



2019-V2.0-0312

Specifications

LED Power Supplies for Outdoor Use

LGCU-50C Series, 50W

PAIRUI ELECTRONICS

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2019

LED Power Supplies for Outdoor Use

LGCU-50C SERIES, 50WATT, IP67 RATING

Features

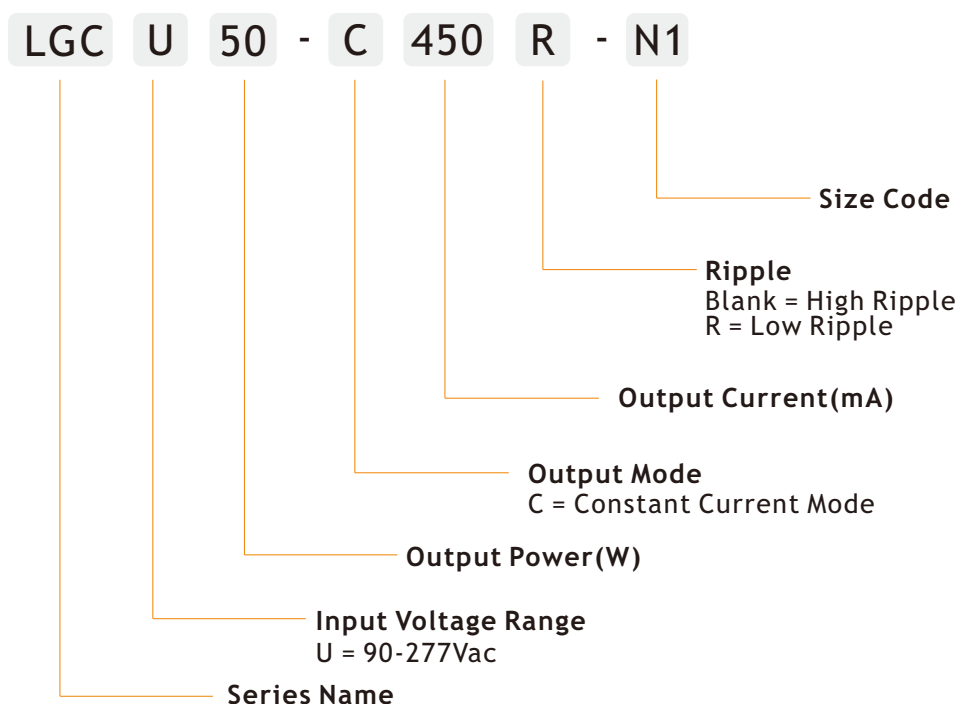
- 3 Year Warranty
- Universal Input Voltage Range: 90~277Vac
- Constant Current Output Mode
- High PF up to 0.99
- Rating IP67, Suitable for Outdoor Applications
- All Round Protections: Short Circuit, Over Voltage, Over Current, Over Temperature



Applications

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

Electrical



Electrical

Part Number	Nominal Input Range	Output Current Output Voltage	No Load Output Voltage	Ripple	Efficiency	Certificate
High Ripple						
LGCU50-C450-N1	100-240VAC	450mA(77-110V)	120V	50%	88%	CE, CCC
LGCU50-C700-N1	100-240VAC	700mA(50-72V)	80V	50%	87%	CE
LGCU50-C1050-N1	100-240VAC	1050mA(33-48V)	60V	50%	87%	CE
Low Ripple						
LGCU50-C450R-N1	100-240VAC	450mA(77-110V)	120V	5%	88%	CE, CCC
LGCU50-C700R-N1	100-240VAC	700mA(50-72V)	80V	5%	87%	CE
LGCU50-C1050R-N1	100-240VAC	1050mA(33-48V)	60V	5%	87%	CE

NOTE: Other output models are may available on request.

INPUT

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Input voltage		90		277	Vac
Input frequency		47		63	Hz
Input current	Full load, Vin=230Vac		0.25		A
Inrush current	Cold start, Vin=230Vac			35	A
Power factor(PF)	Full load, Vin=110Vac Full load, Vin=220Vac		0.99 0.95		
Leakage current	Vin=230Vac, 50Hz		0.75		mA
Surge voltage	L-N L, N-FG		2 4		KV KV

OUTPUT

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Output current accuracy			±5		%
Line regulation	Vin from 100Vac to 240Vac			5	%
Load regulation	Vout from min. to max.			5	%
Output current overshoot	Turning on			10	%
Turn-on delay time	Cold start, power on		1		S
Ripple	Refer to below note		See page 2		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 In hiccup mode, it will recover automatically after fault condition is removed
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

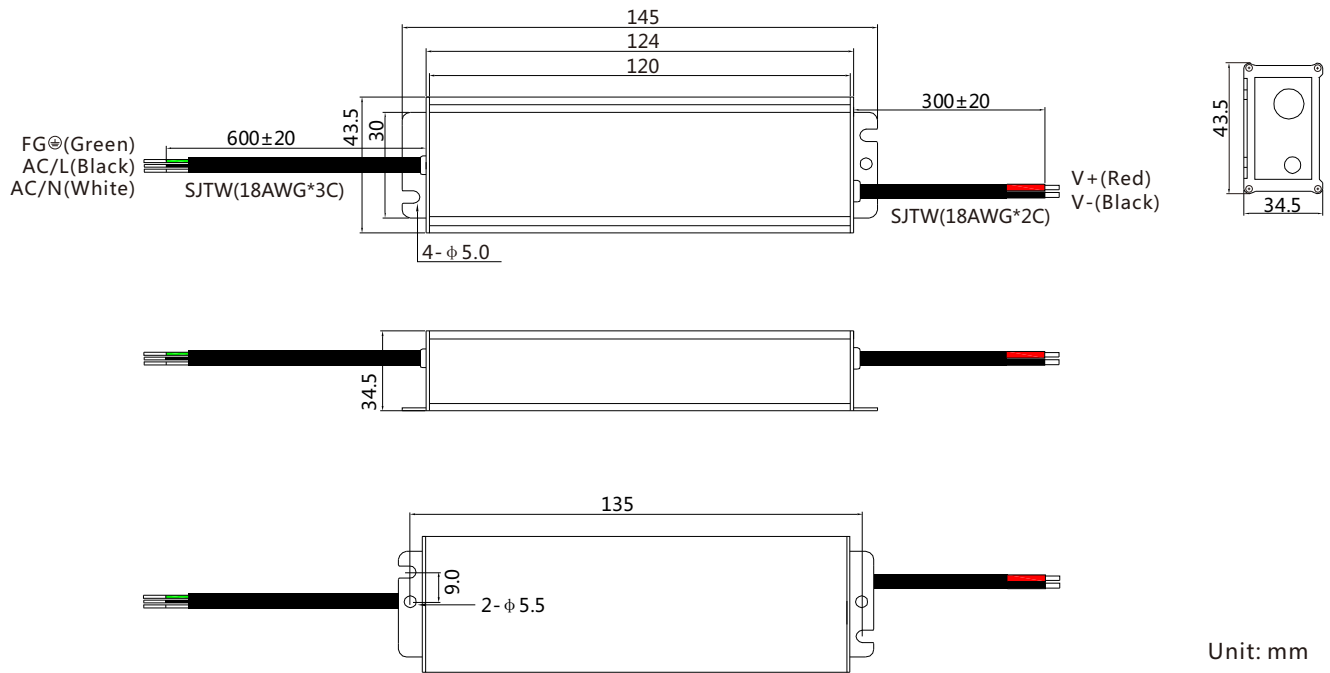
PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Ambient operating temperature	Startup at rated voltage	-35		+50	°C
Operating relative humidity	Non condensing	10		95	%
Storage temperature	Humidity 5 ~ 100% RH	-40		+85	°C
Maximum case temperature	Hot-spot on case			+90	°C
Lifetime	Full load, 220Vac input, 25°C ambient temperature	30			Khrs
Waterproof rating	IP67				
Dimension(LxWxH)	145.0 x 43.5 x 34.5mm				
Weight	390g				

Safety/EMC

Safety	Design refer to UL8750, UL935, UL1012, UL1310 Class 2, EN61347, EN61347-2-13 GB19510.1-2009, GB19510.14-2009
EMC	Compliance to EN55015, FCC Part 15 Class B, EN61000-3-2, EN61000-3-3, EN61000-4-2, 3, 4, 6, 8, 11, EN61547, GB-T17743-2007, GB17625.1-2012

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

Mechanical



Electrical Curve

