



2016-V1.0-0921

# Specifications

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**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

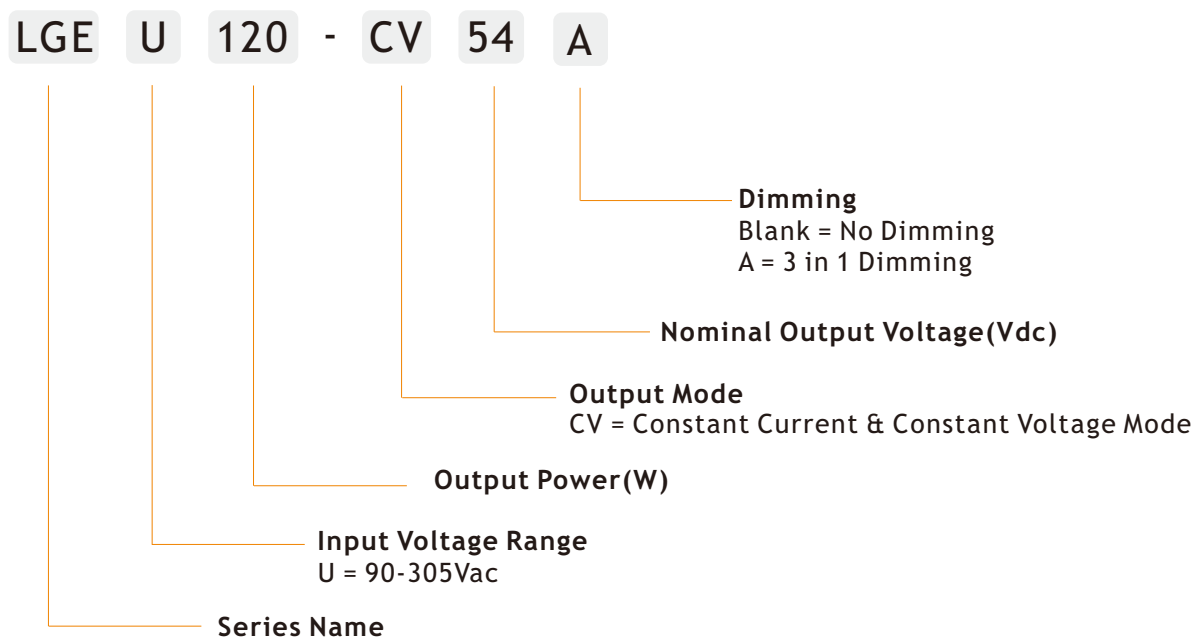
- 5 Year Warranty
- Universal Input Voltage Range: 90~305Vac
- Constant Current & Constant Voltage Mode
- Adjustable Output Current 60%~100%
- High PF up to 0.98
- Rating IP65, Suitable for Outdoor Applications
- All Round Protections: Short Circuit, Over Voltage, Over Current, Over Temperature
- 3 in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

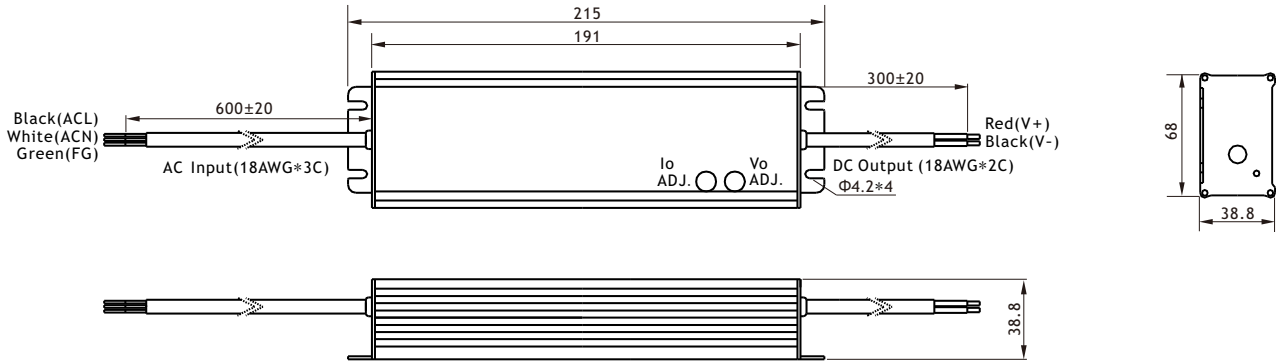
## Safety/EMC

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

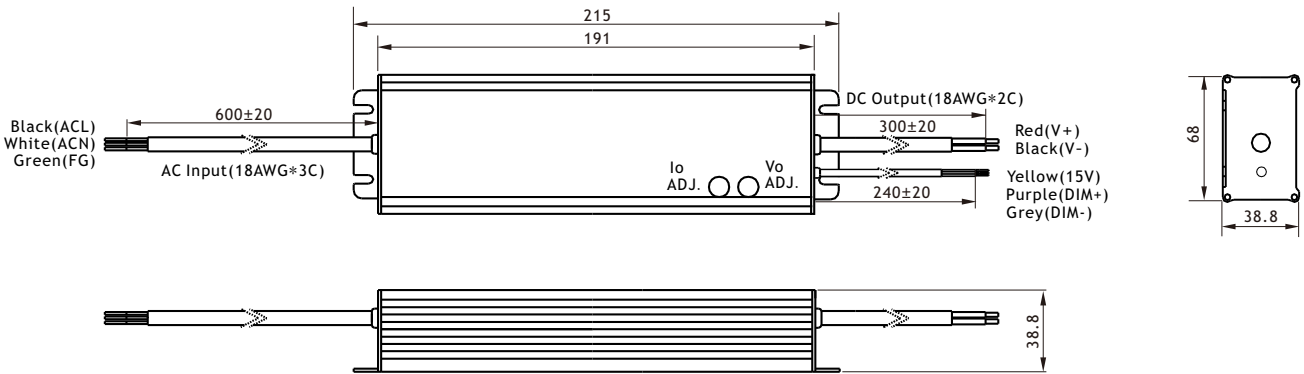
NOTE: Unless otherwise specified, all the above parameters are measured at ambient temperature of 25°C and Vin=100Vac to 277Vac.

Mechanical

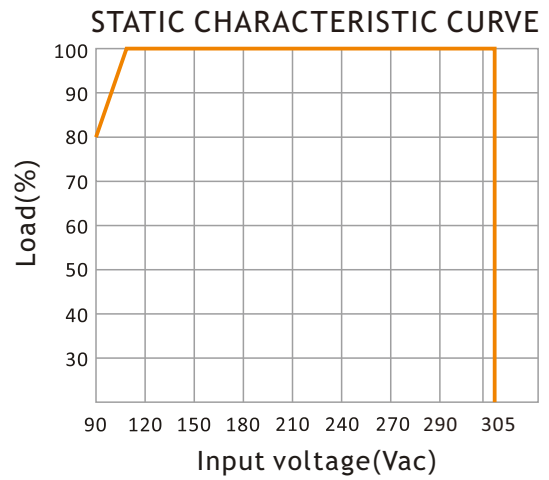
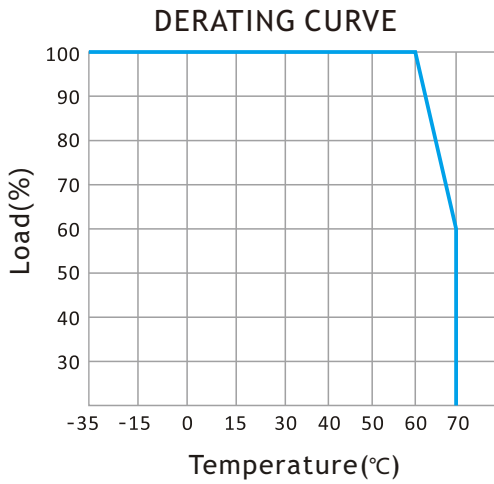
No Dimming



3 in 1 Dimming

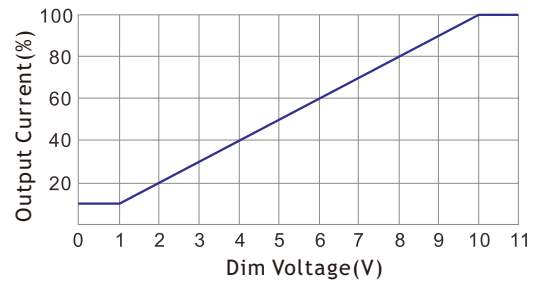
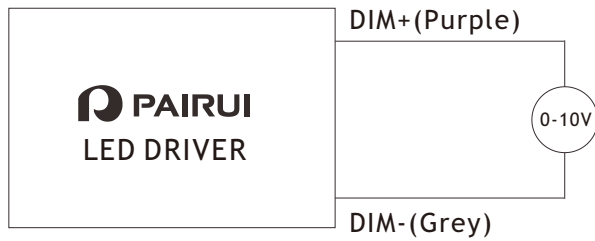


## Electrical Curve

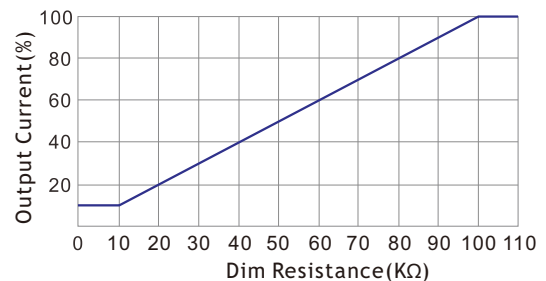
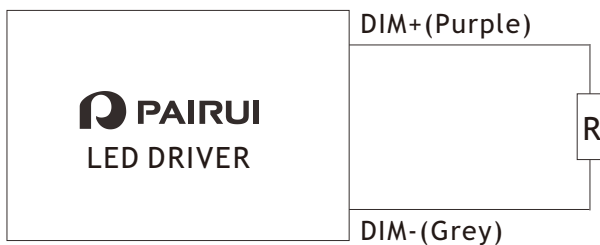


## Dimming Function

### 0-10V Dimming



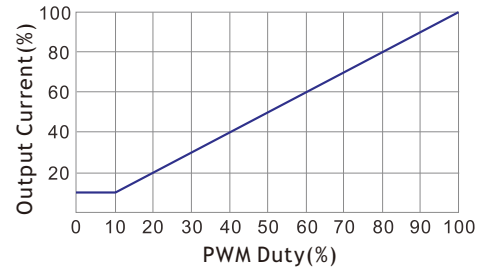
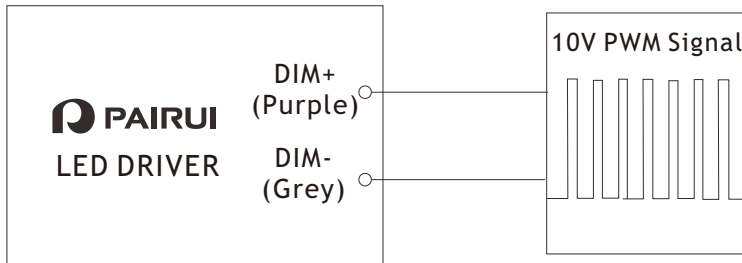
### External Resistor Dimming



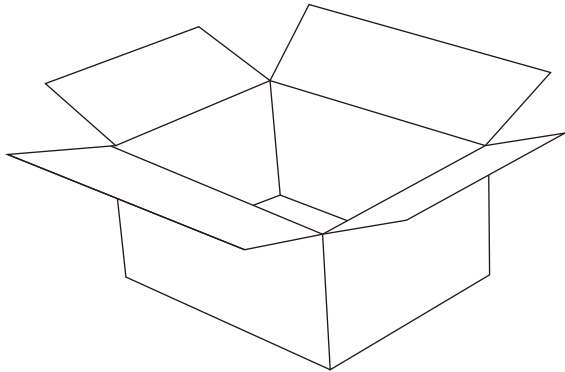


## Dimming Function

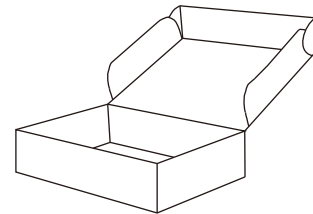
### PWM Dimming



## 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

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

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