



2016-V1.0-0719

Specifications

Constant Voltage LED Power Supplies

LEU-20V Series, 20W

PAIRUI ELECTRONICS

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2016

LED Power Supplies for Outdoor Use

LEU-20V SERIES, 20WATT, IP67 RATING

Features

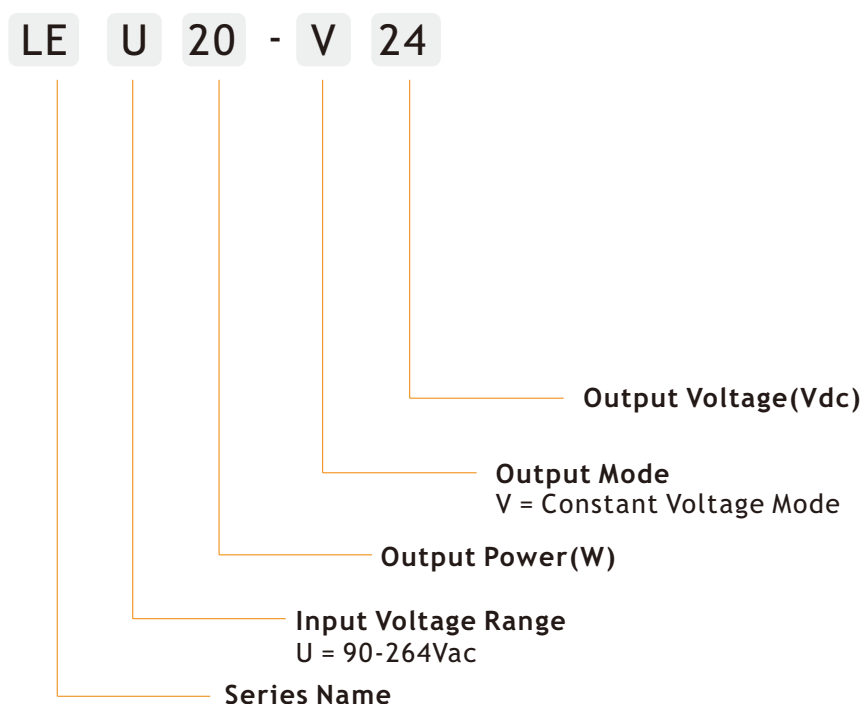
- 3 Year Warranty
- Universal Input Voltage Range: 90~264Vac
- Constant Voltage Output Mode
- Waterproof Rating IP67
- Cooling by Free Air
- Class II Power, no FG
- Short Circuit, Over Load, Over Voltage Protections



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
LEU20-V5	100-240VAC	5V(0-3A)	77%	80mVp-p	CE
LEU20-V12	100-240VAC	12V(0-1.67A)	81%	120mVp-p	CE
LEU20-V15	100-240VAC	15V(0-1.33A)	83%	120mVp-p	CE
LEU20-V24	100-240VAC	24V(0-0.84A)	83%	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		0.55 0.35		A A
Inrush current	Cold start, Vin=230Vac			70	A
Surge voltage	L-N		2		KV

OUTPUT

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Output voltage accuracy			±5		%
Line regulation	Vin from 100Vac to 240Vac		±1		%
Load regulation	Vout from min. to max.		±2		%
Set-up, rise time	Vin=230Vac at full load		500 30		ms ms
THD	Output load≥60%			20	%

Protection

Short circuit	In hiccup mode, it will recover automatically after fault condition is removed
Over voltage	115-135% Vout Shut off output voltage, clamping by zener diode
Over load	110-150% rated output power In hiccup mode, it will recover automatically after fault condition is removed

Environment

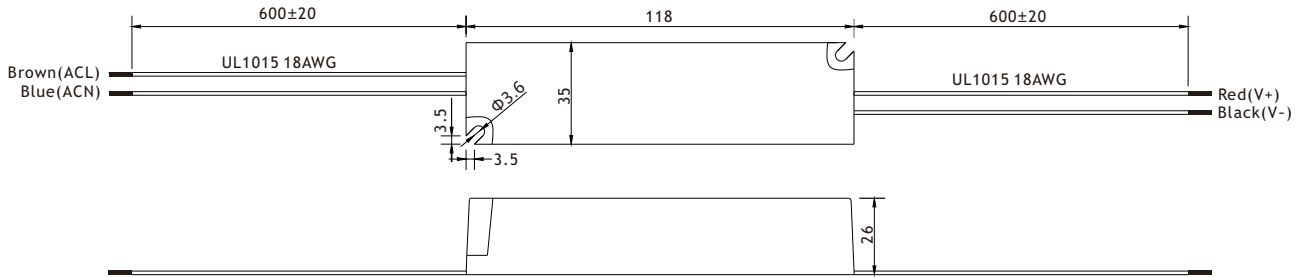
PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Ambient operating temperature	Startup at rated voltage (Derating required)	-25		+70	°C
Operating relative humidity	Non condensing	20		90	%
Storage temperature	Humidity 10 ~ 95% RH	-40		+80	°C
Maximum case temperature	Hot-spot on case			+75	°C
MTBF	Full load, 220Vac input, 25°C ambient temperature(MIL-HDBK-217F)	680			Khrs
Waterproof rating	IP67				
Dimension(LxWxH)	118.0 x 35.0 x 26.0mm				
Weight	220g				

Safety/EMC

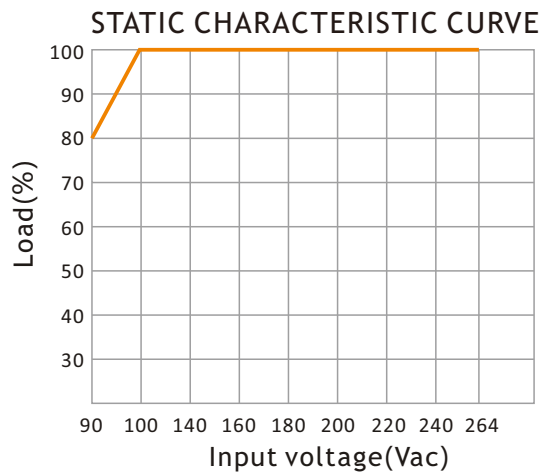
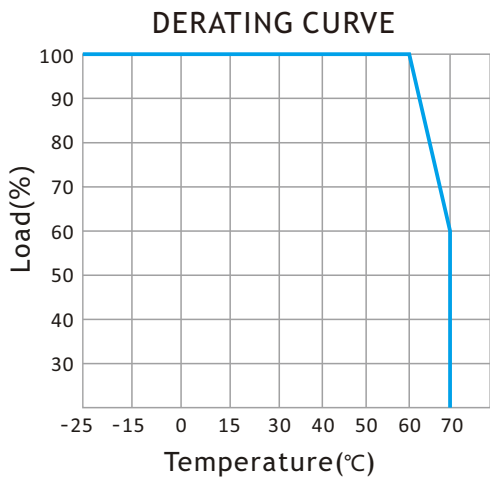
Safety	Design refer to UL879, UL1310, EN60950-1
EMC	Compliance to EN55022(CISPR22) Class B, EN61000-3-2 Class A, EN61000-3-3, EN61000-4-2, 3, 4, 5, 6, 8, 11, EN55024

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

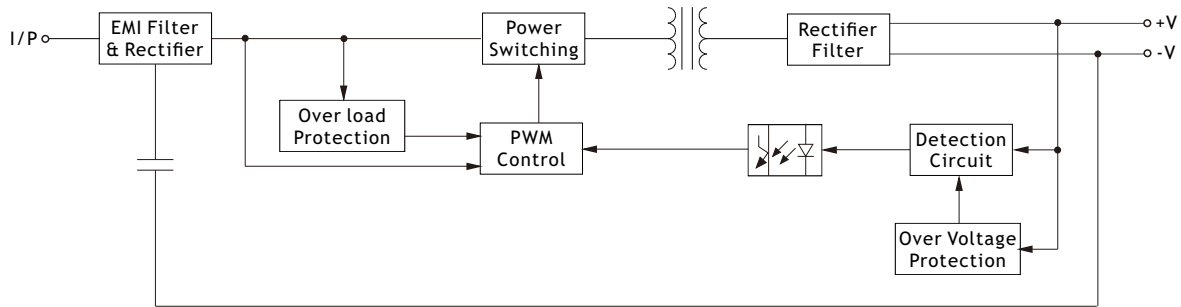
Mechanical



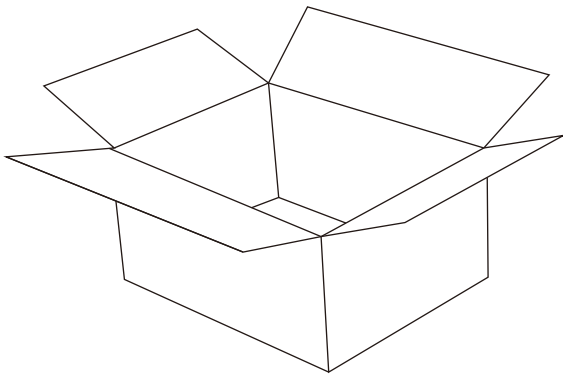
Electrical Curve



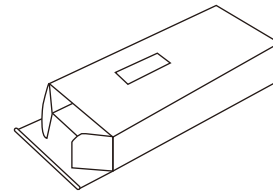
Block Diagram



Package



Outer Carton
L 330 x W 315 x H 210mm



Inner Box
L 150 x W 60 x H 30mm

SERIES	QTY/BOX	QTY/CARTON	NET WEIGHT	GROSS WEIGHT	VOLUME
LEU-20V	1 piece	60 boxes	13.2kg/carton	15kg/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