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Specifications

LED Power Supplies for Outdoor Use

LGEU-120CV Series, 120W

PAIRUI ELECTRONICS

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2016

LED Power Supplies for Outdoor Use

LGEU-120CV SERIES, 120WATT, IP65 RATING

Features

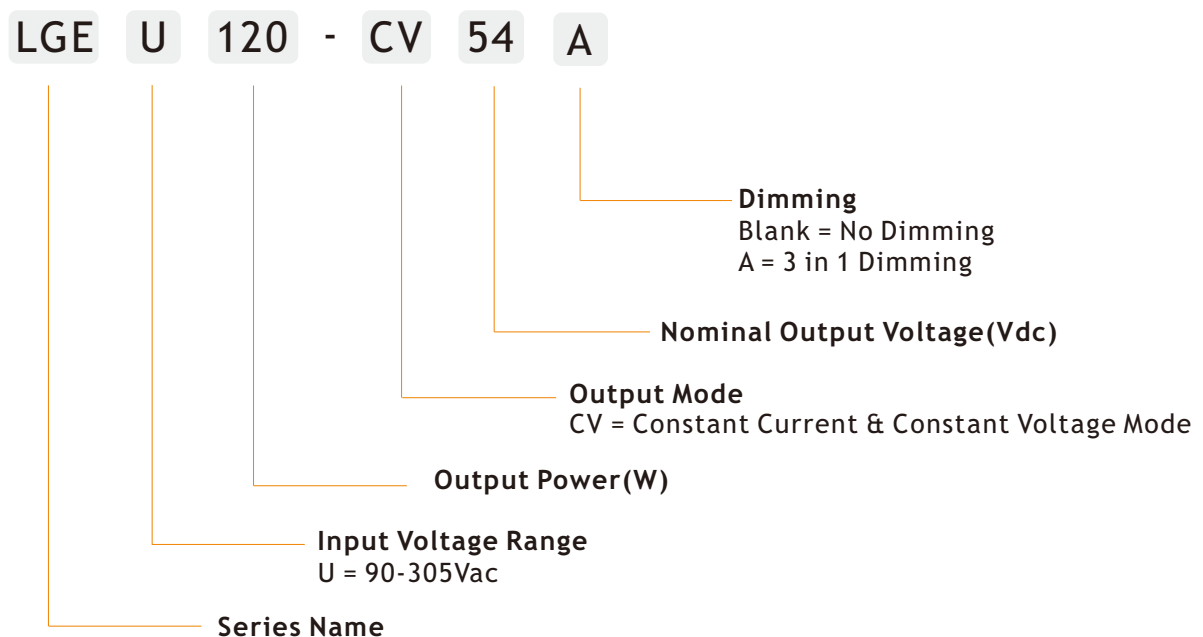
- 5 Year Warranty
- Universal Input Voltage Range: 90~305Vac
- Constant Current & Constant Voltage Mode
- Adjustable Output Current 60%~100%
- High PF up to 0.98
- Rating IP65, Suitable for Outdoor Applications
- All Round Protections: Short Circuit, Over Voltage, Over Current, Over Temperature
- 3 in 1 Dimming(0-10V/Resistor/PWM)



Applications

- ✓ Street Light
- ✓ Tunnel Light
- ✓ Flood Light
- ✓ Refrigeration Equipment
- ✓ Other Light Fixtures for Outdoor Use

Electrical



Electrical

Part Number	Nominal Input Voltage	Nominal Output Voltage & Current	Constant Current Range	Output Voltage Adjustable Range	Output Current Adjustable Range	Ripple	Efficiency	Certificate
LGEU120-CV54	100-277VAC	54V 2200mA	40-54VDC	38-54VDC	1300-2200mA	5%	89%	CE
LGEU120-CV48	100-277VAC	48V 2500mA	36-48VDC	34-48VDC	1500-2500mA	5%	89%	CE
LGEU120-CV42	100-277VAC	42V 2900mA	32-42VDC	30-42VDC	1700-2900mA	5%	88%	CE
LGEU120-CV36	100-277VAC	36V 3300mA	27-36VDC	25-36VDC	2000-3300mA	5%	87%	CE
LGEU120-CV24	100-277VAC	24V 5000mA	18-24VDC	17-24VDC	3000-5000mA	5%	86%	CE

NOTE:

1. Other output models are may available on request;
2. Add suffix "A" for 3 in 1 dimming(0-10V/Resistor/PWM).

INPUT

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Input voltage		90		305	Vac
Input frequency		47		63	Hz
Input current	Full load, Vin=110Vac Full load, Vin=230Vac		1.4 0.7		A A
Inrush current	Cold start, Vin=230Vac			65	A
Power factor(PF)	Full load, Vin=110Vac Full load, Vin=220Vac		0.98 0.96		
Leakage current	Vin=230Vac, 50Hz		0.75		mA
Surge voltage	L-N L, N-FG		4 6		KV KV

OUTPUT

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Output voltage adjustable range				±10	%
Output current adjustable range		60		100	%
Output current accuracy			5		%
Line regulation	Vin from 100Vac to 277Vac		1		%
Load regulation	Vout from min. to max.		3		%
Output current overshoot	Turning on			10	%
Turn-on delay time	Cold start, power on		1000		ms
Ripple	Please refer to below measurement method		5%Io		mAp-p
THD	Output load≥50%			20	%

NOTE: The values are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with 0.1uF & 47uF parallel capacitor under ambient temperature 25°C at rated input voltage and rated load.

Protection

Short circuit	In hiccup mode, it will recover automatically after fault condition is removed
Over voltage	110-150% Vout, the driver shall return to normal operation after the power is turn-on again
Over current	In hiccup mode, it will recover automatically after fault condition is removed
Over temperature	In hiccup mode, it will recover automatically after fault condition is removed

Environment

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Ambient operating temperature	Startup at rated voltage	-35		+70	°C
Operating relative humidity	Non condensing	10		95	%
Storage temperature	Humidity 5 ~ 100% RH	-40		+85	°C
Maximum case temperature	Hot-spot on case			+90	°C
MTBF	Full load, 220Vac input, 25°C ambient temperature	258.5			Khrs
Waterproof rating	IP65				
Dimension(LxWxH)	215.0 x 68.0 x 38.8mm				
Weight	950g				

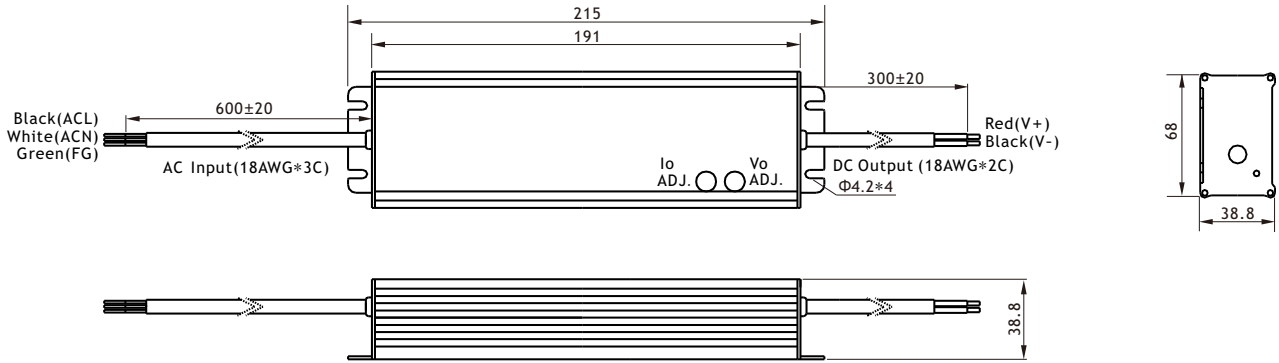
Safety/EMC

Safety	Design refer to UL8750, UL935, UL1012, UL1310 Class 2, EN61347-1, EN61347-2-13
EMC	Compliance to EN55015, FCC Part 15 Class B, EN61000-3-2, EN61000-3-3, EN61000-4-2, 3, 4, 6, 8, 11, EN61547

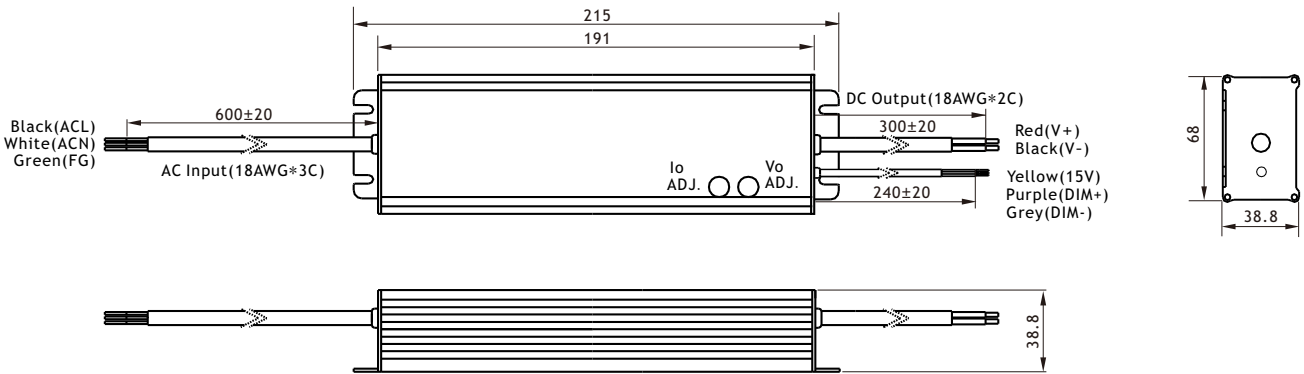
NOTE: Unless otherwise specified, all the above parameters are measured at ambient temperature of 25°C and Vin=100Vac to 277Vac.

Mechanical

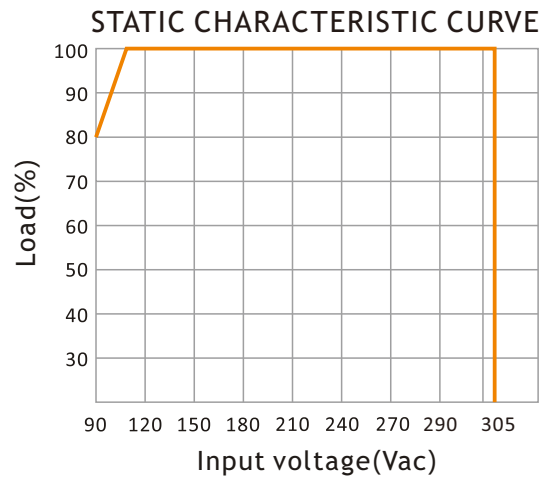
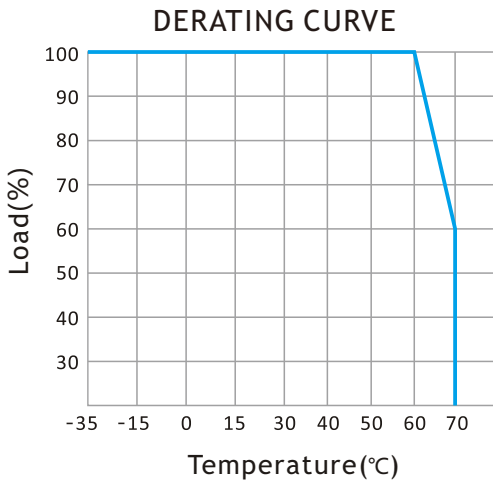
No Dimming



3 in 1 Dimming

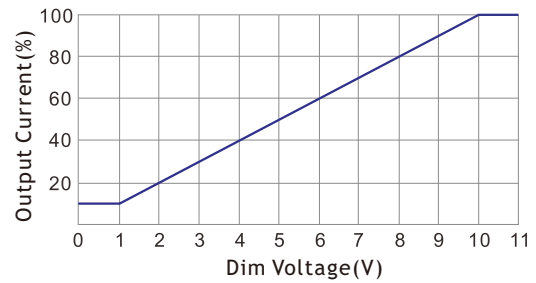
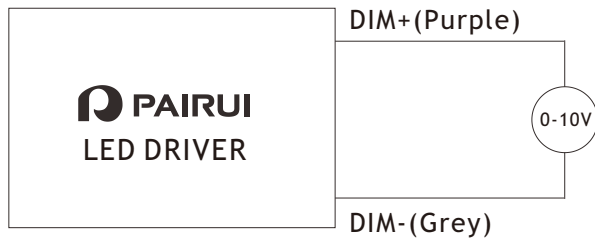


Electrical Curve

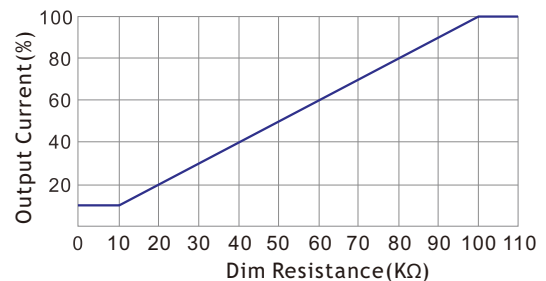
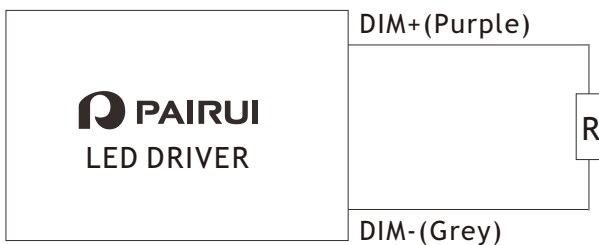


Dimming Function

0-10V Dimming

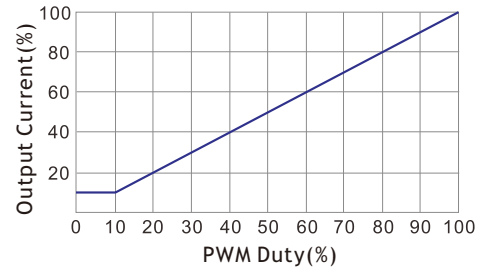
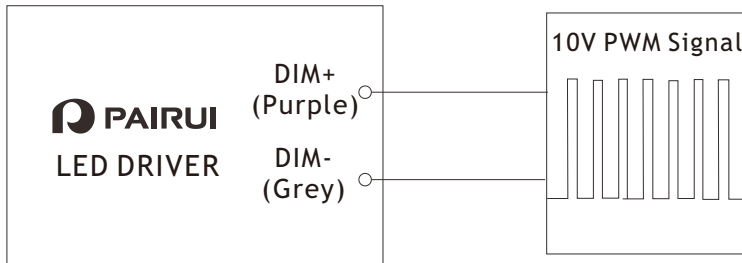


External Resistor Dimming

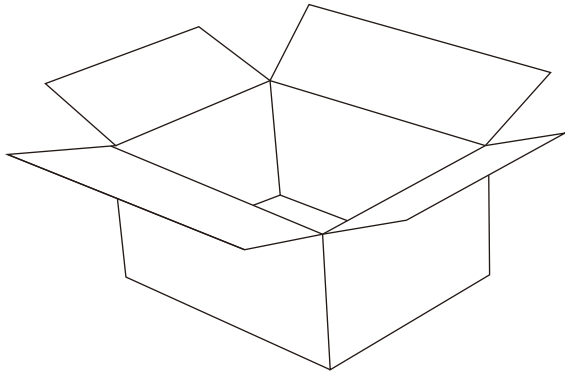


Dimming Function

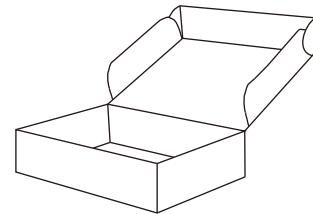
PWM Dimming



Package









Outer Carton
L 620 x W 260 x H 185mm













Inner Box
L 245 x W 102.5 x H 46mm

SERIES	QTY/BOX	QTY/CARTON	NET WEIGHT	GROSS WEIGHT	VOLUME
LGEU-120CV	1 piece	18 boxes	17.1kg/carton	19kg/carton	0.03CBM/carton

Labelling

INPUT <ul style="list-style-type: none"> • ACL (BLK) • ACN (WHT) • ⊕(GRN) 	 LGEU120-CV48 LED POWER SUPPLY INPUT: 100-277VAC, 50/60Hz OUTPUT: 1500-2500mA, 36-48VDC MADE IN CHINA	• ta 70°C • tc 90°C   IP65  	OUTPUT DC+ (RED) • DC- (BLK) •
			 IO ADJ

INPUT <ul style="list-style-type: none"> • ACL (BLK) • ACN (WHT) • ⊕(GRN) 	 LGEU120-CV48A LED POWER SUPPLY INPUT: 100-277VAC, 50/60Hz OUTPUT: 1500-2500mA, 36-48VDC MADE IN CHINA (3 in 1 Dimming)	• ta 70°C • tc 90°C   IP65  	OUTPUT DC+ (RED) • DC- (BLK) • 15V (YEL) • DIM+ (PPL) • DIM- (GRY) •
			 IO ADJ

Symbol	Description
	Short-circuit-proof with safety insulation
	Independent Operation
IP65	Type of protection(IP65 for indoor and outdoor use)
	RoHS Mark
	CE Mark