



2016-V1.0-0719

Specifications

Constant Voltage LED Power Supplies

LEU-12V Series, 12W

PAIRUI ELECTRONICS

No. 545 Museum Road
Yangzhou, Jiangsu
China 225009

Tel: 86 (514) 8279 1592

Fax: 86 (514) 8769 3159

2016

LED Power Supplies for Outdoor Use

LEU-12V SERIES, 12WATT, IP67 RATING

Features

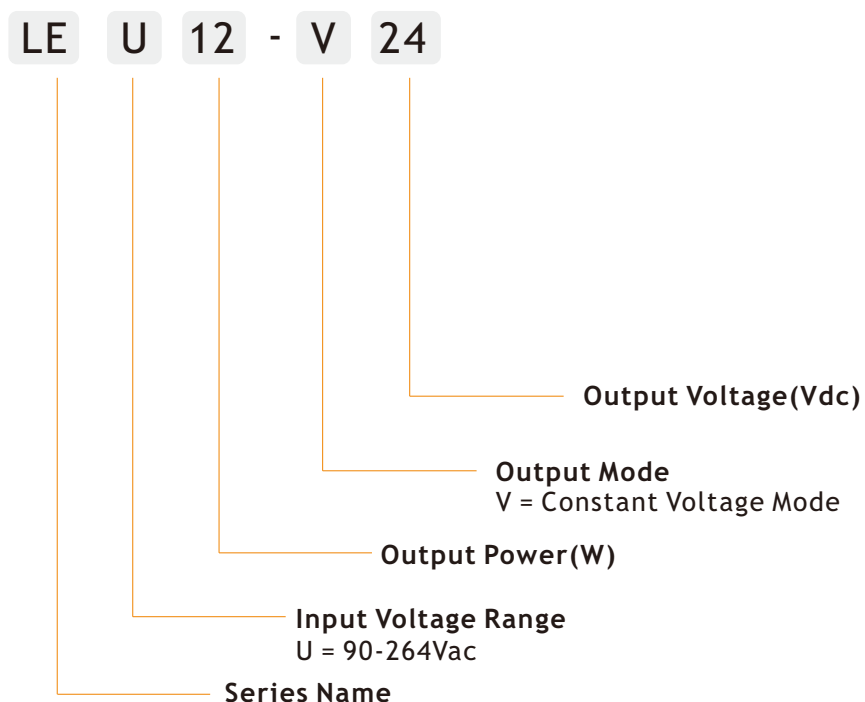
- 3 Year Warranty
- Universal Input Voltage Range: 90~264Vac
- Constant Voltage Output Mode
- Waterproof Rating IP67
- Cooling by Free Air
- Class II Power, no FG
- Short Circuit, Over Load, and Over temperature protections



Applications

- ✓ Garden Light
- ✓ Cabinet Light
- ✓ Landscape Light
- ✓ Other Indoor and Outdoor used Lights
- ✓ Stage Light

Electrical



Electrical

Part Number	Nominal Input Voltage	Output Voltage Output Current	Efficiency	Ripple	Certificate
LEU12-V12	100-240VAC	12V(0-1A)	79%	150mVp-p	CE
LEU12-V24	100-240VAC	24V(0-0.5A)	81%	150mVp-p	CE
LEU12-V36	100-240VAC	36V(0-0.33A)	82%	150mVp-p	CE

- NOTE:
1. Other output models are may available on request;
 2. The ripple 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.

INPUT

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Input voltage		90		264	Vac
Input frequency		47		63	Hz
Input current	Full load, Vin=115Vac Full load, Vin=230Vac		0.3 0.15		A A
Inrush current	Cold start, Vin=230Vac			30	A
Surge voltage	L-N		2		KV

OUTPUT

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Output voltage accuracy			±3		%
Line regulation	Vin from 100Vac to 240Vac		±1		%
Load regulation	Vout from min. to max.		±2		%
Set-up, rise time	Vin=115Vac & 230Vac at full load		800 20		ms ms
THD	Output load≥60%			20	%

Protection

Short circuit	In hiccup mode, it will recover automatically after fault condition is removed
Over load	135-175% rated output power In hiccup mode, it will recover automatically after fault condition is removed
Over temperature	When the temperature of the transistor inner node exceeds 150±10°C, the driver will be cut off, and recovers automatically after the temperature goes down

Environment

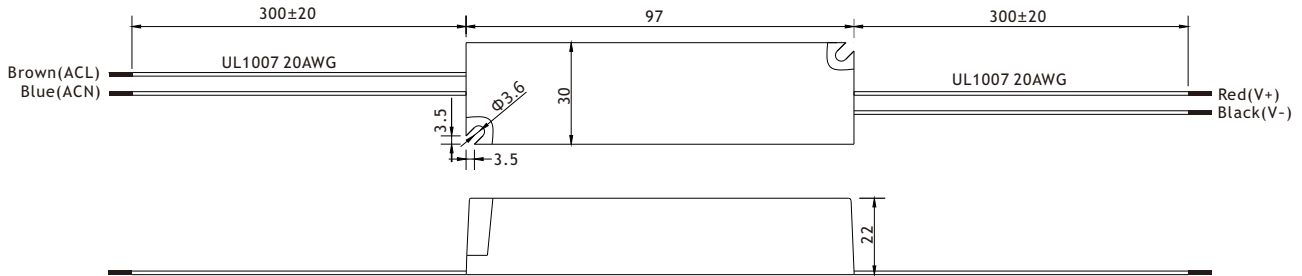
PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Ambient operating temperature	Startup at rated voltage (Derating required)	-25		+70	°C
Operating relative humidity	Non condensing	20		90	%
Storage temperature	Humidity 10 ~ 95% RH	-40		+80	°C
Maximum case temperature	Hot-spot on case			+75	°C
MTBF	Full load, 220Vac input, 25°C ambient temperature(MIL-HDBK-217F)	1300			Khrs
Waterproof rating	IP67				
Dimension(LxWxH)	97.0 x 30.0 x 22.0mm				
Weight	120g				

Safety/EMC

Safety	Design refer to UL1310, EN60950, EN61347-2-13
EMC	Compliance to EN55022(CISPR22) Class B, EN61000-3-2 Class A, EN61000-3-3, EN61000-4-2, 3, 4, 5, 6, 8, 11, EN55024

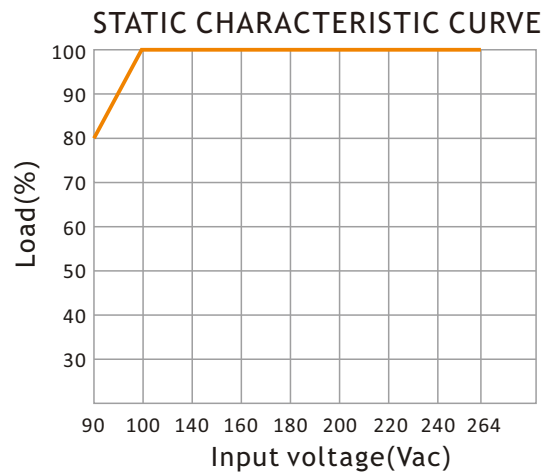
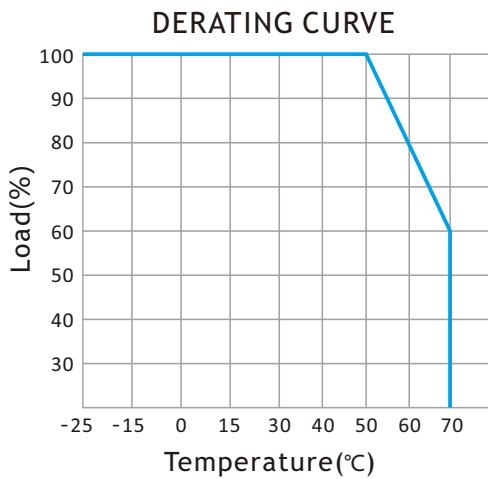
NOTE: Unless otherwise specified, all the above parameters are measured at ambient temperature of 25°C and Vin=100Vac to 240Vac.

Mechanical

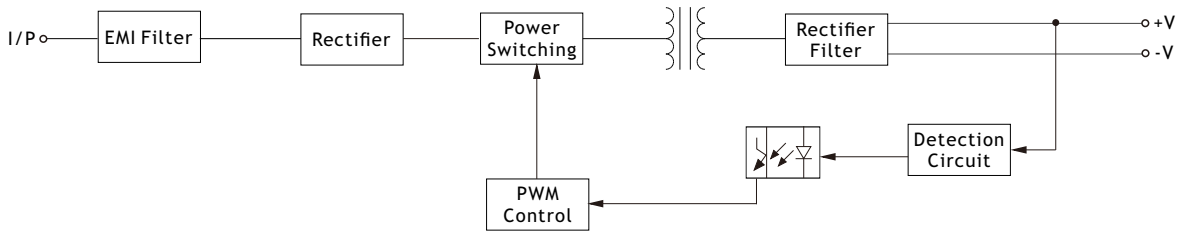


Unit: mm

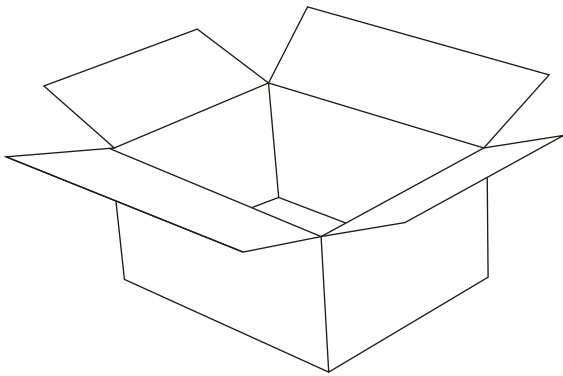
Electrical Curve



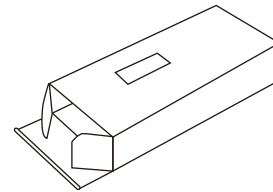
Block Diagram



Package



Outer Carton
L 355 x W 295 x H 210mm



Inner Box
L 170 x W 55 x H 27mm

SERIES	QTY/BOX	QTY/CARTON	NET WEIGHT	GROSS WEIGHT	VOLUME
LEU-12V	1 piece	70 boxes	8.4kg/carton	9.5kg/carton	0.02CBM/carton

Labelling



Symbol	Description
IP67	Type of protection(IP67 for indoor and outdoor use)
	Double insulation(The device is designed to be used in class II equipments and does not need any protection earth)
LPS	Limited Power Source
	CE Mark