

**Powerland's 320W Programmable Series** offers 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.

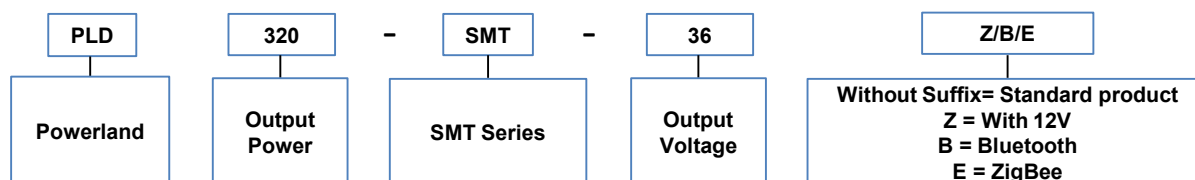


### Applications

- Outdoor & indoor LED lights
- LED lights with flexible current settings
- Street lights, parking lights and architecture decoration lights
- LED horticulture lights
- 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
PLD320-SMT-36(Z/B/E)	320W	108~305Vac	24~36V	8.88A	92.5%	90°C	<20%	>0.95	245x84x42.5mm
PLD320-SMT-48(Z/B/E)	320W	108~305Vac	32~48V	6.66A	92.5%	90°C	<20%	>0.95	245x84x42.5mm
PLD320-SMT-54(Z/B/E)	320W	108~305Vac	36~54V	5.93A	93.0%	90°C	<20%	>0.95	245x84x42.5mm
PLD320-SMT-58(Z/B/E)	320W	108~305Vac	40~58.8V	5.52A	93.0%	90°C	<20%	>0.95	245x84x42.5mm
PLD320-SMT-152(Z/B/E)	320W	108~305Vac	94~152V	2.1A	93.0%	90°C	<20%	>0.95	245x84x42.5mm
PLD320-SMT-228(Z/B/E)	320W	108~305Vac	142~228V	1.4A	93.5%	90°C	<20%	>0.95	245x84x42.5mm
PLD320-SMT-428(Z/B/E)	320W	108~305Vac	320~428V	0.7A	94.0%	90°C	<20%	>0.95	245x84x42.5mm
PLDC-CSCA	Powerland LED drivers programmer (accessory)								

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

### Features

- Ultra-deep dimming down to 0.5%, compatible with DMX (upon request)
- Universal input voltage: 108~305Vac
- 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)
- > 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

## Electrical Specifications

Model	PLD320-SMT -36(Z/B/E)	PLD320-SMT -48(Z/B/E)	PLD320-SMT -54(Z/B/E)	PLD320-SMT -58(Z/B/E)	PLD320-SMT -152(Z/B/E)	PLD320-SMT -228(Z/B/E)	PLD320-SMT -428(Z/B/E)
Output Voltage	24~36V	32~48V	36~54V	40~58.8V	94~152V	142~228V	320~428V
Current Programmable	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Max Output Current	8.88A	6.66A	5.93A	5.52A	2.1A	1.4A	0.7A
Output AUX Power Voltage (Optional)	N/A	12V	12V	12V	12V	12V	12V
Output AUX Power Current (Optional)	N/A	0-100mA	0-100mA	0-100mA	0-100mA	0-100mA	0-100mA
Dimming	0(0.05)~10V, PWM, External Resistor, Clock, DMX (upon request)						
Wireless Dimming	B Version: Bluetooth; E Version: ZigBee						
Output Power	320W	320W	320W	320W	320W	320W	320W
Max. Current Ripple	± 10%	± 10%	± 10%	± 10%	± 10%	± 10%	± 10%
Max. Voltage Ripple	± 0.5%	± 0.5%	± 0.5%	± 0.5%	± 0.5%	± 0.5%	± 0.5%
Voltage Range	108~305Vac	108~305Vac	108~305Vac	108~305Vac	108~305Vac	108~305Vac	108~305Vac
Frequency Range	47~63Hz	47~63Hz	47~63Hz	47~63Hz	47~63Hz	47~63Hz	47~63Hz
Max. Input Current	3.5A	3.5A	3.5A	3.5A	3.5A	3.5A	3.5A
Max. Input Power	360W	360W	360W	360W	360W	360W	360W
Power Factor	>0.95 @ 115Vac & 80~100% full load, >0.90 @ 284Vac & 85~100% full load						
Efficiency	92.5%	92.5%	93.0%	93.0%	93.0%	93.5%	94.0%
Max. Open Circuit Voltage	45V	65V	65V	65V	175V	265V	480V
Ingress Protection	IP67						
THD	<20% @ 120Vac & 80~100% full load, <20% @ 284Vac & 85~100% 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 5.5kV, L/N-Earth 11kV						
ANSI Surge Type	1.2/50µs Combination Wave (w/t 2Q)						
Agency Approbations	UL8750 & EN61347-2-13						
Electromagnetic Compliance	Per Title 47 CFR Part 15 Class B						
Isolation(Primary to Secondary)	3750Vac / 10mAMax / 60seconds						
Isolation(Primary to Earth)	1875Vac / 10mAMax / 60seconds						
Isolation(Secondary to Earth)	1875Vac / 10mAMax / 60seconds						
Dimension	245x84x42.5mm						
Mounting Length	259mm						
Overall Length	269mm						
Weight	1.7kg						
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.