

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)

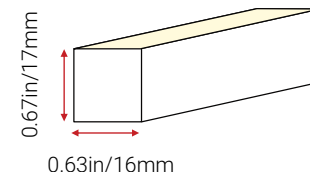
PART NUMBER & SPECIFICATIONS

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	6
052265	RGBW-27K	>95	63	207	49.2ft	15m	2.74	9
052273	RGBW-30K	>95	63	207	49.2ft	15m	2.74	9
052282	RGBW-40K	>95	63	207	49.2ft	15m	2.74	9
High Power Aqueon® Diffuse RGB/RGBW - Horizontal Bend								
052245-12	RGB	>95	105	345	49.2ft	15m	3.66	12
052265-15	RGBW-27K	>95	105	345	39.4ft	12m	4.57	15
052273-15	RGBW-30K	>95	105	345	39.4ft	12m	4.57	15
052282-15	RGBW-40K	>95	105	345	39.4ft	12m	4.57	15
Standard Aqueon® Diffuse RGB/RGBW - Vertical Bend								
052235	RGB	>95	57	185	49.2ft	15m	1.83	6
052264	RGBW-27K	>95	68	222	49.2ft	15m	2.74	9
052271	RGBW-30K	>95	68	222	49.2ft	15m	2.74	9
052281	RGBW-40K	>95	68	222	49.2ft	15m	2.74	9
High Power Aqueon® Diffuse RGB/RGBW - Vertical Bend								
052235-12	RGB	>95	113	370	49.2ft	15m	3.66	12
052264-15	RGBW-27K	>95	113	370	39.4ft	12m	4.57	15
052271-15	RGBW-30K	>95	113	370	39.4ft	12m	4.57	15
052281-15	RGBW-40K	>95	113	370	39.4ft	12m	4.57	15

ORGANIC LIGHTING®

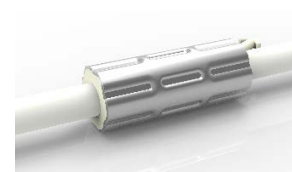
Project

Date

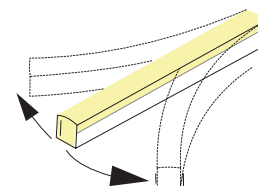


ANTI-WICKING

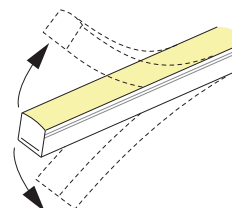
All connections include a ferrule on the power feed to prevent water wicking through the connection point.



HORIZONTAL BENDING



VERTICAL BENDING



Specifications may be modified or improved without notification

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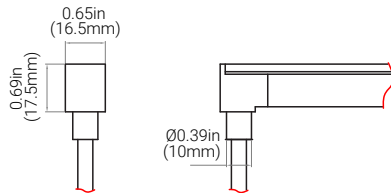
1 of 5

CONNECTORS & ACCESSORIES

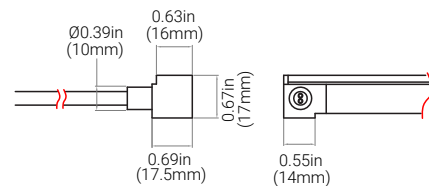
Factory assembled 4-wired RGB & 5-wired RGBW Aqueon Mono IP68 submersible accessories include end caps, extension cords and connectors with customizable cord lengths. IP67 self assembly connectors are also available.

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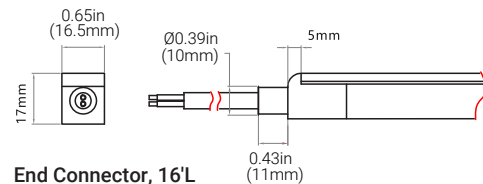
FACTORY ASSEMBLED IP68 CONNECTORS



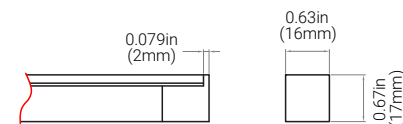
Bottom Feed Connector, 16'L
 RGB #052253-CU16
 RGBW #052260-CU16



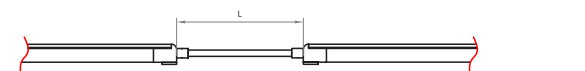
Side Feed Connector, 16'L
 RGB #052254-CU16
 RGBW #052261-CU16



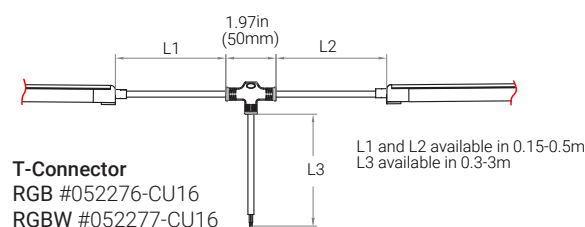
End Connector, 16'L
 RGB #052252-CU16
 RGBW #052259-CU16



End Cap
 #052286

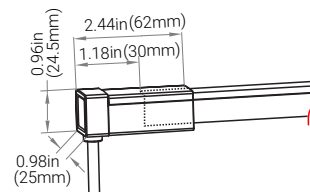


Extension
 RGB #052274-CU16
 RGBW #052275-CU16
 L available in 0.3m-1m

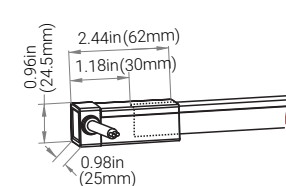


T-Connector
 RGB #052276-CU16
 RGBW #052277-CU16
 L1 and L2 available in 0.15-0.5m
 L3 available in 0.3-3m

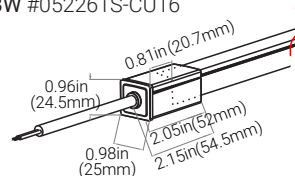
FIELD ASSEMBLY SNAP IP67 CONNECTORS



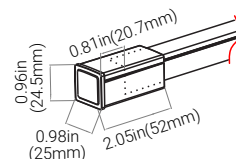
Bottom Snap Connector, 16'L
 RGB #052253S-CU16
 RGBW #052260S-CU16



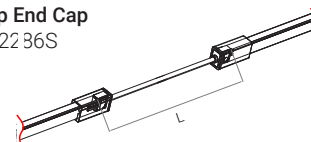
Side Feed Snap Connector, 16'L
 RGB #052254S-CU16
 RGBW #052261S-CU16



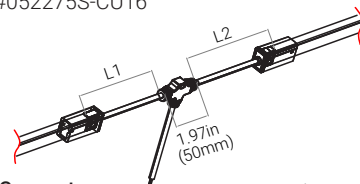
End Snap Connector, 16'L
 RGB #052252S-CU16
 RGBW #052259S-CU16



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

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20W-60W Dimmable Driver



75W-300W Dimmable Driver



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



Nicolaude DE3 DMX 512 Controller



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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 (6w/ft)	Max. Cable Length
		24V
20 AWG *Standard	3.28ft / 1m 16.4ft / 5m 32.8ft / 10m 49.2ft / 15m	656ft / 200m 118.08ft / 36m 49.2ft / 15m 23ft / 7m
18 AWG	3.28ft / 1m 16.4ft / 5m 32.8ft / 10m 49.2ft / 15m	984ft / 300m 190.2ft / 58m 75.4ft / 23m 39.4ft / 12m
16 AWG	3.28ft / 1m 16.4ft / 5m 32.8ft / 10m 49.2ft / 15m	1640ft / 500m 308.3ft / 94m 121.4ft / 37m 65.6ft / 20m
14 AWG	3.28ft / 1m 16.4ft / 5m 32.8ft / 10m 49.2ft / 15m	2624ft / 800m 475.6ft / 145m 187ft / 57m 105ft / 32m

Cable X Information	LED Strip (9w/ft)	Max. Cable Length
		24V
20 AWG *Standard	3.28ft / 1m 16.4ft / 5m 32.8ft / 10m 49.2ft / 15m	409.3ft / 124.8m 72.8ft / 22.2m 31.5ft / 9.6m 6.6ft / 2m
18 AWG	3.28ft / 1m 16.4ft / 5m 32.8ft / 10m 49.2ft / 15m	637.6ft / 194.4m 113.4ft / 34.5m 42ft / 12.8m 21.6ft / 6.6m
16 AWG	3.28ft / 1m 16.4ft / 5m 32.8ft / 10m 49.2ft / 15m	1038.6ft / 316.6m 184.7ft / 56.3m 68.2ft / 20.8m 28.2ft / 8.6m
14 AWG	3.28ft / 1m 16.4ft / 5m 32.8ft / 10m 49.2ft / 15m	1629ft / 496.6m 289.2ft / 88.2m 121.8ft / 37.12m 32.8ft / 10m

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WIRING DIAGRAM

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