

SPECIFICATION

Product name: LES-200W-300X

Release date: 2026/06/09

SUNCOM	Product Type	LED INTEGRATED SPECIAL DRIVER		
	Product Series	LES-200W-300X	REV	V1.1

Features:

- Class I type for insulation
- Input voltage range:100-277V ~ 50/60Hz
- Constant current output ,with power limitation for control mode
- Metal material case, protection grade against water and dust: IP65
- Surge level:
differential mode 4kV ,common mode 6kV
- Guaranteed Lifetime:5 years



Applications

Wall washing light, linear mining light, floodlight, wall light, shoebox light

Model list

Model NO.	Rated input voltage	Max output power	Output voltage	The default current	效率
LES-200W-300A LES-200W-300P LES-200W-300C	100-277V 50/60Hz	200W	180-300Vdc Constant Power (200-300V)	0.83A	≥95.5%

Note:

- 1.Test conditions: Ta=25°C, under 230Vac input,after running for 30 minutes with full load.
2. When the input is less than 90Vac±5Vac, the output power gradually decreases,and it recovers full power when the input is above 100VAC again. Please refer to "THE OUTPUT POWER VS INPUT VOLTAGE" curve chart for details

Function List of Optional Models

Edit	Potentiometer	1-10V/PWM/Resistor	AUX 12V+	Remark
A	√			
P	√	√		
C	√	√	√	

Input characteristics

Parameter	Min	Typ	Max	Remark
Rated input voltage	100Vac	230Vac	277Vac	-
Input voltage range	90Vac	-	305Vac	-
Rated frequency range	47Hz	50/60Hz	63Hz	-
P.F.	0.95	-	-	@230Vac input ,with full load
T.H.D	-	-	10%	@230Vac input ,with full load
Input current	-	-	2.4A	@100Vac input ,with full load
Inrush current	-	-	100A	230Vac, cold start (25°C)

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Output characteristics

Parameter	Min	Typ	Max	Remark
Rated current	0.5A	-	1A	The maximum output power is satisfied $P_o = V_o \cdot I_o = 200W$
Output voltage range	180V	-	300V	Constant power output range: 200-300Vdc
Rated power(120-277Vac)	-	200W	-	
Non-load voltage	-	-	450V	-
Eff.@277Vac	-	95.5%	-	@277Vac input,with full load
Output ripple current (PK-AV)		5%	10%	full load 20MHz BW
Accuracy of output current	-5%	-	+5%	Full load (Constant power output range)
Line regulation	-3%	-	+3%	Full load
Load regulation	-5%	-	+5%	@200-250Vdc,full load @250-300Vdc,full load
Starting time	-	-	500ms	Full load@230Vac

Note:

1.The output current is limited by the input and output voltage, please refer to "I-V WORKING AREA" for details.

Dimming characteristics

Dimming function		Min	Typ	Max	Remark
1-10V dimming (optional)	Safe operation voltage range	1V	-	12V	Beyond the range may lead to a failure of the driver
	Dimming output range	10%	-	100%	-
	Rated operation voltage range	1V	-	10V	
PWM dimming (optional)	PWM high level	9.5V	-	10.5V	-
	PWM low level	0V	-	0.3V	-
	PWM frequency	300Hz	-	2000Hz	-
	PWM duty cycle	10%	-	99%	Full power output at 99% duty cycle
Resistor dimming (optional)	Rated external resistance value	10KΩ	-	100KΩ	-
	Dimming output range	10%	-	100%	-

Note:

1.Output current of dimming port: 100uA (typical value).

2.Within the constant power range, when the dimming signal is 0V, the lamp can be turned off.

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Protections

Protection	Description
Under-voltage protection	When the input is less than 90Vac $\pm$ 5Vac, the output power gradually decreases, and it recovers full power when the input is above 100VAC again.
Output short circuit protection	Hiccup mode, and recovery automatically when the fault condition is removed.
Over temperature protection	Self-recoverable type; When the casing temperature is greater than 90 $\pm$ 5°C, the output power decreases as the casing temperature increases
Output over-voltage protection	Protection mode: Hiccup or clamp at a certain output highest voltage state, the product will not be damaged, when the fault is removed, the driver works normally.

Note:

1. Unless otherwise specified, all parameters should be measured at the condition of 230Vac (50Hz) input, with rated load, and ambient temperature of 25°C;
2. Including setting error, linear adjustment rate and load adjustment rate.

Environmental characteristics

Environmental	Parameter
Working temperature	-40 ~ +55°C@100-277Vac (Refer to "Service Life Curve")
Safety case temperature	-40 ~ 90°C
Working humidity	20 ~ 95% RH, non-condensing
Storage temperature,	-40~+80°C, 10 ~ 95% RH
Resistant to vibration	10 ~ 500Hz, 5G 12 min/cycle, X、Y、Z axis 72 min each
MTBF	230Khrs min. MIL-HDBK-217F (Ta=25°C)
Lifetime	50000 hours, 230Vac, 80% load, Tcase=75°C, "Tcase VS Lifetime" curve for details.

Safety and EMC

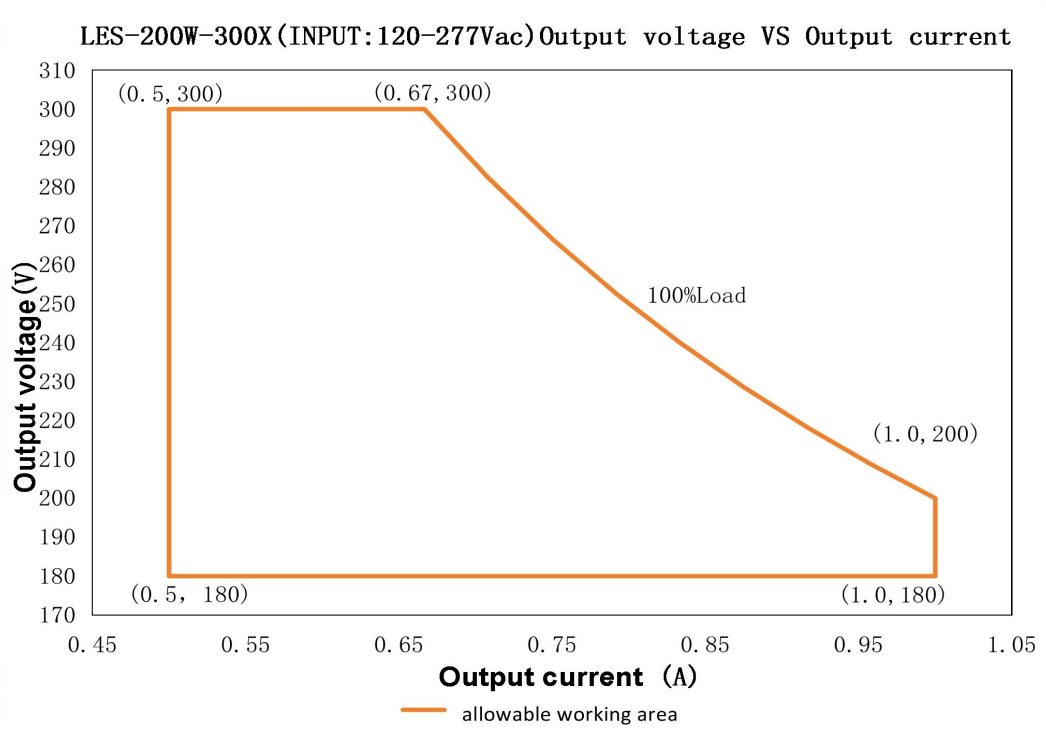
Safety categories	Standard
Safety	GB19510.1、GB19510.14、EN61347-1、EN61347-2-13、IEC61347-1、IEC61347-2-13、AS/NZS61347.1、AS61347.2.13、EN 62384;
EMC	EN 55015、EN 61547、EN 61000-3-2、GB/T 17743、GB17625.1、EN 61000-3-3
Surge level	DM: L-N $\pm$ 4KV (2 Ω), CM:L, N-PE $\pm$ 6KV (12 Ω) refer to IEC61000-4-5 2014
High-pot test	I/P-PE:1.5KVac I/P-DIM:3.75KVac
Insulation impedance	I/P-PG:100M Ohms/500Vdc
Leakage current	<0.7mA@277Vac

NOTE:

1. Attention! As a component of the whole, the EMC performance of the final product is not only decided by the driver, even if the driver is well-designed and fulfils all the required compliance. The final equipment manufacturers must re-qualify EMC Directive on the complete product.

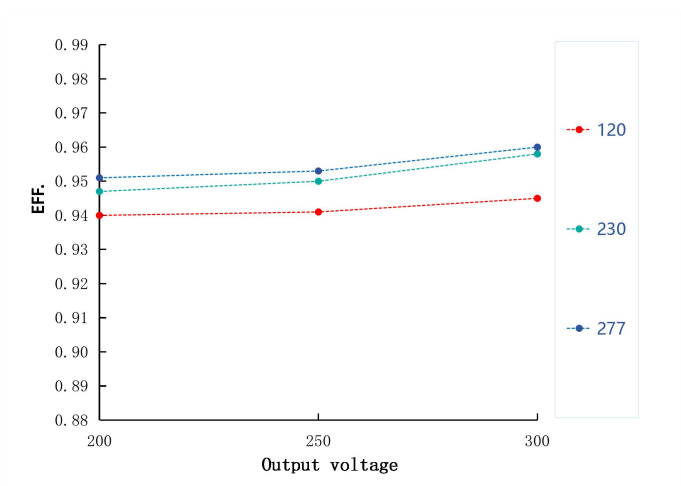
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V-I Working area

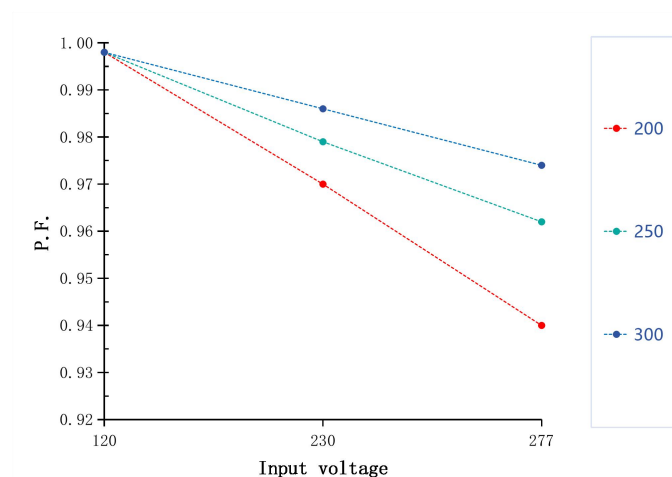


Load	Output								
Load working Voltage	180V	200V	220V	240V	260V	270V	280V	290V	300V
Io_MAX	1A	1A	0.91A	0.83A	0.77A	0.74A	0.71A	0.69A	0.67A
Po_MAX	180W	200W	200W	200W	200W	200W	200W	200W	200W

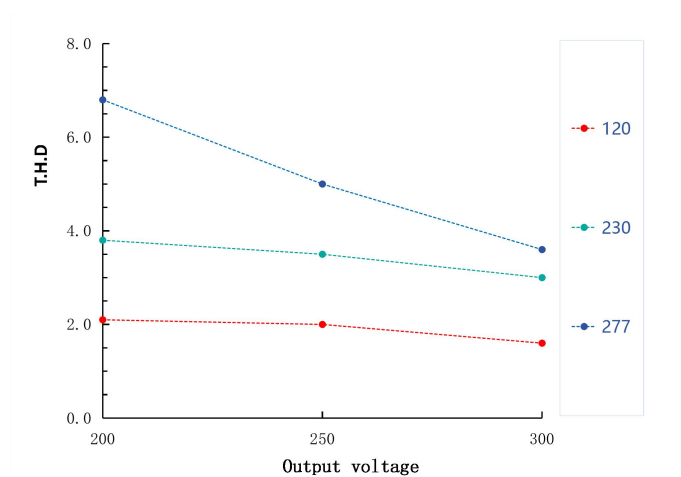
EFF. VS Output voltage



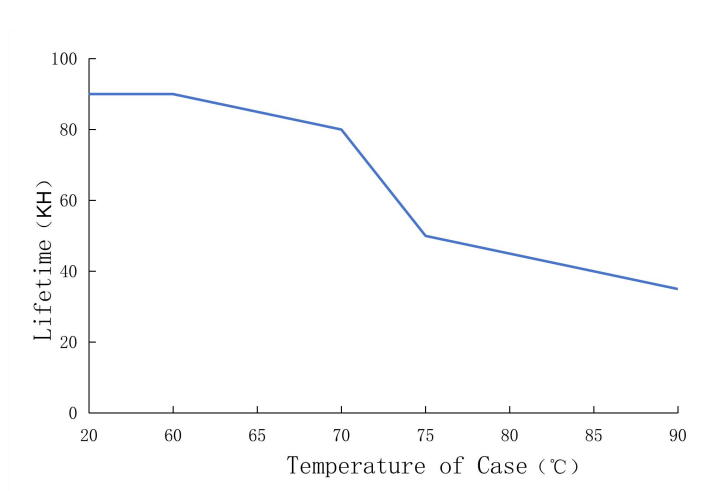
Power factor VS Input voltage



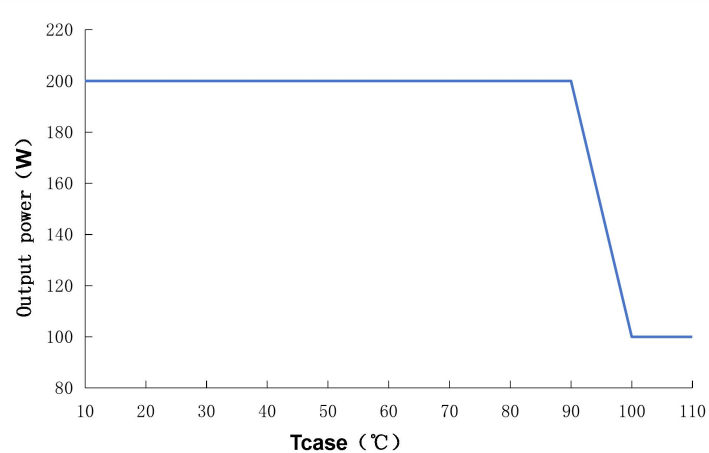
T.H.D. VS Output voltage



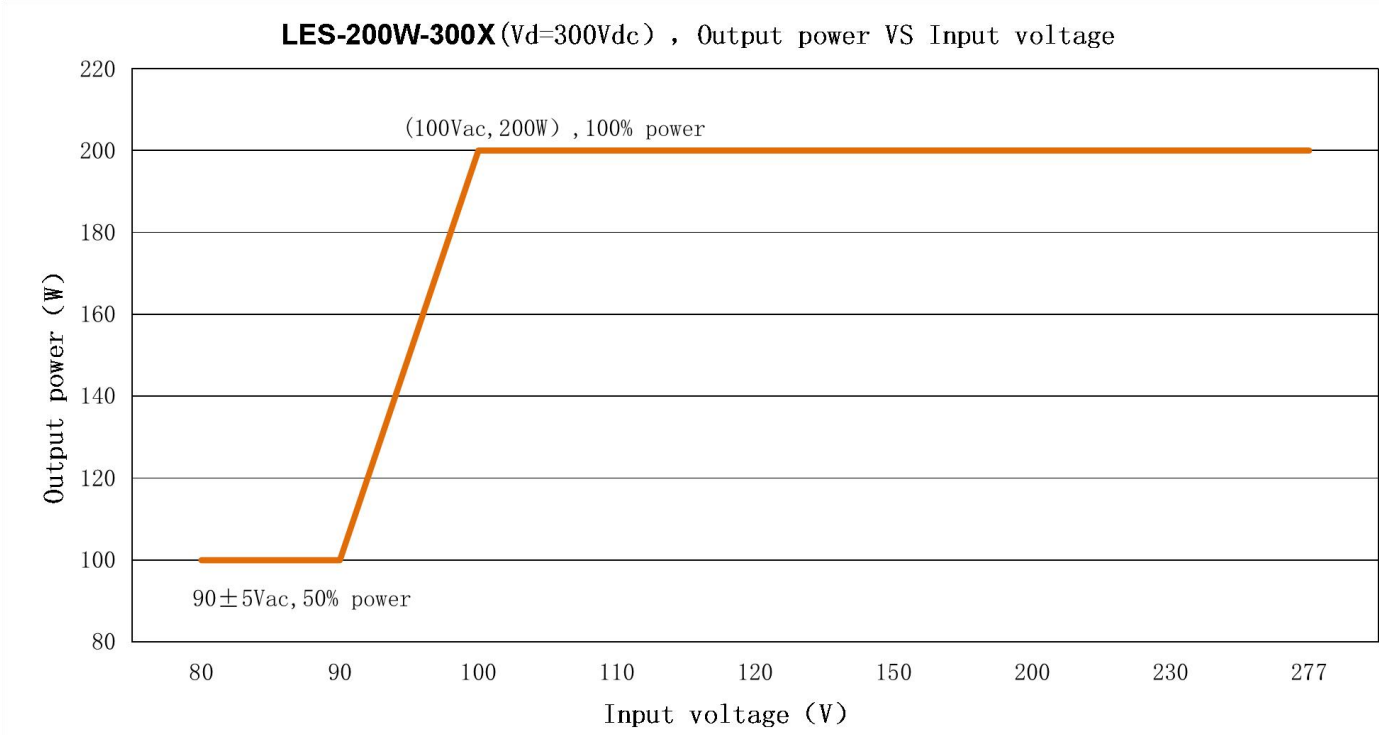
Tc VS Lifetime



Output power VS Tcase



Input voltage VS Output power



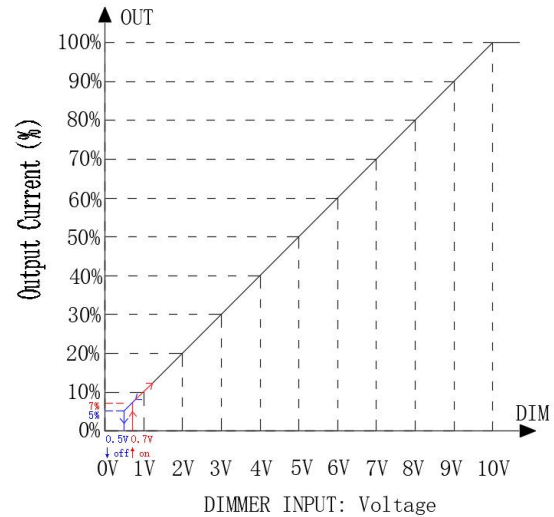
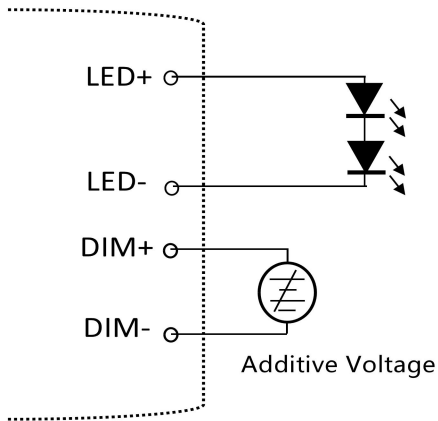
LES-200W-300X (For output 300Vdc, the rated output current & power under different input voltage)								
Input voltage	80Vac	90Vac	100Vac	110Vac	120Vac	180Vac	230Vac	277Vac
Io	0.33A	0.33A	0.67A	0.67A	0.67A	0.67A	0.67A	0.67A
Po	100W	100W	200W	200W	200W	200W	200W	200W

Dimming operation

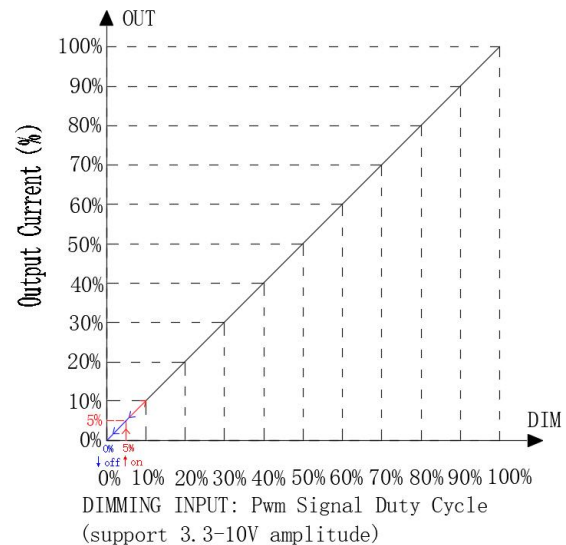
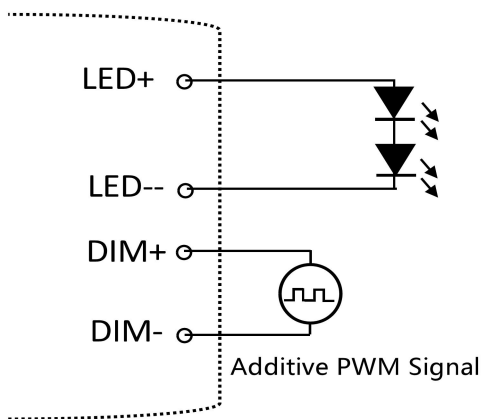
Three-in-one dimming function (P/L version only)

- connect a resistor 0-100K or 0-10V DC voltage or 10V PWM signal between DIM+ and DIM- to adjust the output current
- output current of dimming port: 100uA (typical value). (to be determined!)

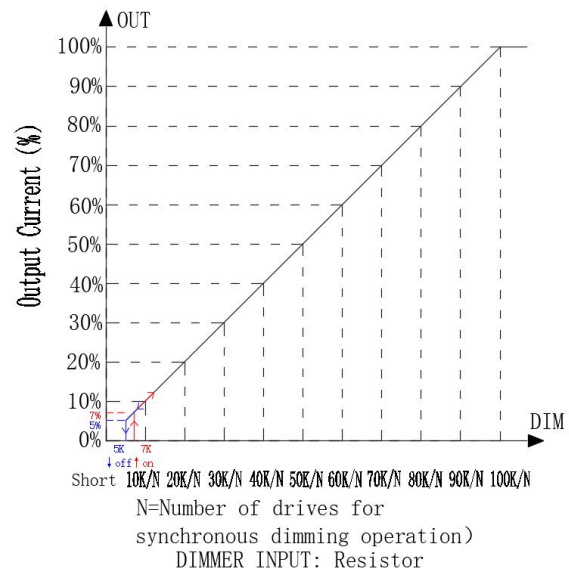
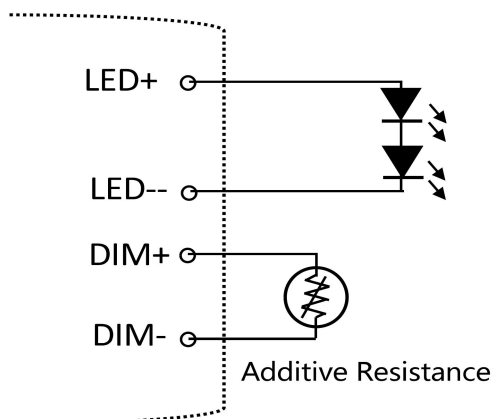
Applied voltage of 0-10V:



Applying additive 10V PWM signal (Frequency range: 300Hz-2KHz) :



Applied an additional 0-100K resistor:

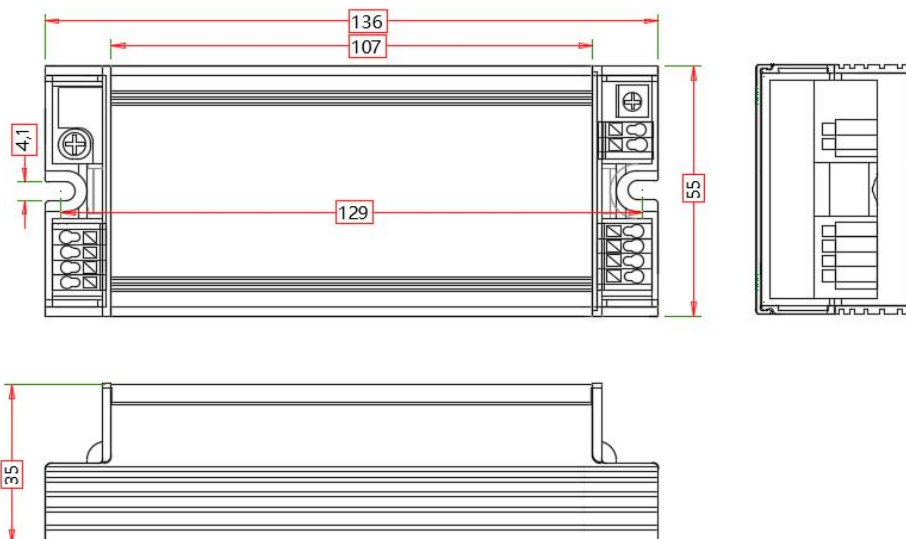


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Mechanical specification

Size (mm)	L136 * W55 * H35 (mm)
Weight (Kg)	350g
Packaging (mm)	

LES-200W-300X



Type	Input Wire	Output Wire	Dimming Wire & AUX Output Wire
Specifications	PVC 0.5-1.0mm ² (20-16AWG)	PVC 0.3-1.0mm ² (22-16AWG)	PVC 0.2-0.5mm ² (24-22AWG)
Color	AC-L(Brown); AC-N(Blue); PG(Yellow/Green)	LED+(Red);LED-(Black)	DIM+(Purple);DIM-(Pink); 12V+ (Black/White)
Length	150±10mm (L1)	150±10mm (L2)	150±10mm (L3)
Tinned	5±1mm (Y1)	5±1mm (Y2)	5±1mm (Y3)

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Version

Date	Update log	version	approved
2026.05.22	Initial version	V1.0	
2026.06.09	Optimize parameters	V1.1	

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