

Powerland's ICE-600 Programmable Series

600W LED Drivers offers digital programmable drivers with wide-range adjustable output current, together with 12V/250mA auxiliary output (optional) for smart lighting.

The drivers comply with high AC input voltage up to 660Vac. 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.



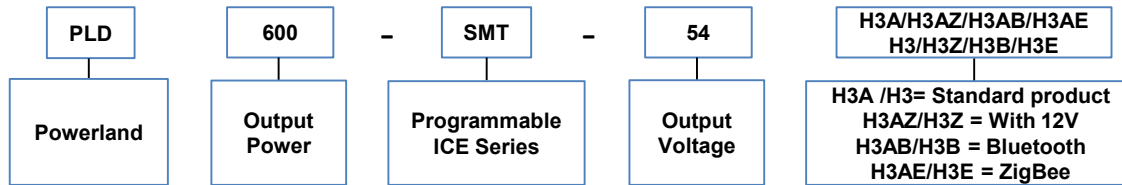
Applications

- Outdoor & indoor LED lights
- LED lights with flexible current settings
- Parking lights and architecture decoration lights
- LED horticulture lights
- LED fishing lights
- Wireless dimming lights



600Vac Operation

Model Name Definition



Specifications

Model	Max. Output Power	Input Voltage	Output Voltage Range	Max. Output Current	Efficiency	Max. Case Temperature	THD	Power Factor	Dimensions
PLD600-SMT-54-H3A(Z/B/E)	600W	305~660Vac	36~54V	11.1A	93%	90°C	<20%	>0.95	269x123x54mm
PLD600-SMT-54-H3(Z/B/E)	600W	305~580Vac	36~54V	11.1A	94.5%	90°C	<20%	>0.95	269x123x54mm
PLDC-CSCA	Powerland LED drivers programmer (accessory)								

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

Features

- Ultra wide input voltage range: 305~660Vac
- High power factor: 0.99 typical for 347Vac, full load
- Maximum current & maximum voltage can be programmed
- Isolated 12V/250mA auxiliary power output
- Constant current & constant voltage output
- Compatible with 0-10V, PWM, external resistor, clock, DMX (upon request) dimming
- Isolated dimming signals
- 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
- Surge voltage rating: L-N 4kV, L/N-Earth 6kV
- EMC according to FCC Part 15 Class A
- Lightning, OVP, SCP, OTP & Open Circuit Protection

Electrical Specifications

Model	PLD600-SMT-54-H3A(Z/B/E)	PLD600-SMT-54-H3(Z/B/E)
Output Voltage Range	36~54V	36~54V
Current Programmable	Yes	Yes
Max Output Current	11.1A	11.1A
Output AUX Power Voltage (Optional)	12V	12V
Output AUX Power Current (Optional)	0-250mA	0-250mA
Dimming	0(0.07)~10V, PWM, External Resistor, Clock, DMX (upon request)	
Wireless Dimming	B Version: Bluetooth; E Version: ZigBee	
Output Power	600W	600W
Max. Current Ripple	±5%	±5%
Max. Voltage Ripple	250mVp-p	250mVp-p
Input Voltage Range	305~660Vac	305~580Vac
Frequency Range	57~63Hz	57~63Hz
Max. Input Current	4.2A	4.2A
Max. Input Power	680W	680W
Power Factor	>0.95 @ 480Vac & 70~100% full load	
Efficiency	93%	94.5%
Max. Open Circuit Voltage	56V	56V
Ingress Protection	IP67	
THD	<20% @ 347~480Vac & 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 6kV	
ANSI Surge Type	1.2/50µs Combination Wave (w/t 2Ω)	
Agency Approbations	UL8750	
Electromagnetic Compliance	Per Title 47 CFR Part 15 Class A	
Isolation (Primary to Secondary)	3750Vac / 10mA Max / 60seconds	
Isolation (Primary to Earth)	3400Vac / 10mA Max / 60seconds	
Isolation (Secondary to Earth)	1150Vac / 10mA Max / 60seconds	
Case Type	Aluminum	
Dimension	269x123x54mm	
Mounting Length	280mm	
Overall Length	291mm	
Weight	3.3kg	
Life Time	>70,000 hours @ full load, 75°C Tcase	

* Unless otherwise noted, the data are based on 25°C ambient temperature, 480Vac input voltage, and full load.