

Aqueon® Diffuse RGB/RGBW

Standard & High Power 24V DC 



Structurally superior for the most discerning applications, submersible; flood and vibration proof. Advanced circuit design with military grade components. Aqueon RGB & RGBW, color mixing, used to create custom effects for any application. Available in both vertical and horizontal bending. IP67 or IP68-tested for use in the most adverse environment. SMD5050 Tri-Chip LEDs for accurate color rendering, and exceptional color consistency. Fully dimmable.

FEATURES

- IK10, cUL Listed, UL Listed 676, UL Listed 2108 - Submersible / IP68
- Horizontal or Vertical bending options
- End to end continuous illumination
- Up to 49.2ft(15m) continuous runs; Flood and vibration proof
- Cuttable every 3.28"(83.3mm)
- Static RGB & RGBW options
- Ultra low energy; RGB-1.83W/ft (6W/m) | RGBW - 2.74W/ft (9W/m)
- 6"(150mm) minimum bending radius
- 5 year limited warranty; 60,000 hrs LED lifetime
- Dimmable with Pulse Width Modulation & DMX
- UV/IR protected Silicone encapsulation
- Ambient working temperature -40°F~131°F (-40°C~55°C)

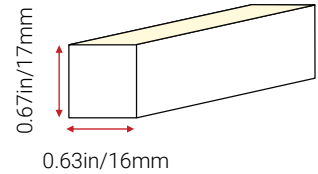
PART NUMBER & SPECIFICATIONS

| Part # | Color | CRI | lm/ft | lm/m | Max Run | W/ft | W/m |
|--------------------------------------------------------------|----------|-----|-------|------|---------|------|------|
| Standard Aqueon® Diffuse RGB/RGBW - Horizontal Bend | | | | | | | |
| 052245 | RGB | >95 | 53 | 173 | 49.2ft | 15m | 1.83 |
| 052265 | RGBW-27K | >95 | 63 | 207 | 49.2ft | 15m | 2.74 |
| 052273 | RGBW-30K | >95 | 63 | 207 | 49.2ft | 15m | 2.74 |
| 052282 | RGBW-40K | >95 | 63 | 207 | 49.2ft | 15m | 2.74 |
| High Power Aqueon® Diffuse RGB/RGBW - Horizontal Bend | | | | | | | |
| 052245-12 | RGB | >95 | 105 | 345 | 49.2ft | 15m | 3.66 |
| 052265-15 | RGBW-27K | >95 | 105 | 345 | 39.4ft | 12m | 4.57 |
| 052273-15 | RGBW-30K | >95 | 105 | 345 | 39.4ft | 12m | 4.57 |
| 052282-15 | RGBW-40K | >95 | 105 | 345 | 39.4ft | 12m | 4.57 |
| Standard Aqueon® Diffuse RGB/RGBW - Vertical Bend | | | | | | | |
| 052235 | RGB | >95 | 57 | 185 | 49.2ft | 15m | 1.83 |
| 052264 | RGBW-27K | >95 | 68 | 222 | 49.2ft | 15m | 2.74 |
| 052271 | RGBW-30K | >95 | 68 | 222 | 49.2ft | 15m | 2.74 |
| 052281 | RGBW-40K | >95 | 68 | 222 | 49.2ft | 15m | 2.74 |
| High Power Aqueon® Diffuse RGB/RGBW - Vertical Bend | | | | | | | |
| 052235-12 | RGB | >95 | 113 | 370 | 49.2ft | 15m | 3.66 |
| 052264-15 | RGBW-27K | >95 | 113 | 370 | 39.4ft | 12m | 4.57 |
| 052271-15 | RGBW-30K | >95 | 113 | 370 | 39.4ft | 12m | 4.57 |
| 052281-15 | RGBW-40K | >95 | 113 | 370 | 39.4ft | 12m | 4.57 |



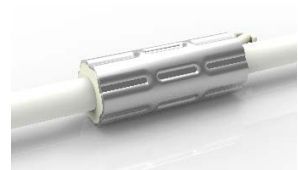
Project

Date

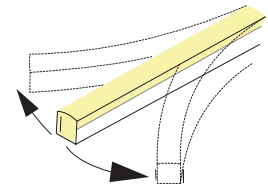


ANTI-WICKING

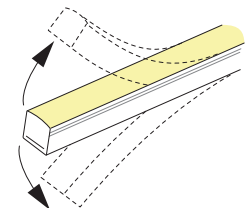
All connections include a ferrule on the power feed to prevent water wicking through the connection point.



HORIZONTAL BENDING



VERTICAL BENDING



Specifications may be modified or improved without notification

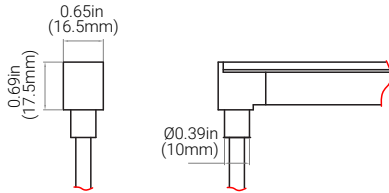


CONNECTORS & ACCESSORIES

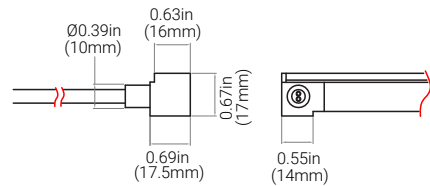
Factory assembled 4-wired RGB & 5-wired RGBW Aqueon Mono IP68 submersible accessories include end caps, extension cords and connectors with customizable cord lengths. IP67 self assembly connectors are also available.

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| Project |
| Date |

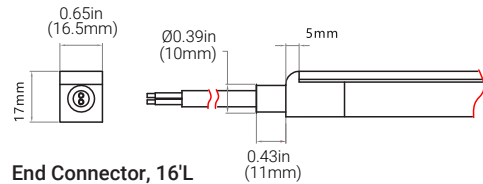
FACTORY ASSEMBLED IP68 CONNECTORS



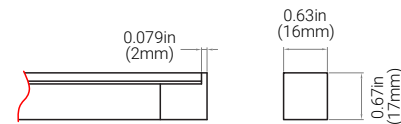
Bottom Feed Connector, 16'L
 RGB #052253-CU16
 RGBW #052260-CU16



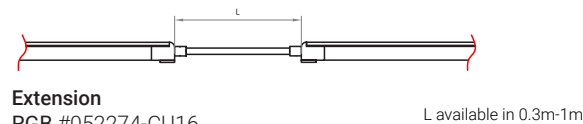
Side Feed Connector, 16'L
 RGB #052254-CU16
 RGBW #052261-CU16



End Connector, 16'L
 RGB #052252-CU16
 RGBW #052259-CU16

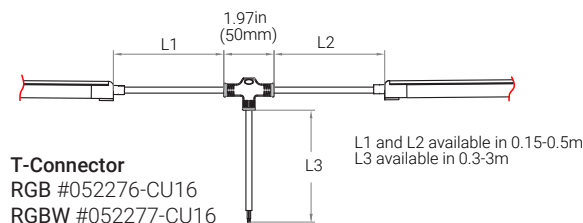


End Cap
 #052286



Extension
 RGB #052274-CU16
 RGBW #052275-CU16

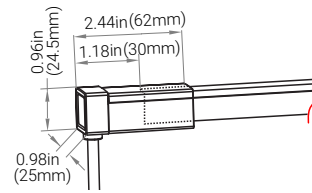
L available in 0.3m-1m



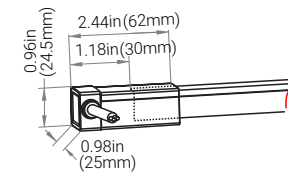
T-Connector
 RGB #052276-CU16
 RGBW #052277-CU16

L1 and L2 available in 0.15-0.5m
 L3 available in 0.3-3m

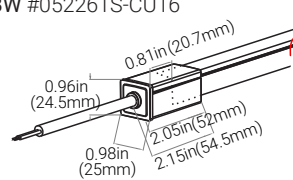
FIELD ASSEMBLY SNAP IP67 CONNECTORS



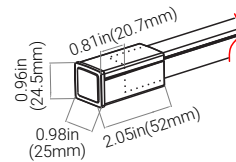
Bottom Snap Connector, 16'L
 RGB #052253S-CU16
 RGBW #052260S-CU16



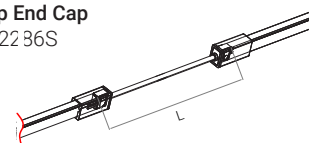
Side Feed Snap Connector, 16'L
 RGB #052254S-CU16
 RGBW #052261S-CU16



End Snap Connector, 16'L
 RGB #052252S-CU16
 RGBW #052259S-CU16

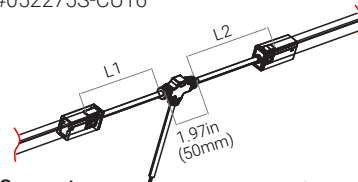


Snap End Cap
 #052236S



Snap Extension
 RGB #052274S-CU16
 RGBW #052275S-CU16

L available in 0.3m, 1m, 3m



Snap T-Connector
 RGB #052276S-CU16
 RGBW #052277S-CU16

L1 and L2 available in 0.3m

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Aqueon® Diffuse RGB/RGBW Standard & High Power



POWER SUPPLIES - 24V

Forward Phase, Reverse Phase, & 0-10V Dimming Drivers. Remote enclosures available.

| Part # | Ingress | Voltage | Wattage | Dimensions (inches / mm) | Description |
|--------|---------|----------|---------|------------------------------------|---------------------|
| 045001 | IP67 | 100-305V | 20W | 7.6 x 1.18 x 0.79 / 193 x 30 x 20 | Dimmable LED Driver |
| 045002 | IP67 | 100-305V | 40W | 5.83 x 1.57 x 0.87 / 148 x 40 x 22 | Dimmable LED Driver |
| 045003 | IP67 | 120-277V | 60W | 6.3 x 2.24 x 1.5 / 160 x 57 x 38 | Dimmable LED Driver |
| 045004 | IP67 | 120-277V | 75W | 6.3 x 2.24 x 1.5 / 160 x 57 x 38 | Dimmable LED Driver |
| 045005 | IP67 | 120-277V | 96W | 7.6 x 2.24 x 1.5 / 193 x 57 x 38 | Dimmable LED Driver |
| 045006 | IP67 | 120-277V | 200W | 10.1 x 3.03 x 1.8 / 257 x 77 x 46 | Dimmable LED Driver |
| 045007 | IP67 | 120-277V | 300W | 11.9 x 3.03 x 1.8 / 302 x 77 x 46 | Dimmable LED Driver |

ENCLOSURES

| Part # | Ingress | Dimensions (inches / mm) | Description |
|---------|---------|-------------------------------------|------------------|
| 045008 | IP67 | 9.4 x 2.6 x 1.9 / 239 x 66 x 48 | 20W Enclosure |
| 045009 | IP67 | 11.02 x 4.05 x 2.2 / 280 x 103 x 56 | 40W Enclosure |
| 045010 | IP67 | 11.02 x 4.05 x 2.2 / 280 x 103 x 56 | 60W Enclosure |
| 045011 | IP67 | 11.02 x 4.05 x 2.2 / 280 x 103 x 56 | 75W Enclosure |
| 045012 | IP67 | 11.02 x 4.05 x 2.2 / 280 x 103 x 56 | 96W Enclosure |
| 045013 | IP67 | 16.7 x 9.8 x 2.3 / 424 x 249 x 58 | 200W Enclosure |
| 045014 | IP67 | 16.7 x 9.8 x 2.3 / 424 x 249 x 58 | 300W Enclosure |
| PC-JBOX | IP67 | 4.25 x 1.63 x 1.25 / 108 x 41 x 32 | Waterproof J-Box |

DMX CONTROLLER

| Part # | Description |
|--------|-----------------------------------------------|
| 011343 | 100W Digital Controller |
| 011344 | 180W Digital Controller |
| 011345 | 720W Digital Controller |
| 011341 | Digital Controller & Power Supply Combination |
| 011410 | Nicolaude DE3 DMX 512 Controller |
| 011403 | Nicolaude DINA-DR1 DMX 512 Controller |

MOUNTINGS & EXTRUSIONS

Mounting Channels to Match any Installation

Aluminum Profile



- High Quality Aluminum
- Lightweight
- Cost Effective
- Warp/corrosion resistant

1.38in(35mm) L - #053001
39.37in(1000mm) L - #053000

Flanged Aluminum Profile



- High Quality Aluminum
- Lightweight
- Cost Effective
- Flange for Recessed Installation

1.38in(35mm) L - #053003
39.37in(1000mm) L - #05302

Flanged Internal Serrated Aluminum Profile



- Lightweight
- Easy to Install & Dismantle
- Continuous & Strong Gripping
- Flange for Recessed Installation

0.79in(20mm) L - #053011
39.37in(1000mm) L - #053010

Internal Serrated Aluminum Profile



- Continuous & Strong Gripping
- Lightweight
- Easy to Install & Dismantle
- For Suspended Installations

0.79in(20mm) L - #053009
39.37in(1000mm) L - #053008

Bendable Serrated Aluminum Profile



- High Quality Aluminum
- Easy to Install & Dismantle
- Continuous & Strong Gripping
- Memory Retaining
- Perfect for Curved Installations

19.68in(500mm) L - #053013
39.37in(1000mm) L - #053012

Thickened Plastic Profile



- Plastic Profile 0.12in(3mm) thick
- Lightweight
- Cost Effective
- Rust & Corrosion Resistant

1.38in(35mm) L - #053005
39.37in(1000mm) L - #053004

Project

Date

20W-60W Dimmable Driver



75W-300W Dimmable Driver



Digital Controller (100W, 180W, 720W)



Nicolaude DE3 DMX 512 Controller



Specifications may be modified or improved without notification



MOUNTINGS & EXTRUSIONS (CONTINUED)

Raceway Aluminum Profile



- Surface-mounted
- Serrated Aluminum Profile

39.37in(1000mm) L
#053021

Suspended Raceway Aluminum Profile



- Suspended
- Serrated Aluminum Profile

39.37in(1000mm) L
#053022

Raceway End Cap



#053023

Raceway Splice Connector



#053024

Stainless Steel Clip



- High Quality Stainless Steel
- Cost Effective

1.38in(35mm) L
#053020

Silicone 3D Bend Profile White



- Silicone
- Bendable Anole Profile

39.37in(1000mm) L
#053026-WH

Silicone 3D Bend Profile Black



- Silicone
- Bendable Anole Profile

39.37in(1000mm) L
#053026-BL

CABLE REQUIREMENT

The Aqueon® LED strips need a minimum voltage at the beginning of the LED strip to function according to the specifications. The table below gives an indication of the maximum cable length based on the cable thickness. The standard starter cable is (20 AWG), see table below for max cable lengths.

In case the required length is longer than the length mentioned in this cable, it is recommended to cut the starter cable down to 1ft (0.3m) and splice a larger gauge cable. Please contact your distributor for a detailed cable calculation.

| Cable X Information | LED Strip (4.57w/ft) | Max. Cable Length |
|---------------------|----------------------|-------------------|
| | | 24V |
| 20 AWG *Standard | 3.28ft / 1m | 255ft / 78m |
| | 16.4ft / 5m | 45ft / 14m |
| | 32.8ft / 10m | 20ft / 6m |
| | 39.4ft / 12m | 10ft / 3m |
| 18 AWG | 3.28ft / 1m | 398ft / 121m |
| | 16.4ft / 5m | 71ft / 22m |
| | 32.8ft / 10m | 33ft / 10m |
| | 39.4ft / 12m | 16ft / 5m |
| 16 AWG | 3.28ft / 1m | 649ft / 197m |
| | 16.4ft / 5m | 115ft / 35m |
| | 32.8ft / 10m | 49ft / 15m |
| | 39.4ft / 12m | 23ft / 7m |
| 14 AWG | 3.28ft / 1m | 1018ft / 310m |
| | 16.4ft / 5m | 180ft / 55m |
| | 32.8ft / 10m | 78ft / 24m |
| | 39.4ft / 12m | 33ft / 10m |



Aqueon® Diffuse RGB/RGBW Standard & High Power



WIRING DIAGRAM

Project

Date

