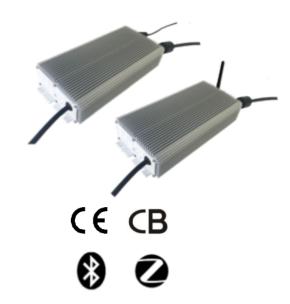


Powerland's ICE-400 Programmable 600W LED Drivers offers digital programmable drivers with wide-range adjustable output current, together with 12V/250mA auxiliary output (optional) for smart lighting.

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.

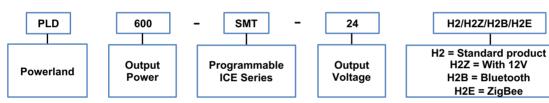
### **Applications**

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



H2E = ZigBee

#### **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-24-H2(Z/B/E)	600W	277~460Vac	18~24V	25A	95.5%	90°C	<20%	>0.95	260x123x54mm
PLD600-SMT-36-H2(Z/B/E)	600W	277~460Vac	27~36V	16.67A	95.5%	90°C	<20%	>0.95	260x123x54mm
PLD600-SMT-42-H2(Z/B/E)	600W	277~460Vac	31~42V	14.28A	95.5%	90°C	<20%	>0.95	260x123x54mm
PLD600-SMT-48-H2(Z/B/E)	600W	277~460Vac	36~48V	12.5A	96.0%	90°C	<20%	>0.95	260x123x54mm
PLD600-SMT-54-H2(Z/B/E)	600W	277~460Vac	42~54V	11.11A	96.0%	90°C	<20%	>0.95	260x123x54mm
PLDC-CSCA	Powerland LED drivers programmer (accessory)								

<sup>\*</sup> 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: 277~460Vac
- Isolated 12V/250mA 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
- 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 EN61347-2-13
- Surge voltage rating: L-N 5.5kV, L/N-Earth 11kV
- EMC according to EN55015 Class B
- Lightning, OVP, SCP, OTP & Open Circuit Protection



# **Electrical Specifications**

Model	PLD600-SMT-24-H2(Z/B/E)	PLD600-SMT-36-H2(Z/B/E)	PLD600-SMT-42-H2(Z/B/E)	PLD600-SMT-48-H2(Z/B/E)	PLD600-SMT-54-H2(Z/B/E)					
Output Voltage Range	18~24V	27~36V	31~42V	36~48V	42~54V					
Current Programmable	Yes	Yes	Yes	Yes	Yes					
Max Output Current	25A	16.67A	14.28A	12.5A	11.11A					
Output AUX Power Voltage (Optional)	12V	12V	12V	12V	12V					
Output AUX Power Current (Optional)	0-250mA	0-250mA	0-250mA	0-250mA	0-250mA					
Dimming	0(0.05)~10V, PWM, External Resistor, Clock, DMX (upon request)									
Wireless Dimming	B Version: Bluetooth; E Version: ZigBee									
Output Power	600W	600W	600W	600W	600W					
Max. Current Ripple	±5%	±5%	±5%	±5%	±5%					
Max. Voltage Ripple	250mVp-p	250mVp-p	250mVp-p	350mVp-p	350mVp-p					
Input Voltage Range	277~460Vac	277~460Vac	277~460Vac	277~460Vac	277~460Vac					
Frequency Range	47~63Hz	47~63Hz	47~63Hz	47~63Hz	47~63Hz					
Max. Input Current	3A	3A	3A	3A	3A					
Max. Input Power	680W	680W	680W	680W	680W					
Power Factor	>0.95 @ 277Vac ~400Vac & 80~100% full load									
Efficiency	95.5%	95.5%	95.5%	96.0%	96.0%					
Max. Open Circuit Voltage	28V	39V	45V	51V	63V					
Ingress Protection	IP67									
THD	<20% @ 277Vac~400Vac & 80~100% full load,									
Protections	OVP, OCP, SCP, OTP & Open Circuit Protection									
Environmental Protection	IP65/IP67									
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 2Ω)									
Agency Approbations	EN61347-2-13									
Electromagnetic Compliance	EN55015 Class B									
Isolation (Primary to Secondary)	3750Vac / 10mAMax / 60seconds									
Isolation (Primary to Earth)	1875Vac / 10mAMax / 60seconds									
Isolation (Secondary to Earth)	1150Vac / 10mAMax / 60seconds									
Case Type	Aluminum									
Dimension	260x123x54mm									
Mounting Length	271mm									
Overall Length	290mm									
Weight	3.2kg									
Life Time	>70,000 hours @ full load, 75°C Tcase									

 $<sup>^{\</sup>star}$  Unless otherwise noted, the data are based on 25°C ambient temperature, 400Vac input voltage, and full load.