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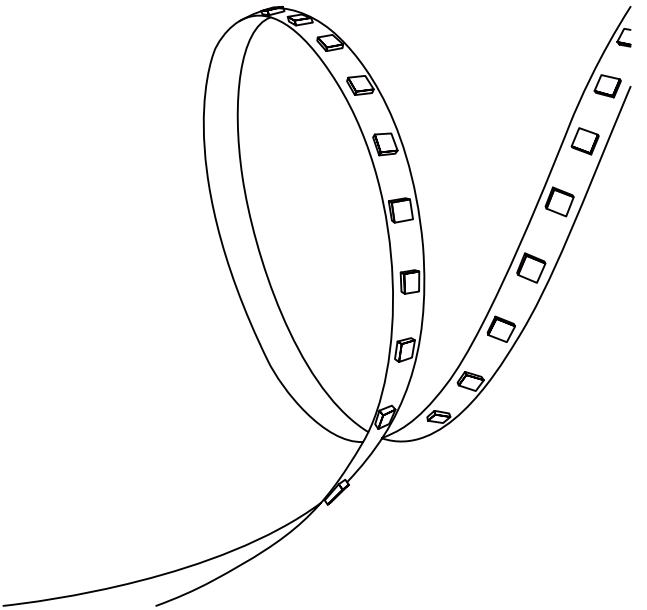
www.opple.com

# LED Strip Instruction and Operating Manual



Opple Lighting B.V.
Meerenakkerweg 1-07 5652 AR EindhovenThe Netherlands
OPPLE Lighting Co.,Ltd.
Room 411,Building 1 No.6111,Longdong Avenue,PudongNew District,
Shanghai City 201201,P.R.China
www.opple.com service@opple.com

# LED Strip

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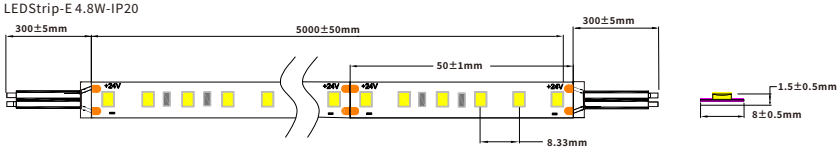
## Technical Specification

| SKU | SAP Description | Dimension (L*W*H) | W/M | LM/M | Efficacy | K | CRI | Operating Temp. |
|---|---|---|---|---|---|---|---|---|
| 806001007000 | LEDStrip-E 4.8W-927-600-IP20 | 5000*8*1.5mm | 4.8 | 600 | 115 | 2700 | 90 | -20-40℃ |
| 806001007100 | LEDStrip-E 4.8W-930-600-IP20 | 5000*8*1.5mm | 4.8 | 600 | 115 | 3000 | 90 | -20-40℃ |
| 806001007200 | LEDStrip-E 4.8W-940-600-IP20 | 5000*8*1.5mm | 4.8 | 600 | 120 | 4000 | 90 | -20-40℃ |
| 806001007300 | LEDStrip-E 4.8W-927-600-IP67 | 5000*10*4.5mm | 4.8 | 600 | 115 | 2700 | 90 | -20-40℃ |
| 806001007400 | LEDStrip-E 4.8W-930-600-IP67 | 5000*10*4.5mm | 4.8 | 600 | 115 | 3000 | 90 | -20-40℃ |
| 806001007500 | LEDStrip-E 4.8W-940-600-IP67 | 5000*10*4.5mm | 4.8 | 600 | 120 | 4000 | 90 | -20-40℃ |
| 806001007600 | LEDStrip-E 9.6W-927-1200-IP20 | 5000*8*1.5mm | 9.6 | 1200 | 115 | 2700 | 90 | -20-40℃ |
| 806001007700 | LEDStrip-E 9.6W-930-1200-IP20 | 5000*8*1.5mm | 9.6 | 1200 | 115 | 3000 | 90 | -20-40℃ |
| 806001007800 | LEDStrip-E 9.6W-940-1200-IP20 | 5000*8*1.5mm | 9.6 | 1200 | 125 | 4000 | 90 | -20-40℃ |
| 806001007900 | LEDStrip-E 9.6W-927-1200-IP67 | 5000*10*4.5mm | 9.6 | 1200 | 115 | 2700 | 90 | -20-40℃ |
| 806001008000 | LEDStrip-E 9.6W-930-1200-IP67 | 5000*10*4.5mm | 9.6 | 1200 | 115 | 3000 | 90 | -20-40℃ |
| 806001008100 | LEDStrip-E 9.6W-940-1200-IP67 | 5000*10*4.5mm | 9.6 | 1200 | 125 | 4000 | 90 | -20-40℃ |
| 806001008200 | LEDStrip-E 14.4W-927-1800-IP20 | 5000*8*1.5mm | 14.4 | 1800 | 115 | 2700 | 90 | -20-40℃ |
| 806001008300 | LEDStrip-E 14.4W-930-1800-IP20 | 5000*8*1.5mm | 14.4 | 1800 | 120 | 3000 | 90 | -20-40℃ |
| 806001008400 | LEDStrip-E 14.4W-940-1800-IP20 | 5000*8*1.5mm | 14.4 | 1800 | 120 | 4000 | 90 | -20-40℃ |
| 806001008500 | LEDStrip-P 12W-1000-BLE2-TW-IP20 | 5000*8*1.5mm | 12 | 1440 | 120 | 2700-6500 | 90 | -20-40℃ |
| 806001008600 | LEDStrip-P 12W-1000-BLE2-TW-IP67 | 5000*8*4.5mm | 12 | 1440 | 120 | 2700-6500 | 90 | -20-40℃ |
| 806001008700 | LEDStrip-E 14.4W-927-1800-IP67 | 5000*10*4.5mm | 14.4 | 1800 | 105 | 2700 | 90 | -20-40℃ |
| 806001008800 | LEDStrip-E 14.4W-930-1800-IP67 | 5000*10*4.5mm | 14.4 | 1800 | 105 | 3000 | 90 | -20-40℃ |
| 806001008900 | LEDStrip-E 14.4W-940-1800-IP67 | 5000*10*4.5mm | 14.4 | 1800 | 115 | 4000 | 90 | -20-40℃ |
| 806001009000 | LEDStrip-E 19.2W-927-2600-IP20 | 5000*8*1.5mm | 19.2 | 2300 | 115 | 2700 | 90 | -20-40℃ |
| 806001009100 | LEDStrip-E 19.2W-930-2600-IP20 | 5000*8*1.5mm | 19.2 | 2300 | 110 | 3000 | 90 | -20-40℃ |
| 806001009200 | LEDStrip-E 19.2W-940-2600-IP20 | 5000*8*1.5mm | 19.2 | 2300 | 120 | 4000 | 90 | -20-40℃ |
| 806002000100 | LEDStrip-P 12W-927-1000-COB-IP20 | 5000*8*4.5mm | 12 | 1320 | 100 | 2700 | 90 | -20-40℃ |
| 806002000200 | LEDStrip-P 12W-930-1000-COB-IP20 | 5000*8*4.5mm | 12 | 1320 | 100 | 3000 | 90 | -20-40℃ |
| 806002000300 | LEDStrip-P 12W-940-1000-COB-IP20 | 5000*8*4.5mm | 12 | 1320 | 100 | 4000 | 90 | -20-40℃ |

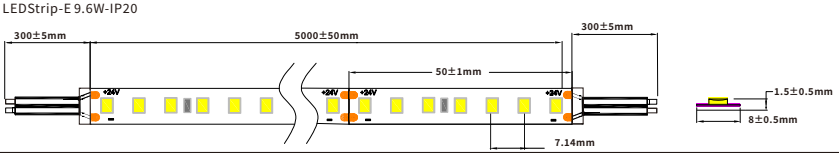
The instructions are only valid for the products named above, containing important instructions for commissioning and handling, and are an integral part of the product. The permissible maximum Tc temperature must not be exceeded during operation. Read the safety in structions carefully. Electrical installation of the LED strip must be carried out by a qualified electrician!

## Dimension drawing:

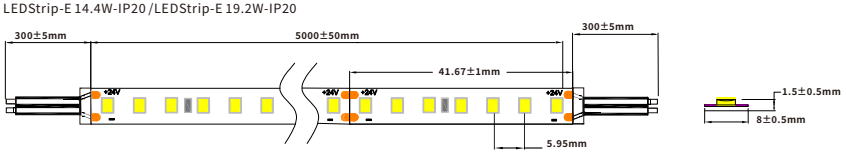
LEDStrip-E 4.8W-IP20



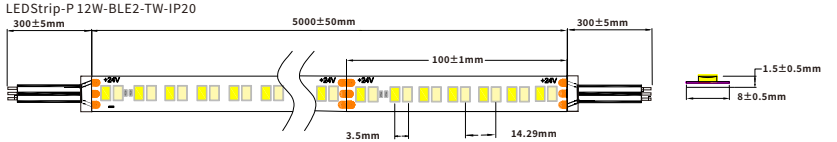

LEDStrip-E 9.6W-IP20




LEDStrip-E 14.4W-IP20 /LEDStrip-E 19.2W-IP20




LEDStrip-P 12W-BLE2-TW-IP20



# LED Strip

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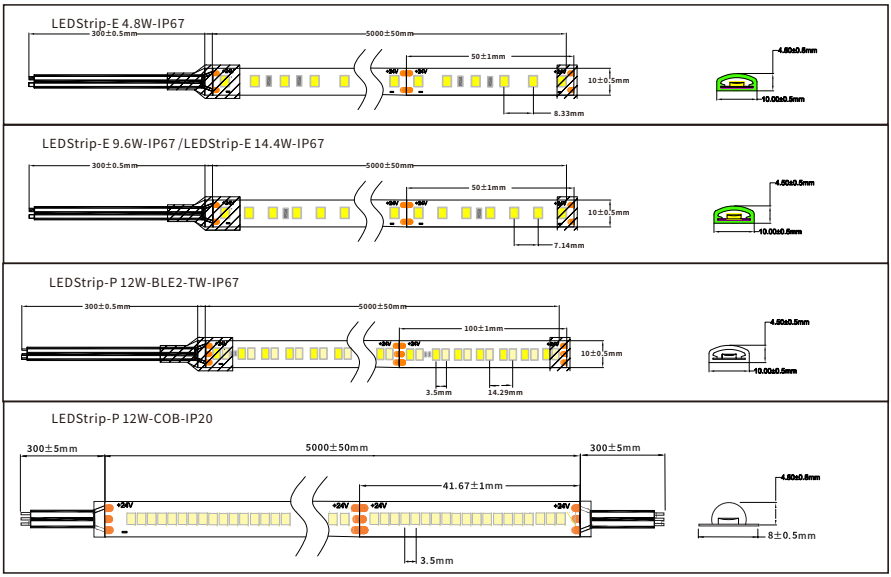



## General Instruction For Use

The LED Strip may only be sharply bent once in places where no electronic components aremounted. The minimum bending radius is 20 mm.

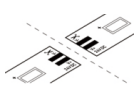
Ensure that no mechanical loads are applied to the electronic components on the LED strip.
Ensure that the LED strip is adequately protected in areas containing dust or water.
Never fold LED Strip in the transverse direction. This damages the solder paths and soldercontacts.

Max length of LED Strip connect to a power supply cannot exceed 5 meters.
The total output of Opple LED Strip must not exceed the maximum output of the driver.
Recommend having additional 20% of safe margin from power supply.

## Installation

*Cutting LED Strip to the desired length*

You can use scissors (or similar) to cut the Opple LED strip to the desired length at the marked points between the solder pads.



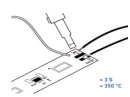
The color of the cable must show:

| One CCT | COB | Two CCT |
|---|---|---|
| Red → LED+<br>Black → LED- | Red → LED+<br>Black → LED- | Red →LED1+(Brown) and/or LED2+(White)<br>Yellow → LED1- (2700k-Blue)<br>White → LED2- (6500k-Grey) |

## General Instruction For Use

*Connection IP20*

LED Strip is cut to length, the connection wire can be connected by soldering or using Opple LED Strip connectors for IP20 strips.
When soldering, ensure that the copper contact points are clean. For a good adhesion of the solder tin, it is recommended making a few scratches in the copper contacts with a screwdriver.



*Connection IP67:*
After cutting IP67 LED Strip, Opple recommend solder to make connection between the wire and strip. Always use the Opple silicone kit to make the IP67 strip waterproof again.

*Applications:*
IP20 LED Strip: Suitable for indoor application where the humidity no more than 55%.
IP67 LED Strip: Suitable for indoor and outdoor applications. It can withstand immersion for a short period.
NOT suitable for permanent installation underwater, NOT suitable for sea salt or chlorine environment.

For more information related to Connectors and Mounting Accessory, please visit www.opple.com

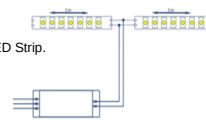
*LED Strip and Profile:*
To mount Led Strip with power higher than 5W per meter, strongly recommend use aluminium LED Strip profile from Opple. Aluminium profiles for LED Strip consist of a specific alloy that minimizes expansion/shrinking in the event of temperature fluctuations. See below table for Strip and Profile combination.

| Ref. | IP20 Strip | | | | | | IP67 Strip | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Profile | 4.8W | 9.6W | 14.4W | 19.2W | 12W COB | 12W TW | 4.8W | 9.6W | 14.4W | 12W TW |
| Profile-SF-10x10(AL/BL) | X | X | | | | | X | X | | |
| Profile-SF-15x15 (AL/BL) | X | X | X | X | X | X | X | X | X | X |
| Profile-SF-17x7(AL/BL) | X | X | X | X | X | X | X | X | X | X |
| Profile-Rc-10x10 | X | X | | | | | X | X | | |
| Profile-Rc-15x15 | X | X | X | X | X | X | X | X | X | X |
| Profile-Corner-18x18 | X | X | X | X | X | X | X | X | X | X |

**SF: Surface Mounting; RC: Recessed Mounting**

For more information related to Connectors and Mounting Accessory, please visit www.opple.com

*Power supply and controller:*



- Using 24VDC power supply, requires a minimum voltage of 24DCV +/-10% to function.
- Opple recommends choosing a power supply with 20% safe margin of the total power needed for LED Strip.
- The maximum length of LED Strip to the driver is 5 meters, to avoid the voltage drops.
- Opple strongly recommend using Parallel Connection.

## Compatibility table of Opple LED Strip and Driver

| Driver Type | IP20 Strip | | | | | | IP67 Strip | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 4.8W | 9.6VV | 14.4W | 19.2W | 12W COB | 12W TW | 4.8W | 9.6VV | 14.4W | 12W TW |
| 36W On/Off | X | | | | | | (X) | | | |
| 60W On/Off | X | X | X | | | | (X) | (X) | | |
| 120W On/Off | X | X | X | X | X | | (X) | (X) | (X) | |
| 160W On/Off | X | X | X | X | X | | (X) | (X) | (X) | |
| 240W On/Off | X | X | X | X | X | | (X) | (X) | (X) | |
| 80W TW | | | | | | X | | | | (X) |
| 240W TW | | | | | | X | | | | (X) |
| 40W DA/10/PWM | X | | | | | | (X) | | | |
| 75W DA/10/PWM | X | X | | | X | | (X) | (X) | | |
| 150W DA/10/PWM | X | X | X | X | X | | (X) | (X) | (X) | |
| 240W DA/10/PWM | X | X | X | X | X | | (X) | (X) | (X) | |
| 75W DALI IP67 | X | X | X | X | X | | X | X | X | |
| 150W DALI IP67 | X | X | X | X | X | | X | X | X | |
| 240W DALI IP67 | X | X | X | X | X | | X | X | X | |
| 75W 10V/PWM IP67 | X | X | X | X | X | | X | X | X | |
| 150W 10V/PWM IP67 | X | X | X | X | X | | X | X | X | |
| 240W 10V/PWM IP67 | X | X | X | X | X | | X | X | X | |

PS: "(x)": Only if driver is mounting indoor. Opple recommend strong watertight protection to use the IP20 driver for IP67 LED Strip.

## The Max. Length of wire in connection between LED Strip and Power supply

| Driver Type | | Diameter of Wire | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 0.5mm2 | 0.75mm2 | 1mm2 | 1.5mm2 | 2.5mm2 | 4mm2 | 6mm2 |
| Power Supply | 40W | 6m | 9m | 12m | 18m | 30m | 48m | 72m |
| | 60W | 4m | 6m | 8m | 12m | 20m | 32m | 48m |
| | 75W | 3m | 4.8m | 6.4m | 9.6m | 16m | 25m | 38m |
| | 100W | 2.4m | 3.6m | 4.8m | 7.2m | 12m | 19.3m | 29m |
| | 120W | 2m | 3m | 4m | 6m | 10m | 16m | 24m |
| | 150W | 1.6m | 2.4m | 3.2m | 4.8m | 8m | 12.9m | 19.3m |
| | 200W | 1.2m | 1.8m | 2.4m | 3.6m | 6m | 9.6m | 14.5m |
| | 240W | 1m | 1.5m | 2m | 3m | 5m | 8m | 12m |