

USER MANUAL

PCB Deco, Power, High Power & Photon



Table of Contents

| | |
|----------------------------|----|
| Warning | 2 |
| Product Information | 2 |
| Product Dimensions | 2 |
| Bending Radius | 2 |
| Cutting Instructions | 3 |
| Connecting & Waterproofing | 4 |
| Connections IP40 | 5 |
| Solder Connections IP20 | 6 |
| General | 8 |
| Power Supply | 9 |
| Cable Selection | 10 |
| Product Specifications | 12 |
| Photometric Diagram | 19 |
| Symbols | 20 |

PLEASE READ THESE INSTRUCTIONS CAREFULLY BEFORE INSTALLATION & LEAVE A COPY FOR THE END USER/ MAINTANANCE ENGINEER FOR FUTURE REFERENCE.



Warning

This product comes with a 5 year warranty.

Warranty void if:

1. The installation guide has not been consulted (installation mistake).
2. The installation is not done by a certified installer.
3. Local rules and guidelines are not respected.
4. The invoice cannot be shown and/or has been altered.
5. Damage is caused by negligence, abnormal use or improper handling, use, maintenance and/or cleaning of the product.

This product is intended for professional use only! This product must be installed by a qualified and certified installer according to local rules and guidelines. Organic Lighting Systems, Inc. cannot be held liable for (consequential) damage and/or injuries due to unintended use and/or installation errors.

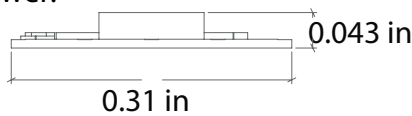
Product Information

The OrgaLED® LED strip (IP40) is a high quality, flexible LED strip with a unique co-extrusion technology. Designed for an endless range of indoor and outdoor applications.

** For use in wet environments, use mirror welded connectors or IP68 waterproof kits.*

Product Dimensions

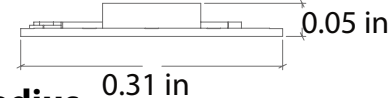
OrgaLED strip front view: Deco, Power:



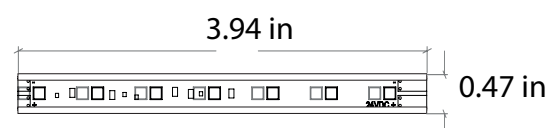
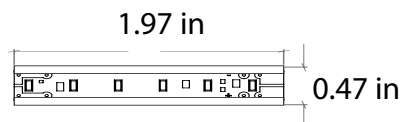
High Power:



Photon:

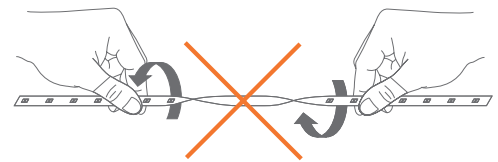
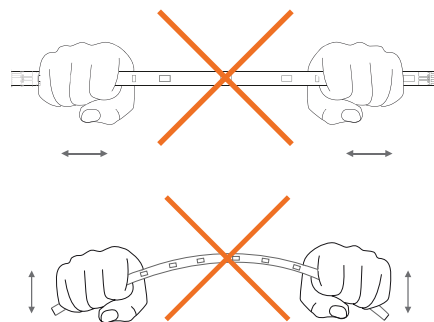
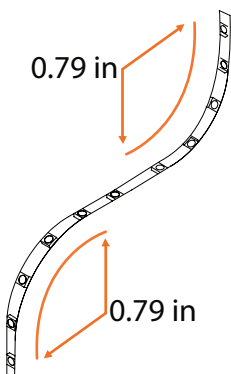


OrgaLED strip top view; cuttable sections:



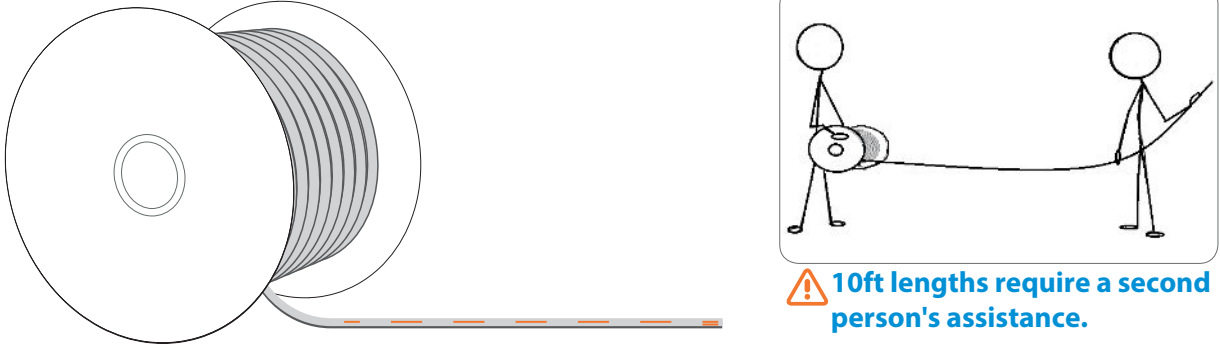
Bending Radius

Maximum bending radius is 0.79 in. Solely bend up or downward. Do not compress, stretch or bend the LED strip.



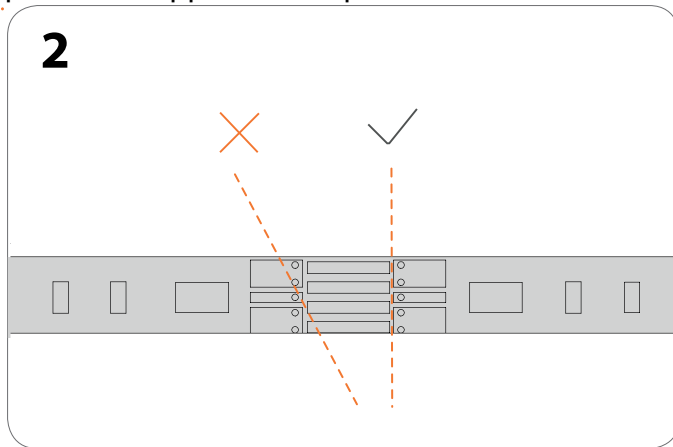
Cutting Instructions

1

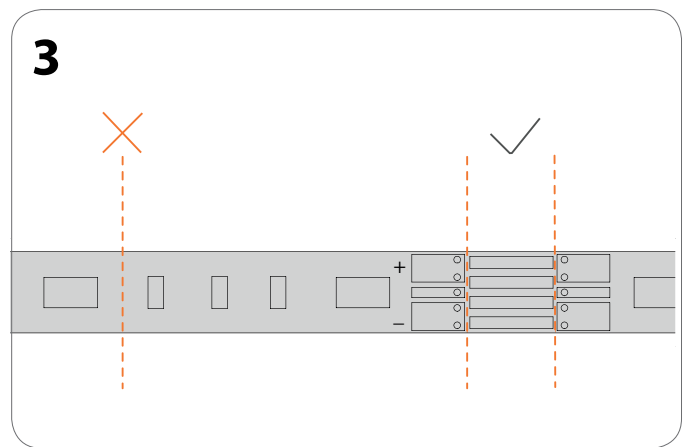


! 10ft lengths require a second person's assistance.

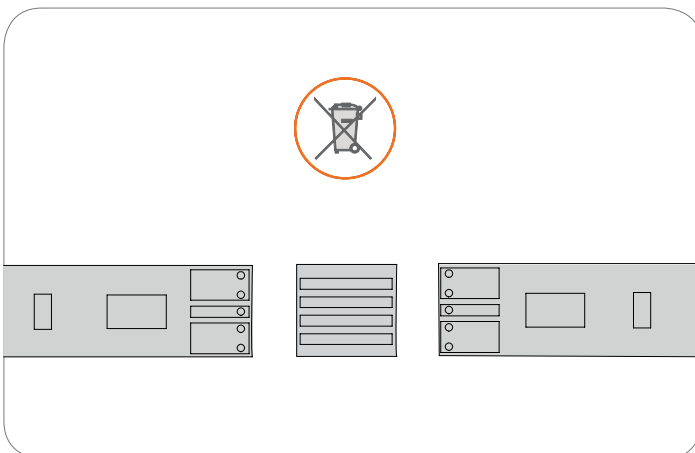
! The LED strip has to be unreeled on a horizontal surface at the time of installation. Do not unreele the spool of LED strip before installation. Lengths over 10ft should be installed with the help of a second person to support the strip to ensure that the connector is not stressed.



Top view | Make sure the cut is vertical as illustrated in the image above. Only cut on the dotted lines to prevent damaging the LED strip.



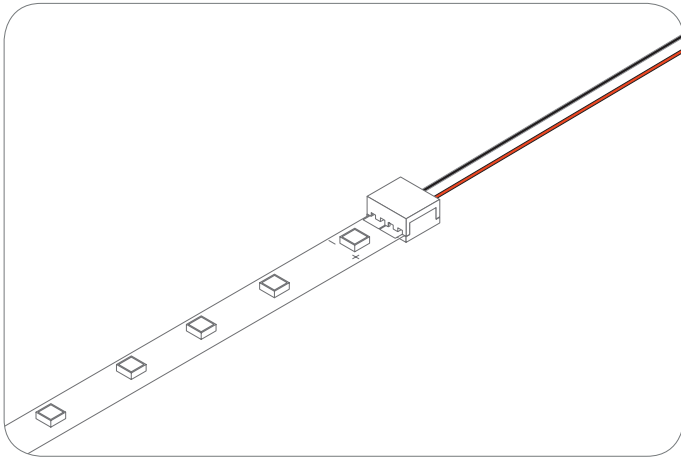
Top view | Only cut on the dotted lines to prevent damaging the LED strip.



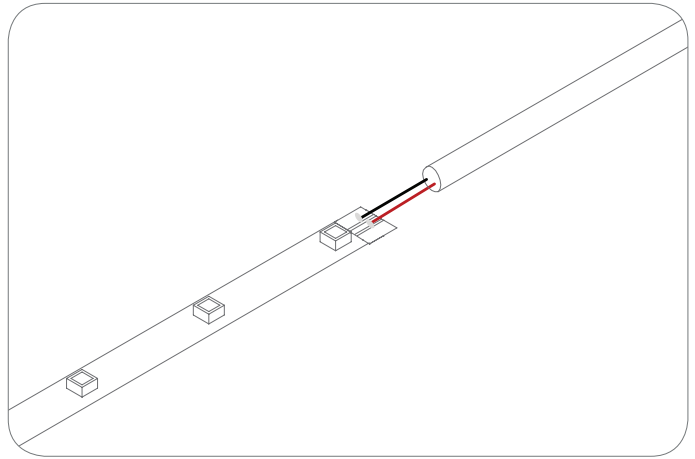
Dispose of the unnecessary material through waste recycling of electrical and electronic equipment.

Choose your Connector - IP20

Depending on the area where the OrgaLED® LED strip is installed we offer a range of solutions to cope with external factors. The product portfolio for the OrgaLED® PCB LED strip includes a IP20 connector. OrgaLED PCB requires either an IP20 connector or a soldered connection. (pg.5)

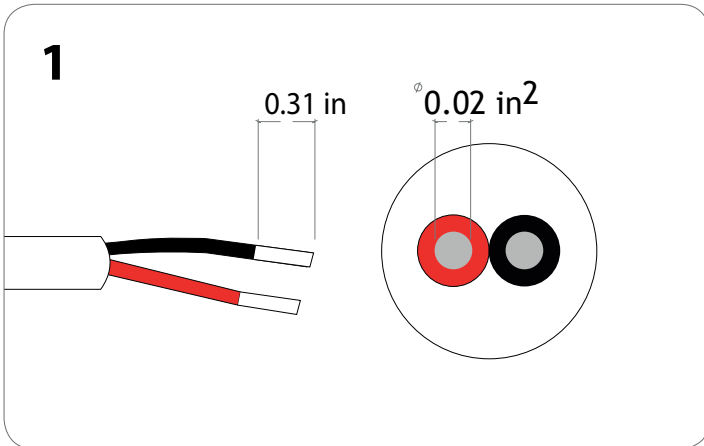


Indoor environment | (IP20) | OrgaLED® PCB Connector Set

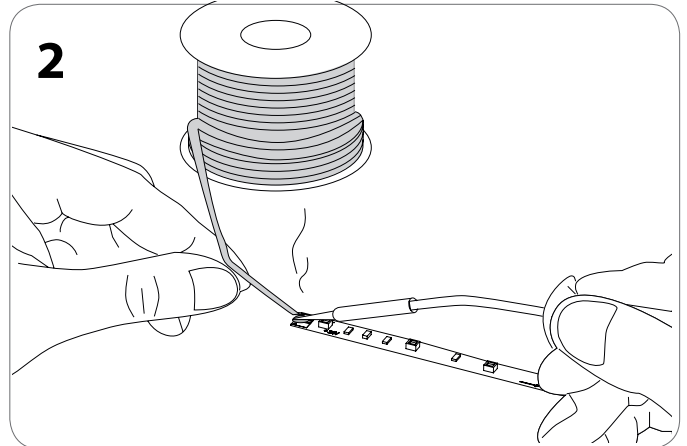


Indoor environment | (IP00) Solder

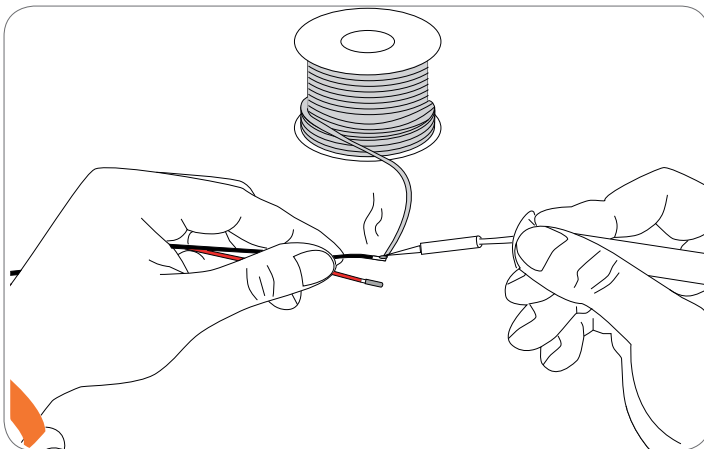
Solder Connection Assembly (IP20)



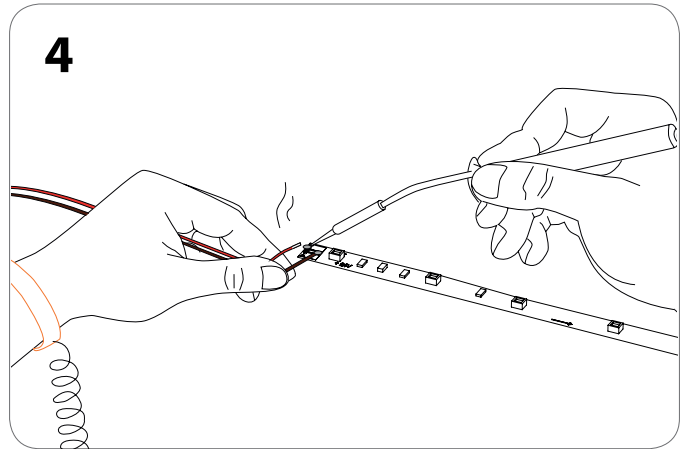
1 Solder the wires to the PCB. We advise to use a cable with an area not bigger than 0.5 mm².



2 Pre-solder the connector pads.



Pre-solder the wires.



4 Solder the wires to the connector pads. 662°F

General

Read the instructions and safety precautions before installation, usage and storage of the products to secure safety of the user and reliability of the product. Hand over the instructions to the end-user and/or those responsible for installation, maintenance and usage.

- Organic Lighting Systems, Inc. cannot be held responsible for improper handling, product installation, usage or storage.

Handling

- Handle with care.
- The product may not be modified or converted otherwise than prescribed.
- Products are transported in proper packaging. Products should remain packed until installation.

Installation

- Attention: The power has to be switched off the main power supply or the connection before installation. Not doing so may damage the product.
- Use a suitable LED power supply/driver: 24 V DC constant voltage. Do not drive the product on other voltages than described in their datasheet/products specifications.
- Installation has to be done by a certified professional with knowledge of electrical circuits or a specialised maintenance person known with valid directives.
- General and local construction, safety- and installation regulations should be respected.
- Use only supplied parts, accessories and required tools as prescribed in the installation manual to guarantee a safe installation and use of the product.
- Products may solely be installed in the areas according to their prescribed IP-rating, IK-rating, temperature range and chemical resistances.
- Do not fasten anything on the product, same applies for hanging.
- Do not install the product in the following cases:
 - Damage is visible on the product or its cables.
 - The inside of the product is moistened or dirty.
 - The product or its cables have been modified. It could lead to an electrical shock or a short circuit may occur.
- Children may not play unsupervised with electrical products as they cannot judge the dangers in dealing with electrical circuits correctly.

Operation and Use

Solely use the product when its working correctly. If not, switch the power off immediately and advise an electrical specialist in the following case.

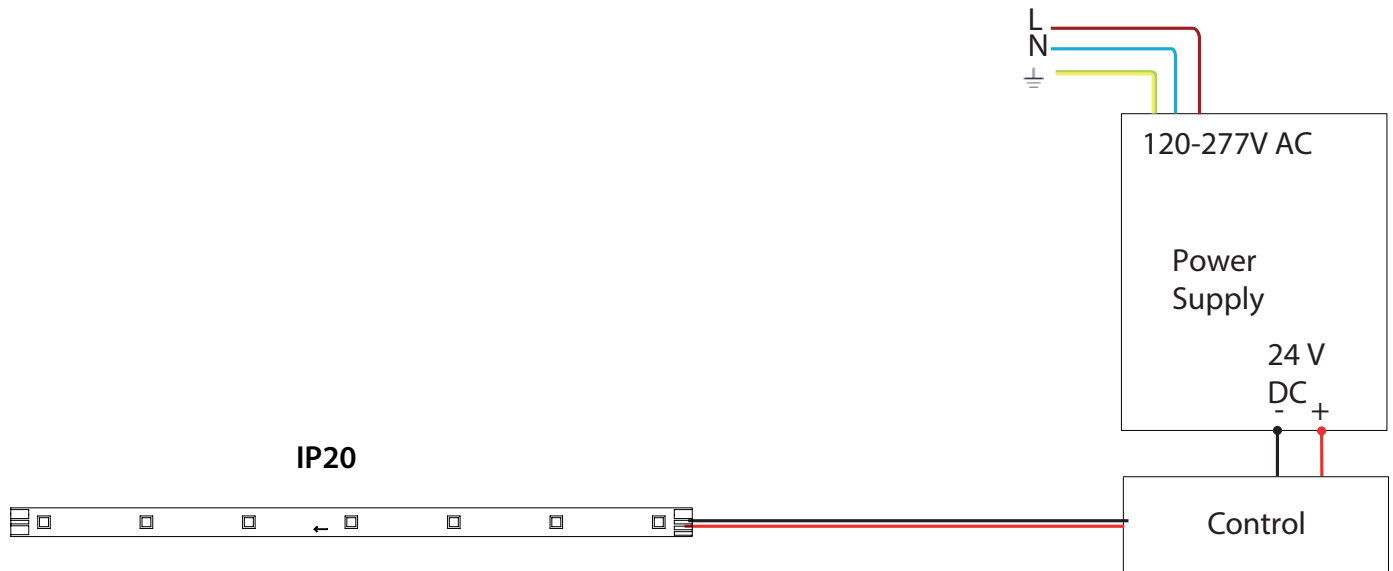
- Damage is visible on the product.
- The product does not function.
- Smoke or steam rises from the product.
- Crackling sounds are noticeable.
- The product is overheating.
- Repairs on the installation may only be performed by qualified electricians. Product repairs may solely be done by Organic Lighting Systems, Inc.

Cleaning and Maintenance

- Attention: Disconnect the power before maintenance and cleaning.
- Dust and dirt accumulated over time should be removed from the light-emitting surface to assure optimal functioning of the product.
- Paints, solvents and corrosive cleaning chemicals may not contact and thus affect the product.

Environment and Waste

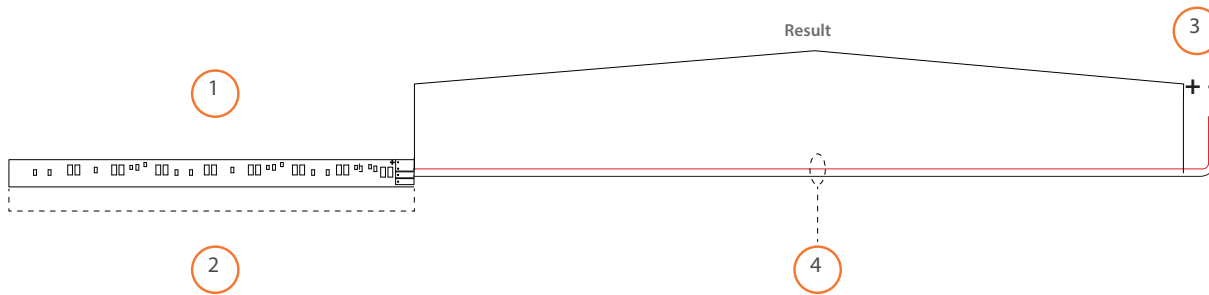
- Exterior decorative lighting should only be used after sunset.
- This product may not be treated as household waste. Dispose of the material through the waste recycling of electrical and electronic equipment.



Cable Selection

The following chart gives the maximum 24V supply cable run lengths based on 22AWG, 20AWG, 18AWG, 16AWG and 14AWG wire gauge to avoid voltage drop to the strips, with a 3ft liniLED connector cable length.

A wiring plan with branches from a single power supply connection cannot exceed the maximum connector strip length shown on the charts and if complex will require special electrical calculations to ensure adequate power to maintain full LED output.



Result = Maximum cable length based on the cable thickness and power supply voltage.

1. Color Temperature

DECO 2400-6500K

| 2. LED Strip Length | | 3' | | 16' | | 33' | | 66' | |
|---------------------|---------------|--------|--------|--------|--------|--------|-------|--------|--------|
| 3. Voltage | | 24V DC | 25V DC | 24V DC | 25V DC | 24V DC | 25VDC | 24V DC | 25V DC |
| 4. Cable Size | 22 AWG | 304' | 587' | 57' | 114' | 27' | 55' | 11' | 25' |
| | 20 AWG | 457' | 883' | 86' | 172' | 40' | 82' | 17' | 38' |
| | 18 AWG | 608' | 1174' | 114' | 228' | 53' | 110' | 22' | 51' |
| | 16 AWG | 914' | 1767' | 173' | 343' | 80' | 165' | 33' | 76' |
| | 14 AWG | 1521' | 2940' | 287' | 571' | 133' | 275' | 56' | 127' |

1. Color Temperature

DECO RED & AMBER

| 2. LED Strip Length | | 3' | | 16' | | 33' | | 66' | |
|---------------------|---------------|--------|--------|--------|--------|--------|-------|--------|--------|
| 3. Voltage | | 24V DC | 25V DC | 24V DC | 25V DC | 24V DC | 25VDC | 24V DC | 25V DC |
| 4. Cable Size | 22 AWG | 227' | 439' | 42' | 84' | 19' | 40' | 7' | 18' |
| | 20 AWG | 341' | 661' | 63' | 127' | 28' | 60' | 11' | 27' |
| | 18 AWG | 453' | 879' | 84' | 169' | 38' | 80' | 14' | 36' |
| | 16 AWG | 682' | 1322' | 127' | 254' | 57' | 121' | 22' | 54' |
| | 14 AWG | 1135' | 2200' | 210' | 423' | 95' | 201' | 37' | 90' |

1. Color Temperature

DECO BLUE & GREEN

| 2. LED Strip Length | | 3' | | 16' | | 33' | | 66' | |
|---------------------|---------------|--------|--------|--------|--------|--------|-------|--------|--------|
| 3. Voltage | | 24V DC | 25V DC | 24V DC | 25V DC | 24V DC | 25VDC | 24V DC | 25V DC |
| 4. Cable Size | 22 AWG | 402' | 776' | 77' | 152' | 36' | 74' | 16' | 35' |
| | 20 AWG | 605' | 1168' | 116' | 228' | 55' | 111' | 24' | 52' |
| | 18 AWG | 805' | 1553' | 154' | 304' | 73' | 148' | 32' | 70' |
| | 16 AWG | 1210' | 2336' | 233' | 457' | 110' | 222' | 48' | 105' |
| | 14 AWG | 2015' | 3888' | 386' | 761' | 182' | 370' | 81' | 174' |

Cable Selection

1. Color Temperature

POWER 2400 - 6500K

| 2. LED Strip Length | | 3' | | 6' | | 16' | | 33' | |
|---------------------|--------|--------|--------|--------|--------|--------|-------|--------|--------|
| 3. Voltage | | 24V DC | 25V DC | 24V DC | 25V DC | 24V DC | 25VDC | 24V DC | 25V DC |
| 4. Cable Size | 22 AWG | 221' | 429' | 109' | 213' | 41' | 82' | 18' | 39' |
| | 20 AWG | 333' | 646' | 163' | 320' | 61' | 124' | 28' | 59' |
| | 18 AWG | 443' | 859' | 217' | 425' | 82' | 165' | 37' | 78' |
| | 16 AWG | 667' | 1292' | 327' | 640' | 123' | 248' | 55' | 118' |
| | 14 AWG | 1110' | 2150' | 544' | 1065' | 205' | 413' | 92' | 196' |

1. Color Temperature

POWER RED & AMBER

| 2. LED Strip Length | | 3' | | 6' | | 16' | | 33' | |
|---------------------|--------|--------|--------|--------|--------|--------|-------|--------|--------|
| 3. Voltage | | 24V DC | 25V DC | 24V DC | 25V DC | 24V DC | 25VDC | 24V DC | 25V DC |
| 4. Cable Size | 22 AWG | 118' | 231' | 57' | 113' | 20' | 43' | 8' | 19' |
| | 20 AWG | 178' | 347' | 86' | 170' | 31' | 64' | 12' | 29' |
| | 18 AWG | 236' | 462' | 114' | 227' | 40' | 86' | 16' | 38' |
| | 16 AWG | 356' | 695' | 172' | 341' | 61' | 129' | 24' | 58' |
| | 14 AWG | 592' | 1156' | 285' | 567' | 101' | 214' | 40' | 96' |

1. Color Temperature

POWER BLUE & GREEN

| 2. LED Strip Length | | 3' | | 6' | | 16' | | 33' | |
|---------------------|--------|--------|--------|--------|--------|--------|-------|--------|--------|
| 3. Voltage | | 24V DC | 25V DC | 24V DC | 25V DC | 24V DC | 25VDC | 24V DC | 25V DC |
| 4. Cable Size | 22 AWG | 137' | 267' | 66' | 131' | 24' | 50' | 10' | 23' |
| | 20 AWG | 206' | 401' | 100' | 197' | 36' | 75' | 15' | 34' |
| | 18 AWG | 274' | 534' | 133' | 262' | 48' | 100' | 20' | 46' |
| | 16 AWG | 412' | 803' | 199' | 395' | 72' | 150' | 30' | 69' |
| | 14 AWG | 686' | 1336' | 332' | 657' | 119' | 250' | 50' | 114' |

1. Color Temperature

HIGH POWER 2400 - 6500K

| 2. LED Strip Length | | 3' | | 6' | | 16' | | 33' | |
|---------------------|--------|--------|--------|--------|--------|--------|-------|--------|--------|
| 3. Voltage | | 24V DC | 25V DC | 24V DC | 25V DC | 24V DC | 25VDC | 24V DC | 25V DC |
| 4. Cable Size | 22 AWG | 110' | 215' | 53' | 105' | 18' | 39' | 7' | 18' |
| | 20 AWG | 165' | 324' | 79' | 158' | 28' | 59' | 11' | 27' |
| | 18 AWG | 220' | 430' | 106' | 211' | 37' | 79' | 14' | 35' |
| | 16 AWG | 331' | 647' | 159' | 317' | 56' | 119' | 22' | 53' |
| | 14 AWG | 551' | 1077' | 265' | 528' | 93' | 198' | 36' | 89' |

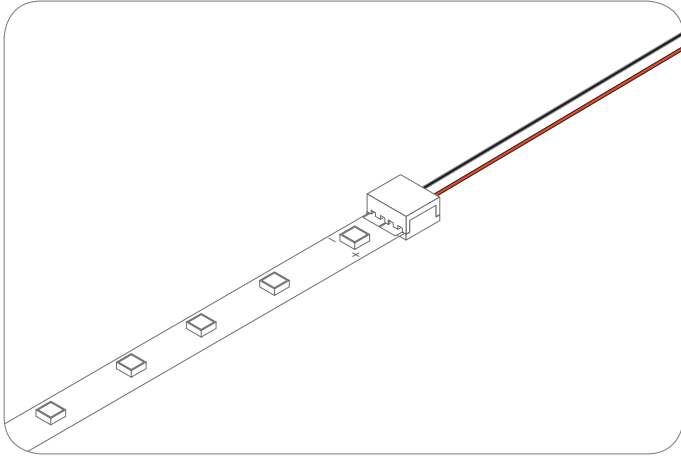
1. Color Temperature

PHOTON 2400-6500K

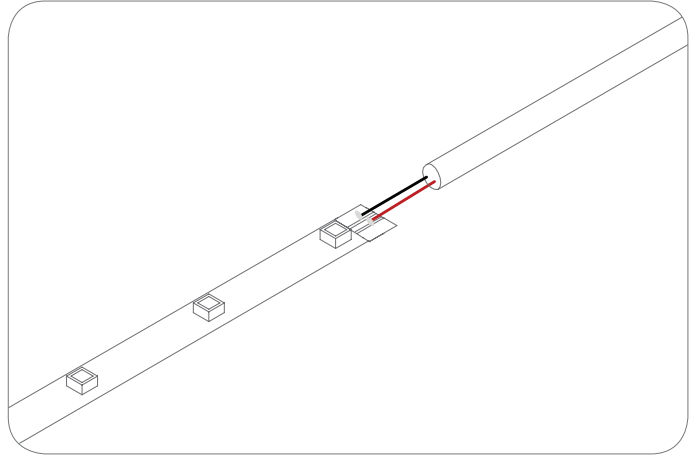
| 2. LED Strip Length | | 3' | | 6' | | 16' | | 29' | |
|---------------------|--------|--------|--------|--------|--------|--------|-------|--------|--------|
| 3. Voltage | | 24V DC | 25V DC | 24V DC | 25V DC | 24V DC | 25VDC | 24V DC | 25V DC |
| 4. Cable Size | 22 AWG | 121' | 236' | 58' | 116' | 21' | 44' | 10' | 22' |
| | 20 AWG | 182' | 356' | 88' | 175' | 31' | 66' | 14' | 34' |
| | 18 AWG | 242' | 473' | 117' | 232' | 42' | 88' | 19' | 45' |
| | 16 AWG | 365' | 712' | 176' | 350' | 63' | 132' | 29' | 68' |
| | 14 AWG | 607' | 1185' | 293' | 582' | 104' | 220' | 49' | 113' |

Cable Selection

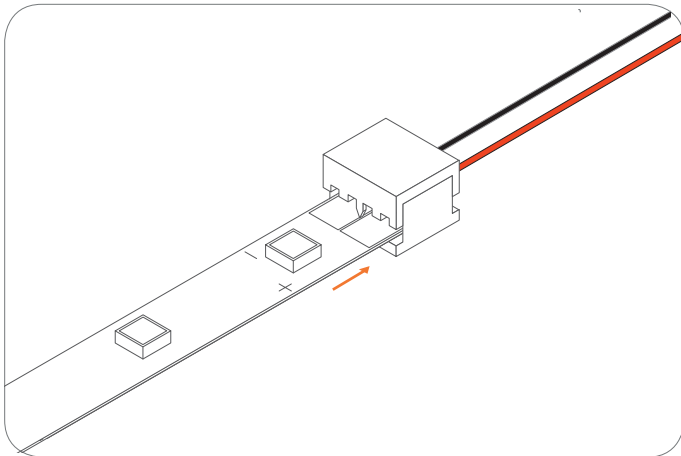
Depending on the area where the OrgaLED® LED strip is installed we offer a range of solutions to cope with external factors. The product portfolio for the OrgaLED® PCB LED strip includes a IP20 connector.



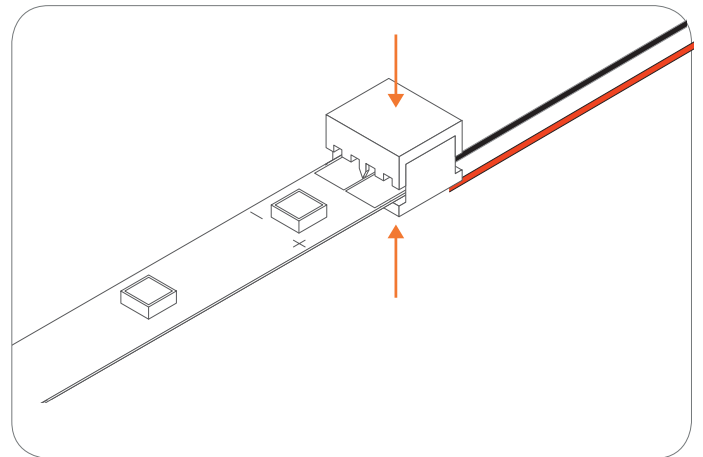
Indoor environment | (IP20)



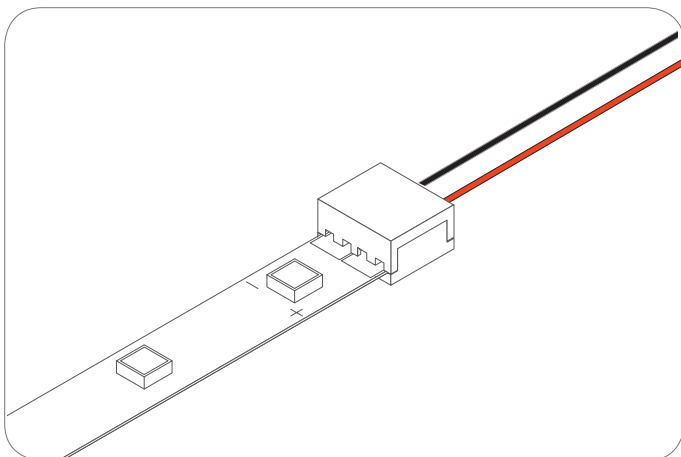
Indoor environment | (IP00) Solder



Open the PCB connector.



Push the OrgaLED® PCB LED strip into the connector. Make sure the + is above.



Close the PCB connector.

Product Specifications - Deco White

| Deco White PCB | 2400K | 2700K | 3000K | 4000K | 6500K |
|--|---------------------------------|--------------|--------------|--------------|--------------|
| Product code | 012197 | 012174 | 012180 | 012186 | 012185 |
| Luminous flux | 27 lm/ft | 32 lm/ft | 31 lm/ft | 34 lm/ft | 34 lm/ft |
| Luminous efficiency | 105 lm/W | 120 lm/W | 115 lm/W | 128 lm/W | 60 lm/W |
| Beam angle | 120° | | | | |
| Dimensions | 0.31 x 0.043 in | | | | |
| Power (24 V DC) | 0.33 W/ft | 0.33 W/ft | 0.33 W/ft | 0.33 W/ft | 0.67 W/ft |
| Power (25 V DC) | 0.33 W/ft | 0.33 W/ft | 0.33 W/ft | 0.33 W/ft | 0.7 W/ |
| CRI | > 80 | > 80 | > 80 | > 80 | > 80 |
| Spool length | Max. 164 ft | | | | |
| Section length | 7.9 in | | | | |
| LED | Duris™ E 5 | | | | |
| Number of LEDs | 7 per section / 10.6 per ft | | | | |
| Max. connection length | 65.6 ft | | | | |
| Operation voltage | 24 V DC | | | | |
| Max. operation voltage | 25 V DC | | | | |
| Dimmable | PWM dimming, 0-10V dimming | | | | |
| Binning | ± 50K | | | | |
| Weight | 0.8 oz/ft | | | | |
| Expected lifetime | B50/L70 > 50,000 hours @ 104 °F | | | | |
| Degree of protection (IP) | IP20 | | | | |
| Storage temperature | -4 °F - 131 °F | | | | |
| Operation temperature | -22 °F - 131 °F1 | | | | |
| Minimal bending radius | 1.2 in | | | | |
| Max. connection length between -4 °F and -22 °F is 46 ft | | | | | |

Product Specifications - Deco Color

| Deco Color PCB | Red | Green | Blue | Amber |
|--|---------------------------------|--------------|-------------|--------------|
| Product code | 012182 | 012183 | 012184 | 012181 |
| Luminous flux | 16 lm/ft | 41 lm/ft | 8 lm/ft | 12 lm/ft |
| Luminous efficiency | 11 lm/W | 49 lm/W | 15 lm/W | 9 lm/W |
| Beam angle | 120° | | | |
| Dimensions | 0.31 x 0.09 in | | | |
| Power (24 V DC) | 1.3 W/ft | 0.7 W/ft | 0.5 W/ft | 1.3 W/ft |
| Power (25 V DC) | 1.4 W/ft | 0.8 W/ft | 0.5 W/ft | 1.4 W/ft |
| CRI | > 80 | > 80 | > 80 | > 80 |
| Wave length | 617 nm | 469 nm | 525 nm | 587 nm |
| Spool length | Max. 164 ft | | | |
| Section length | 7.9 in | | | |
| LED | Top LED® long life | | | |
| Number of LEDs | 7 per section / 10.6 per ft | | | |
| Max. connection length | 65.6 ft | | | |
| Operation voltage | 24 V DC | | | |
| Max. operation voltage | 25 V DC | | | |
| Dimmable | PWM dimming, 0-10V dimming | | | |
| Binning | ± 50K | | | |
| Weight | 0.8 oz/ft | | | |
| Expected lifetime | B50/L70 > 50,000 hours @ 104 °F | | | |
| Degree of protection (IP) | IP20 | | | |
| Storage temperature | -4 °F - 131 °F | | | |
| Operation temperature | -22 °F - 131 °F1 | | | |
| Minimal bending radius | 1.2 in | | | |
| Max. connection length between -4 °F and -22 °F is 46 ft | | | | |

Product Specifications - Power White

| Power White PCB | 2400K | 2700K | 3000K | 4000K | 6500K |
|--|---------------------------------|--------------|--------------|--------------|--------------|
| Product code | 011857 | 011598 | 011600 | 011599 | 011609 |
| Luminous flux | 146 lm/ft | 146 lm/ft | 147 lm/ft | 155 lm/ft | 152 lm/ft |
| Luminous efficiency | 85 lm/W | 126 lm/W | 116 lm/W | 125 lm/W | 104 lm/W |
| Beam angle | 120° | | | | |
| Dimensions | 0.31 x 0.039 in | | | | |
| Power (24 V DC) | 1.3 W/ft | 1.4 W/ft | 1.3 W/ft | 1.2 W/ft | 1.2 W/ft |
| Power (25 V DC) | 1.4 W/ft | 1.4 W/ft | 1.3 W/ft | 1.3 W/ft | 1.3 W/ft |
| CRI | >80 | >80 | >80 | >80 | >80 |
| Spool Length | Max. 164 ft | | | | |
| Section length | 7.87 in | | | | |
| LED | Duris™ E 5 | | | | |
| Number of LEDs | 7 per section / 10.6 per ft | | | | |
| Max. connection length | 32.8 ft | | | | |
| Operation voltage | 24 V DC | | | | |
| Max. operation voltage | 25 V DC | | | | |
| Dimmable | PWM dimming, 0-10V dimming | | | | |
| Binning | ± 50K | | | | |
| Weight | 0.8 oz/ft | | | | |
| Expected lifetime | B50/L70 > 50,000 hours @ 104 °F | | | | |
| Degree of protection (IP) | IP20 | | | | |
| Storage temperature | -4 °F - 131 °F | | | | |
| Operation temperature | -22 °F - 131 °F | | | | |
| Minimal bending radius | 1.2 in | | | | |
| Max. connection length between -4 °F and -22 °F is 23 ft | | | | | |

Product Specifications - Power Color

| Power Color PCB | Red | Green | Blue | Amber |
|--|---------------------------------|--------------|-------------|--------------|
| Product code | 012176 | 012178 | 012177 | 012179 |
| Luminous flux | 43 lm/ft | 59 lm/ft | 20 lm/ft | 35 lm/ft |
| Luminous efficiency | 12 lm/W | 31 lm/W | 9 lm/W | 11 lm/W |
| Beam angle | 120° | | | |
| Dimensions | 0.31 x 0.09 in | | | |
| Power (24 V DC) | 2.5 W/ft | 1.5 W/ft | 2.2 W/ft | 2.5 W/ft |
| Power (25 V DC) | 2.6 W/ft | 1.5 W/ft | 2.2 W/ft | 2.6 W/ft |
| CRI | > 80 | > 80 | > 80 | > 80 |
| Wave length | 467 nm | 625 nm | 525 nm | 587 nm |
| Spool length | Max. 32.8ft | | | |
| Section length | 3.93 in | | | |
| LED | Top LED® long life | | | |
| Number of LEDs | 5 per section / 15.2 per ft | | | |
| Max. connection length | 32.8 ft | | | |
| Operation voltage | 24 V DC | | | |
| Max. operation voltage | 25 V DC | | | |
| Dimmable | PWM dimming, 0-10V dimming | | | |
| Binning | ± 50K | | | |
| Weight | 0.8 oz/ft | | | |
| Expected lifetime | B50/L70 > 50,000 hours @ 104 °F | | | |
| Degree of protection (IP) | IP20 | | | |
| Storage temperature | -4 °F - 131 °F | | | |
| Operation temperature | -22 °F - 131 °F | | | |
| Minimal bending radius | 1.2 in | | | |
| Max. connection length between -4 °F and -22 °F is 23 ft | | | | |

Product Specifications - High Power

| High Power PCB | 2400K | 2700K | 3000K | 4000K | 6500K |
|---|---------------------------------|-----------|-----------|-----------|-----------|
| Product code | 012199 | 012192 | 012193 | 012194 | 012195 |
| Luminous flux | 223 lm/ft | 254 lm/ft | 228 lm/ft | 263 lm/ft | 251 lm/ft |
| Luminous efficiency | 70 lm/W | 79 lm/W | 74 lm/W | 83 lm/W | 81 lm/W |
| Beam angle | 120° | | | | |
| Dimensions | 0.31 x 0.055 in (W x L) | | | | |
| Power (24 V DC) | 2.7 W/ft | 2.7 W/ft | 2.5 W/ft | 2.6 W/ft | 2.6 W/ft |
| Power (25 V DC) | 2.8 W/ft | 2.8 W/ft | 2.6 W/ft | 2.7 W/ft | 2.7 W/ft |
| CRI | > 80 | > 80 | > 80 | > 80 | > 80 |
| Spool length | Max. 164 ft | | | | |
| Section length | 2 in | | | | |
| LED | Duris™ E 5 | | | | |
| Number of LEDs | 6 per inch / 36.5 per ft | | | | |
| Max. connection length | 32.8 ft | | | | |
| Operation voltage | 24 V DC | | | | |
| Max. operation voltage | 25 V DC | | | | |
| Dimmable | PWM dimming, 0-10V dimming | | | | |
| Binning | ± 50K | | | | |
| Weight | 0.8 oz/ft | | | | |
| Expected lifetime | B50/L70 > 50,000 hours @ 104 °F | | | | |
| Degree of protection (IP) | IP20 | | | | |
| Storage temperature | -4 °F - 131 °F | | | | |
| Operation temperature | -22 °F - 131 °F1 | | | | |
| Minimal bending radius | 1.2 in | | | | |
| Max. connection length between -4 °F and -22 °F | is 23 ft | | | | |

Product Specifications - Photon 1200

| Photon 1200 PCB | 2000K | 2400K | 2700K | 3000K | 4000K | 6500K |
|--|---|--------------|--------------|--------------|--------------|--------------|
| Product code | 012147 | 012148 | 012149 | 012150 | 012151 | 012152 |
| Luminous flux | 305 lm/ft | 356 lm/ft | 368 lm/ft | 375 lm/ft | 372 lm/ft | 373 lm/ft |
| Beam angle | 120° | | | | | |
| Dimensions | 0.31 x 0.05 in | | | | | |
| Power (24 V DC) | 3.2 W/ft | 3.2 W/ft | 2.7 W/ft | 2.7 W/ft | 2.4 W/ft | 2.4 W/ft |
| Power (25 V DC) | 3.3 W/ft | 3.3 W/ft | 2.8 W/ft | 2.8 W/ft | 2.5 W/ft | 2.5 W/ft |
| CRI | > 80 (>90 available in 27, 30 and 40K) | | | | | |
| Spool length | Max. 29.5 ft | | | | | |
| Section length | 3.93 in | | | | | |
| LED | Nichia | | | | | |
| Number of LEDs | 7 per section / 21.3 per ft | | | | | |
| Max. connection length | 29.5 ft | | | | | |
| Operation voltage | 24 V DC | | | | | |
| Max. operation voltage | 25 V DC | | | | | |
| Dimmable | PWM dimming, 0-10V dimming | | | | | |
| Binning | ± 50K | | | | | |
| Weight | 0.8 oz/ft | | | | | |
| Expected lifetime | B50/L70 > 60,000 hours @ 104 °F | | | | | |
| Degree of protection | IP20 | | | | | |
| Storage temperature | -40 °F - 131°F | | | | | |
| Operation temperature | -22 °F - 131 °F2 | | | | | |
| Minimal bending radius | 1.2 in | | | | | |
| Max. connection length between -4 °F and -22 °F is 23 ft | | | | | | |

Product Specifications - Photon 2000

| Photon 2000 PCB | 2000K | 2400K | 2700K | 3000K | 4000K | 6500K |
|--|---|--------------|--------------|--------------|--------------|--------------|
| Product code | 012153 | 012154 | 012155 | 012156 | 012157 | 012158 |
| Luminous flux | 468 lm/ft | 521 lm/ft | 548 lm/ft | 548 lm/ft | 558 lm/ft | 558 lm/ft |
| Beam angle | 120° | | | | | |
| Dimensions | 0.31 x 0.05 in | | | | | |
| Power (24 V DC) | 5.5 W/ft | 5.5 W/ft | 4.6 W/ft | 4.6 W/ft | 4.1 W/ft | 4.1 W/ft |
| Power (25 V DC) | 5.6 W/ft | 5.6 W/ft | 4.7 W/ft | 4.7 W/ft | 4.2 W/ft | 4.2 W/ft |
| CRI | > 80 (>90 available in 27, 30 and 40K) | | | | | |
| Spool length | Max. 14.8 ft | | | | | |
| Section length | 3.93 in | | | | | |
| LED | Nichia | | | | | |
| Number of LEDs | 7 per section / 21.3 per ft | | | | | |
| Max. connection length | 14.8 ft | | | | | |
| Operation voltage | 24 V DC | | | | | |
| Max. operation voltage | 25 V DC | | | | | |
| Dimmable | PWM dimming, 0-10V dimming | | | | | |
| Binning | ± 50K | | | | | |
| Weight | 0.8 oz/ft | | | | | |
| Expected lifetime | B50/L70 > 60,000 hours @ 104 °F | | | | | |
| Degree of protection | IP20 | | | | | |
| Storage temperature | -40 °F - 131°F | | | | | |
| Operation temperature | -22 °F - 131 °F2 | | | | | |
| Minimal bending radius | 1.2 in | | | | | |
| Max. connection length between -4 °F and -22 °F is 23 ft | | | | | | |

Product Specifications - Photon 3000


| Photon 3000 PCB | 2000K | 2400K | 2700K | 3000K | 4000K | 6500K |
|--|---|--------------|--------------|--------------|--------------|--------------|
| Product code | 012159 | 012160 | 012161 | 012162 | 012163 | 012164 |
| Luminous flux | 699 lm/ft | 776 lm/ft | 802 lm/ft | 849 lm/ft | 812 lm/ft | 797 lm/ft |
| Beam angle | 120° | | | | | |
| Dimensions | 0.31 x 0.05 in | | | | | |
| Power (24 V DC) | 8.8 W/ft | 8.8 W/ft | 7.2 W/ft | 7.2 W/ft | 6.6 W/ft | 6.6 W/ft |
| Power (25 V DC) | 8.9 W/ft | 8.9 W/ft | 7.3 W/ft | 7.3 W/ft | 6.7 W/ft | 6.7 W/ft |
| CRI | > 80 (>90 available in 27, 30 and 40K) | | | | | |
| Spool length | Max. 9.8 ft | | | | | |
| Section length | 3.93 in | | | | | |
| LED | Nichia | | | | | |
| Number of LEDs | 7 per section / 21.3 per ft | | | | | |
| Max. connection length | 9.8 ft | | | | | |
| Operation voltage | 24 V DC | | | | | |
| Max. operation voltage | 25 V DC | | | | | |
| Dimmable | PWM dimming, 0-10V dimming | | | | | |
| Binning | ± 50K | | | | | |
| Weight | 0.8 oz/ft | | | | | |
| Expected lifetime | B50/L70 > 60,000 hours @ 104 °F | | | | | |
| Degree of protection | IP20 | | | | | |
| Storage temperature | -40 °F - 131°F | | | | | |
| Operation temperature | -22 °F - 131 °F2 | | | | | |
| Minimal bending radius | 1.2 in | | | | | |
| Max. connection length between -4 °F and -22 °F is 23 ft | | | | | | |


Product Specifications - Photon 4000


User Manual | OrgaLED® PCB Deco, Power, High Power, Photon


| Photon 4000 PCB | 2000K | 3000K | 4000K | 6500K |
|--|---|--------------|--------------|--------------|
| Product code | 012167 | 012168 | 012169 | 012170 |
| Luminous flux | 1006 m/ft | 1037 lm/ft | 1041 lm/ft | 1038 lm/ft |
| Beam angle | 120° | | | |
| Dimensions | 0.31 x 0.05 in | | | |
| Power (24 V DC) | 8.8 W/ft | 8.8 W/ft | 8.8 W/ft | 8.8 W/ft |
| Power (25 V DC) | 8.9 W/ft | 8.9 W/ft | 8.9 W/ft | 8.9 W/ft |
| CRI | > 80 (>90 available in 27, 30 and 40K) | | | |
| Spool length | Max. 9.8 ft | | | |
| Section length | 3.93 in | | | |
| LED | Nichia | | | |
| Number of LEDs | 7 per section / 21.3 per ft | | | |
| Max. connection length | 9.8 ft | | | |
| Operation voltage | 24 V DC | | | |
| Max. operation voltage | 25 V DC | | | |
| Dimmable | PWM dimming, 0-10V dimming | | | |
| Binning | ± 50K | | | |
| Weight | 0.8 oz/ft | | | |
| Expected lifetime | B50/L70 > 60,000 hours @ 104 °F | | | |
| Degree of protection | IP20 | | | |
| Storage temperature | -40 °F - 131°F | | | |
| Operation temperature | -22 °F - 131 °F2 | | | |
| Minimal bending radius | 1.2 in | | | |
| Max. connection length between -4 °F and -22 °F is 23 ft | | | | |


Symbols


- 


UL is a world leader in product safety testing and certification. UL sets standards and tests products to make sure they meet standards.
- 


The ETL Listed mark indicates that your product has been tested by Intertek and found in compliance with accepted UL standards.
- 


Electro Static Discharge (ESD) sensitive device, apply standard ESD precautions when handling the product.
- 


Manufacturer's declaration that the product meets the applicable EC directives.
- 


Suitable for mounting on all surfaces and suitable to cover with insulating material.
- 


Restriction of Hazardous Substances (RoHS): product complies with the RoHS directive and each homogeneous material does not exceed the limits for the materials mentioned under the RoHS directive (Pb, Hg, Cd, Cr6+, PBB and PBDE).
- 


This product can be both IP40 and IP68 depending on the configuration and application. See the documentation for the exact IP rating.
- 


Bending of the LED strip is possible with a radius of ≥ 1.2 inches in the specified direction.
- 


Electrical appliance class III: this product is designed to be supplied from an extra-low voltage (≤ 60.0 V DC or ≤ 42.4 V AC).
- 


System guarantee of 5 years when the complete system consist of OrgaLED® products with the 5 year system warranty logo.
- 


Product is resistant against ultraviolet (UV) light or sunlight. Non-UV resistant products can degrade or discolor fast when exposed to UV.
- 


Product can be cleaned with normal cleaning agents as specified in the datasheet under 'chemical compliances.'
- 

This product can be stored and used below 32 degrees Fahrenheit. Verify the minimum storage and operation temperature in the datasheet for the lowest temperature allowed.
- 

This product can be applied in seawater and its environment. Elements in seawater will have no harmful effect on the product. For chemical specifications see datasheet. Verify the IP rating for proper use.
- 

This product can be applied inside swimming pool environments. Elements in the air will have no harmful effect on the product. For chemical specifications of these elements see datasheet. Verify the IP rating for proper use.
- 

This product is available on request and can be submerged n swimming pools and their environments. Disinfectants will have no harmful effect on product. For chemical specifications of these elements see datasheet. Verify the IP rating for proper use.
- 

The CRI value of this product is 80 or higher.
- 

The binning tolerance of this product is 2 MacAdam.

Disclaimer

The published information is checked to be as accurate as possible, however Organic Lighting, or any reseller of OrgaLED® cannot be held liable for any damages resulting from errors or outdated information. Organic Lighting reserves the right to modify the information without informing the costumers. When this document is printed or downloaded, please check for the latest version on the Internet, the most up to date information will be published on www.organiclighting.com. This product should not be used in applications, devices or systems where incorrect operation of the product may result in personal injury (includes emergency lighting) without written permission from the board of Organic Lighting. If nevertheless used in such applications, devices or systems Organic Lighting cannot be held liable for any resulting injury.