

Powerland's ICE-305 Programmable Series 720W LED Drivers offers digital programmable drivers with wide-range adjustable output current together with 12V/250mA

wide-range adjustable output current, together with 12V/250mA auxiliary output (optional) for smart lighting.

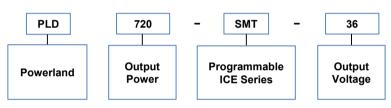
The output current of this series are programmable, and designed for 0(0.05)-10V/PWM/Rset/Clock/DMX (upon request) ultra-deep dimming applications. Bluetooth and ZigBee dimming are provided in B and E versions, respectively.

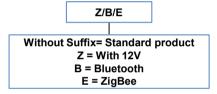
Applications

- 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



Model Name Definition





Specifications

Model	Max. Output Power	Input Voltage	Output Voltage Range	Max. Output Current	Efficiency	Max. Case Temperature	THD	Power Factor	Dimensions
PLD720-SMT-36(Z/B/E)	720W	108~305Vac	24~36V	20A	95%	90°C	<20%	>0.95	280x123x54mm
PLD720-SMT-42(Z/B/E)	720W	108~305Vac	27~42V	17.2A	95%	90°C	<20%	>0.95	280x123x54mm
PLD720-SMT-48(Z/B/E)	720W	108~305Vac	32~48V	15A	95%	90°C	<20%	>0.95	280x123x54mm
PLD720-SMT-54(Z/B/E)	720W	108~305Vac	36~54V	13.3A	95%	90°C	<20%	>0.95	280x123x54mm
PLD720-SMT-58(Z/B/E)	720W	108~305Vac	40~58.8V	12.2A	95%	90°C	<20%	>0.95	280x123x54mm
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/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
- Support wireless dimming (Bluetooth or ZigBee protocol)
- Support isolated 12V auxiliary power output & dimming (optional)

- > 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 A
- Lightning, OVP, SCP, OTP & Open Circuit Protection



Electrical Specifications

Model	PLD720-SMT-36(Z/B/E)	PLD720-SMT-42(Z/B/E)	PLD720-SMT-48(Z/B/E)	PLD720-SMT-54(Z/B/E)	PLD720-SMT-58(Z/B/E)						
Output Voltage Range	24~36V	27~42V	32~48V	36~54V	40~58.8V						
Current Programmable	Yes	Yes	Yes	Yes	Yes						
Max Output Current	20A	17.2A	15A	13.3A	12.2A						
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	720W	720W	720W	720W	720W						
Max. Current Ripple	±5%	±5%	±5%	±5%	±5%						
Max. Voltage Ripple	250mVp-p	250mVp-p	250mVp-p	350mVp-p	350mVp-p						
Input Voltage Range	108~305Vac	108~305Vac	108~305Vac	108~305Vac	108~305Vac						
Frequency Range	47~63Hz	47~63Hz	47~63Hz	47~63Hz	47~63Hz						
Max. Input Current	7.8A	7.8A	7.8A	7.8A	7.8A						
Max. Input Power	820W	820W	820W	820W	820W						
Power Factor	>0.95 @ 120Vac & 80~100% full load, >0.90 @ 277Vac & 80~100% full load										
Efficiency	95%	95%	95%	95%	95%						
Max. Open Circuit Voltage	39V	49V	51V	61.8V	61.8V						
Ingress Protection	IP67										
THD	<10% @ 120Vac & 80~100% full load, <15% @ 284Vac & 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 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 A										
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	280x123x54mm										
Mounting Length	290mm										
Overall Length	306mm										
Weight	3.56kg										
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.