD150-SMT -42(Z/B/E)	PLD150-SMT -48(Z/B/E)	PLD150-SMT -58(Z/B/E)	PLD150-SMT -95(Z/B/E)	PLD150-SMT -142(Z/B/E)	PLD150-SMT -190(Z/B/E)	PLD150-SMT -285(Z/B/E)
Output Voltage	16-24V	24~36V	28~42V	32~48V	29-58V	47~95V	71~142V	95~190V	142~285V
Current Programmable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Max Output Current	7.5A	5A	4.3A	3.75A	2.60A	1.89A	1.26A	0.95A	0.63A
Output AUX Power Voltage (Optional)	12V	12V	12V	12V	12V	12V	12V	12V	12V
Output AUX Power Current (Optional)	0-100mA	0-100mA	0-100mA	0-100mA	0-100mA	0-100mA	0-100mA	0-100mA	0-100mA
Dimming	0(0.05V)~10V, PWM, External Resistor, Clock, DMX (upon request)								
Wireless Dimming	B Version: Bluetooth; E Version: ZigBee								
Output Power	150W	150W	150W	150W	150W	150W	150W	150W	150W
Max. Current Ripple	750mA	500mA	430mA	375mA	300mA	200mA	150mA	100mA	80mA
Max. Voltage Ripple	±0.5%	±0.5%	±0.5%	±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	90~305Vac	90~305Vac	90~305Vac
Frequency Range	47~63Hz	47~63Hz	47~63Hz	47~63Hz	47~63Hz	47~63Hz	47~63Hz	47~63Hz	47~63Hz
Max. Input Current	2A	2A	2A	2A	2A	2A	2A	2A	2A
Max. Input Power	173W	173W	173W	173W	173W	173W	173W	173W	173W
Power Factor	>0.95 @ 115Vac & 80~100% full load, >0.90 @ 277Vac & 80~100% full load								
Efficiency	92.5%	92.5%	92.5%	92.5%	92.5%	93.5%	94.0%	94.0%	94.5%
Max. Open Circuit Voltage	33V	42V	55V	75V	70V	125V	180V	260V	360V
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				-40~+80°C				
Max. Case Temperature	90°C								
Surge Protection	L-N 5.5kV, L/N-Earth 11kV								
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, (Class A with 12V AUX output)								
Isolation	Primary to Secondary: 3750Vac / 10mAMax / 60seconds								
Dimension	200x68x42.5mm				230x68x42.5mm				
Mounting Length	212mm				242mm				
Overall Length	226mm				256mm				
Weight	1.15kg				1.45kg				
Life Time	>70,000 hours @ full load, 75°C Tcase				>100,000 hours @ full load, 75°C Tcase				

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