

## Features

- Rated input voltage: 100-277Vac
- Can withstand 305vac input 5s
- Active PFC function
- Compliant with EMC EN55035/55032 Class B
- The maximum operating temperature can reach 75°C
- No Fan natural air cooling design
- Over voltage level III
- Short circuit, over voltage, over load, over temperature protection
- 5-year warranty



## Application

Industrial control, Industrial equipment, Power systems, Rail transit.

## Model List

| Model No.        | Rated input voltage | Max output power | Output voltage | Output current max. | Efficiency typ. | Ripple current | Adjustable voltage |
|------------------|---------------------|------------------|----------------|---------------------|-----------------|----------------|--------------------|
| DL-200W-V12-EXS  | 100-277Vac          | 200W             | 12Vdc          | 16.67A              | 92%             | 150mV          | ±10%               |
| DL-200W-V15-EXS  | 100-277Vac          | 200W             | 15Vdc          | 13.34A              | 92%             | 150mV          | ±10%               |
| DL-200W-V24-EXS  | 100-277Vac          | 200W             | 24Vdc          | 8.34A               | 93%             | 240mV          | ±10%               |
| DL-200W-V36-EXS  | 100-277Vac          | 200W             | 36Vdc          | 5.56A               | 93%             | 240mV          | ±10%               |
| DL-200W-V48-EXS  | 100-277Vac          | 200W             | 48Vdc          | 4.17A               | 93%             | 240mV          | ±10%               |
| DL-200W-V12R-EXS | 100-277Vac          | 200W             | 12Vdc          | 16.67A              | 92%             | 150mV          | ±10%               |
| DL-200W-V15R-EXS | 100-277Vac          | 200W             | 15Vdc          | 13.34A              | 92%             | 150mV          | ±10%               |
| DL-200W-V24R-EXS | 100-277Vac          | 200W             | 24Vdc          | 8.34A               | 93%             | 240mV          | ±10%               |
| DL-200W-V36R-EXS | 100-277Vac          | 200W             | 36Vdc          | 5.56A               | 93%             | 240mV          | ±10%               |
| DL-200W-V48R-EXS | 100-277Vac          | 200W             | 48Vdc          | 4.17A               | 93%             | 240mV          | ±10%               |

### NOTE:

- 1、The above parameter test conditions are as follows: Ta=25°C, 230Vac input, and the test results are obtained after full-load operation for 30 minutes.
- 2、Ripple and noise measurement method: Use a 12" twisted-pair cable, with 0.1μF and 47μF capacitors connected in parallel at the terminal, and conduct measurements under a 20MHz bandwidth
- 3、Version selection: R version with redundancy (e.g.: DL-200W-V12R-EXS)

## Input Characteristics

| Parameter                  | MIN          | TYP     | MAX           | NOTE                                          |
|----------------------------|--------------|---------|---------------|-----------------------------------------------|
| Rated input voltage        | 100Vac       | 230Vac  | 277Vac        | -                                             |
| Input voltage range        | 90Vac/120Vdc | /       | 305Vac/420Vdc | Reference input voltage vs output power curve |
| Input frequency            | 47Hz         | 50/60Hz | 63Hz          | -                                             |
| Power factor               | -            | ≥0.97   | -             | -                                             |
| Total harmonic distortion  | -            | <10%    | -             | -                                             |
| Input current/100Vac       | -            | 2.5A    | -             | 100% load, 100Vac input                       |
| Input surge current/277Vac | -            | -       | 90A           | 277Vac input, cold start (25°C)               |
| Leakage current            | -            | -       | 0.75mA        | 277Vac input,RMS Max.                         |

## Output Characteristics

| Parameter              | MIN  | TYP        | MAX | NOTE                        |
|------------------------|------|------------|-----|-----------------------------|
| Output accuracy        | -    | ±1%        | -   | 0-100% load                 |
| Linear adjustment rate | -    | ±1%        | -   | 0-100% load                 |
| Load regulation rate   | -    | ±1%        | -   | Rated Input voltage: 230Vac |
| Start-up time          | -    | 500ms/30ms | -   | Rated Input voltage: 230Vac |
| Hold time              | 16ms | -          | -   | 0-100% load                 |

## Protection

| Included functions              | Function Description                                                                                                                                |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Output overload protection      | When the rated power is 1.4 to 1.8 times, it enters hiccup protection and can automatically recover after the abnormal load conditions are removed. |
| Output short-circuit protection | Yes; Hiccup mode, which can automatically recover after abnormal conditions are removed.                                                            |
| Over-temperature protection     | Yes; When TC exceeds 110°C, it enters protection mode and automatically restarts after the anomaly is removed                                       |
| Output over voltage protection  | It turns off when the output voltage exceeds >1.08-1.2 times and resumes after a restart                                                            |

## Function

| functions          | Function Description                                                                                                                                                                                   |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC OK              | The power supply is operating abnormally with the DCOK signal voltage ranging from -0.1V to -0.5V. When the power supply is operating normally, the DCOK signal voltage ranges from 4.5V to 6V (60mA). |
| Remote switch      | When the DC voltage of the signal source is ≤ 0.8V, the power supply is turned on; when it is ≥4-30V, the power supply is turned off. The maximum signal source must not exceed 30V 1A.                |
| Redundant function | When the DC voltage of the signal source is ≤ 0.8V, the power supply is turned on; when it is ≥4-30V, the power supply is turned off. The maximum signal source must not exceed 30V 1A                 |

## Environmental Reliability

| Environmental category              | Parameter                                                                         |
|-------------------------------------|-----------------------------------------------------------------------------------|
| Maximum operating temperature range | -40 ~ +75°C @100-277Vac reference temperature curve                               |
| Working humidity                    | 20-90% RH, no condensation                                                        |
| Storage temperature and humidity    | -40~+80°C, 10 ~ 90% RH                                                            |
| Vibration-resistant                 | 10 to 500Hz, 5G 12 minutes per cycle, 72 minutes for each of the X, Y, and Z axes |
| MTBF                                | 230Khrs min. MIL-HDBK-217F (Ta=25°C)                                              |
| Lifespan                            | 70,000 hours @230Vac, TC ≤ 75°C . For details, please refer to the life curve     |

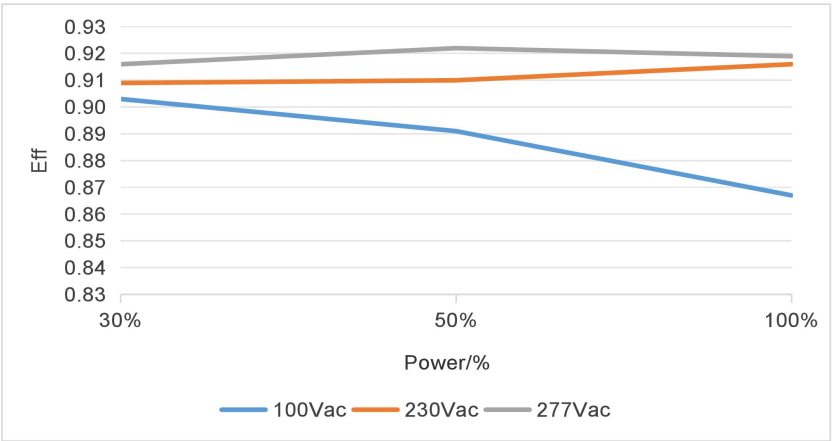
## Safety and Electromagnetic Compatibility

| Safety regulations category       | Standard                                                                                      |
|-----------------------------------|-----------------------------------------------------------------------------------------------|
| Safety                            | UL62368-1, TUV BS EN/EN62368-1, BS EN/EN60335-1, BS EN/EN61558-1/-2-16,GB 4943.1              |
| EMC Electromagnetic compatibility | EMI BS EN/EN55032、EN55035、Class B                                                             |
|                                   | Harmonic Current BS EN/EN 61000-3-2 Class B                                                   |
|                                   | ESD BS EN/EN 61000-4-2                                                                        |
|                                   | EFT/Burst BS EN/EN 61000-4-4                                                                  |
| Lightning protection grade        | Differential mode L-N ± 2 KV (2Ω),Common mode L, N-PE ± 4 KV (12Ω) Refer to IEC61000-4-5 2014 |
| Pressure resistance               | I/P-O/P:4KVac I/P-PE :2KVac O/P-PE : 1.25KVac                                                 |
| Insulation impedance              | I/P-PE:100MΩ / 500VDC; I/P-O/P:100MΩ / 500VDC / 25°C/ 70% RH                                  |

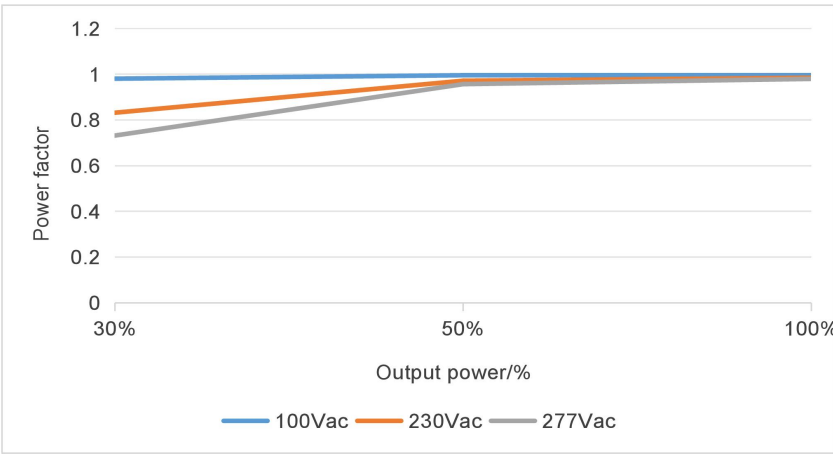
Note: As a component used in conjunction with terminal equipment, the power supply's EMC is affected by the entire set of devices. Terminal equipment manufacturers need to reconfirm the EMC of the entire set of devices.

Parametric curves

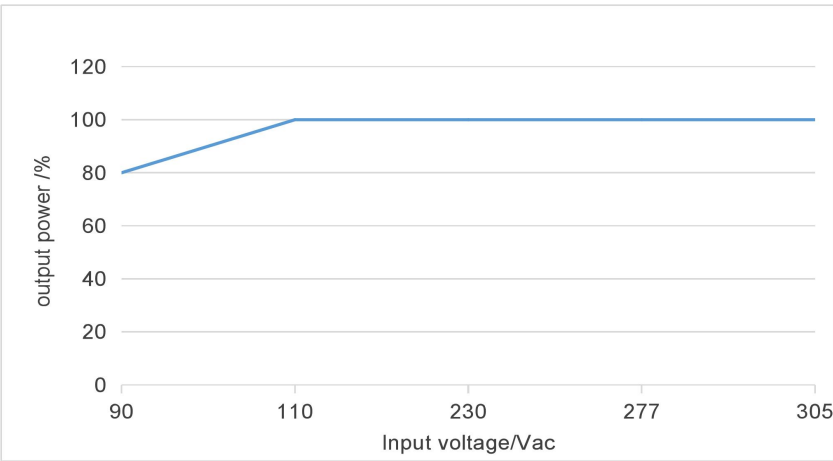
Eff/Power



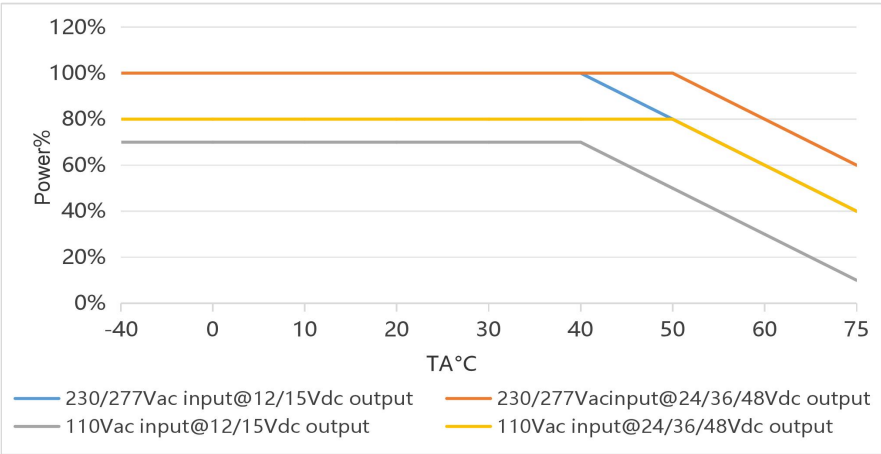
Power factor/Output power



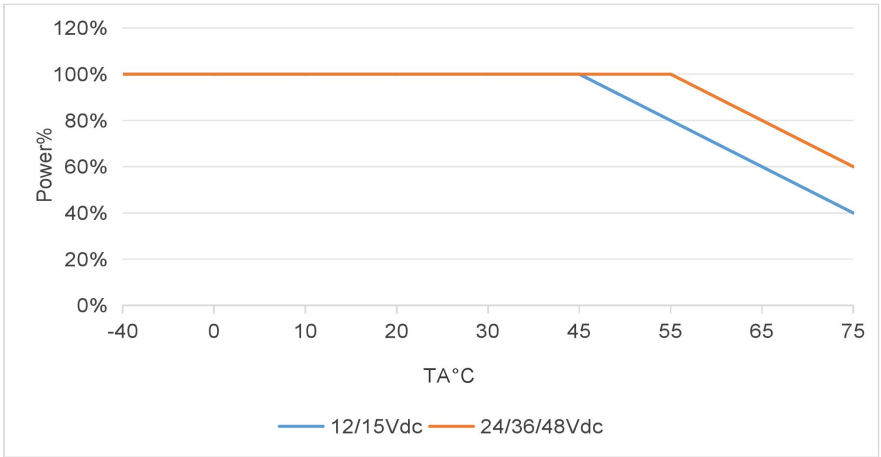
Output power /Input voltage (static curve)



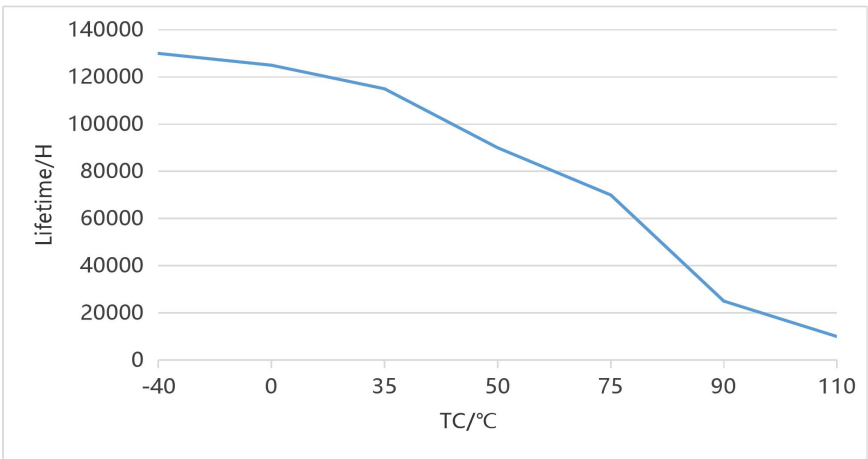
Power/TA (without aluminum plate)



Power/TA (with aluminum plate)

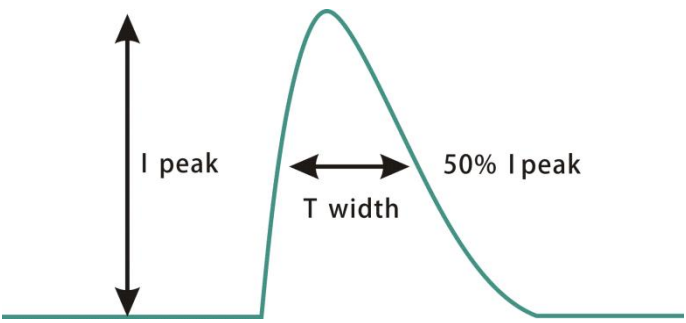


Lifetime/TC



Inrush Current

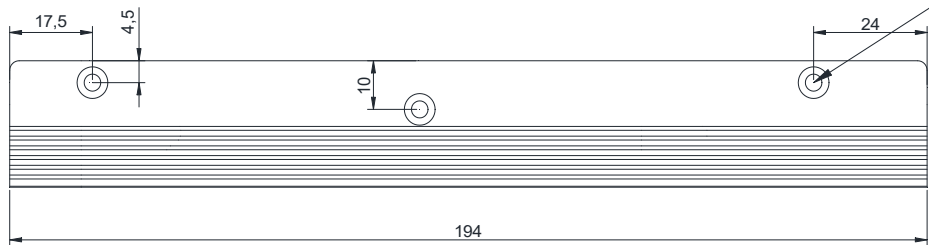
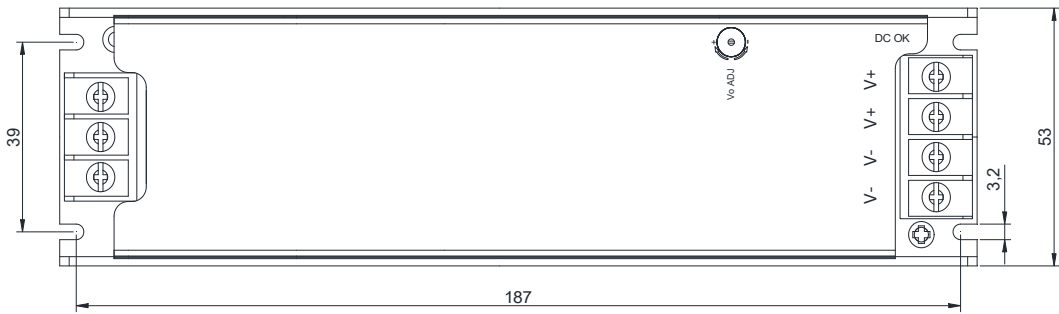
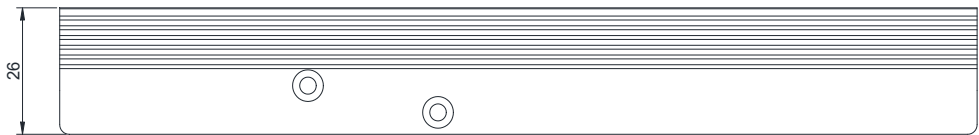
| Input voltage | Peak current | T (@50% peak current) |
|---------------|--------------|-----------------------|
| 100Vac        | 31.3A        | 229us                 |
| 230Vac        | 49.8A        | 386us                 |
| 277Vac        | 62.8A        | 440us                 |



Size & Packaging

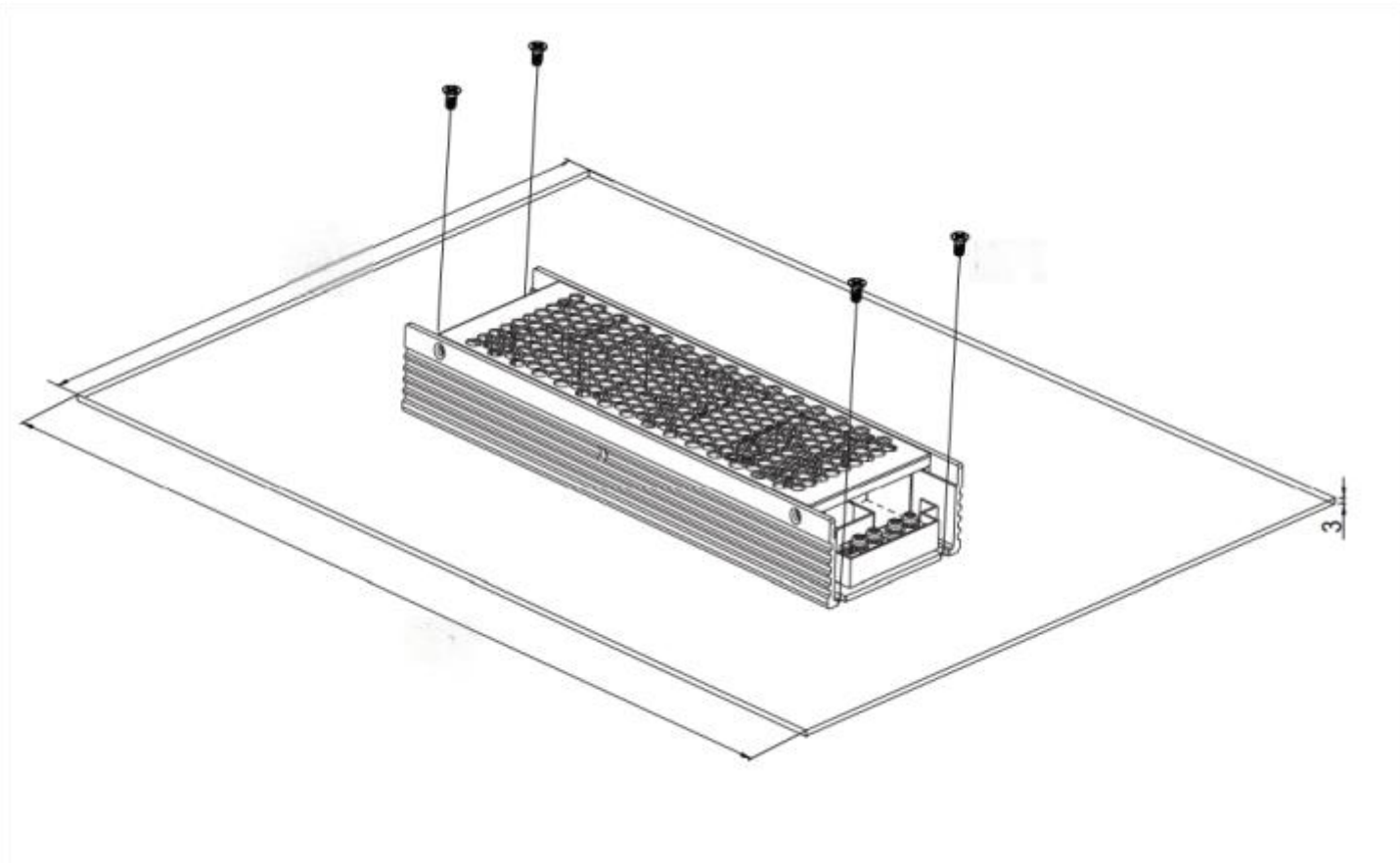
Weight

|        |                    |
|--------|--------------------|
| Size   | L194mm*W53mm*H26mm |
| Weight | 470g               |



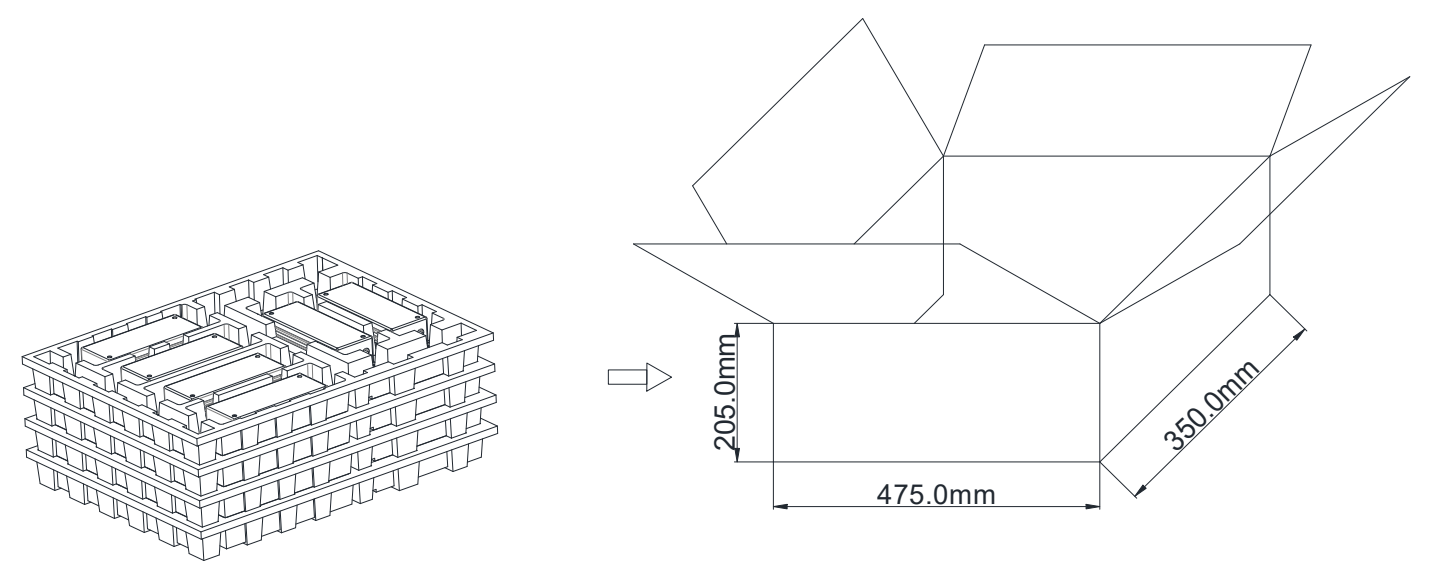
4-R1.6\*6.5Salad Hole

Installation instructions for aluminum plate: This product is a self-cooling type. It is recommended to install it on a heat dissipation aluminum plate for use. The recommended aluminum plate is as shown in the following figure. At the same time, to optimize the heat dissipation performance, it is recommended to apply heat dissipation paste on the surface of the aluminum plate or keep the installation surface of the aluminum plate smooth.



Packaging

|                |                      |
|----------------|----------------------|
| Packaging (mm) | L475mm*W350mm*H205mm |
|----------------|----------------------|



NOTE:

- 1. Each box has 4 layers, with 6 pieces on each layer, totaling 24 pieces per box.
- 2. According to the certificates obtained by LED DRIVER, LED DRIVER with English labels are sold in Europe, America and India.
- 3. LED driver power supplies with Chinese labels are only for the Chinese market.