



Allegro Dot S RGB/RGBW

Allegro Dot is the next generation of intelligent media dot family. The dots are constructed on a flexible cable with customizable pitch. The dots can provide advanced features and flexibility for lighting design and project execution. Customizable pitch containing up to 60 dots max RGBW and 48 dots RGB.

Product Specifications



Model	Allegro Dot S Direct View	Allegro Dot S Diffused View
Number of Pixel	48	
Light Source	RGB: 4 RGB LEDs per dot RGBW: 4 LEDs + 2 White per dot	
Color Range	16.7 Million additive RGB colors, white CCT 6500K	
Color Resolution	RGB: 3 x 12-bit (Gamma correction) RGBW: 4 x 12-bit (Gamma correction)	
WhiteOne	Algorithms enable auto control of white LED by 3-channel RGB values	
Beam Angle	100°	135°
Luminous Flux¹	RGB: 36 lm RGBW: 48 lm	RGB: 32 lm RGBW: 40 lm
Efficacy¹	RGB: 24 lm/W RGBW: 48 lm/W	RGB: 21.3 lm/W RGBW: 40 lm/W
Cover Lens	Clear (PC)	Diffuser dome (PC)
LED Pitch	100mm to 4000mm; Standard: 150mm	
Housing	Die cast aluminum with PC cover	
Adjustment Options	Flexible cable	
Dimensions (Ø x L x H)	Ø53 x 42 x 18mm Ø2.1" x 1.7" x 0.7"	Ø53 x 42 x 27mm Ø2.1" x 1.7" x 1.1"
Weight	48g	55g
Regulatory Listing & Safety Approval	cETLus, 3G ANSI C136.31	
Operating Temperature	-30°C to +50°C/-22°F to +122°F	
Storage Temperature	-40°C to +70°C/-40°F to +158°F	
Environment	Outdoor (IP66, IP67), suitable for coastal environments	
Humidity	0 to 90% non-condensing	

Electrical Specifications

Operating Voltage	30V DC
Power Consumption¹	RGB: 1.5W RGBW: 1W

System Specifications

Control	DMX512/e:pix/RDM/e:net
Power Supply	LED ENG 100W 30V IP67 AL DO (Class 2)
Addressing Options	Auto-Addressing

1. Measurement per dot.

LED CHARACTERISTICS Because LEDs are semiconductor devices, their performances are subject to inherent variability commonly found in semiconductor industry. To improve consistency in performance across the same product, LED manufacturers "sort" LEDs into bins according to different preset parameters, such as forward driving voltage, illumination, etc. Whereas binning is a sorting function, it is not a correction process. Inherent variability in the manufacturing process results always in different binning distributions according to different production lots. Traxon uses automatically binned LEDs on its products, thereby minimizing output variations within the model range.

As with all electronic devices, LED output degrades over time – a term called lumen depreciation. This also explains why it is nearly impossible to expect photometric performances of two LED products with different service life spans to be the same. The rate of LED degrade is a complicate function of many factors such as operating efficiency, duration of continuous operation, and more significantly, environmental conditions (ambient temperature for example). If allowed working under optimal operating temperature range and with good ventilation, LED devices enjoy long service lives over conventional light sources. When using/installing LED devices, care should be taken to ensure that the devices will operate within the operating conditions specified in respective product literature.

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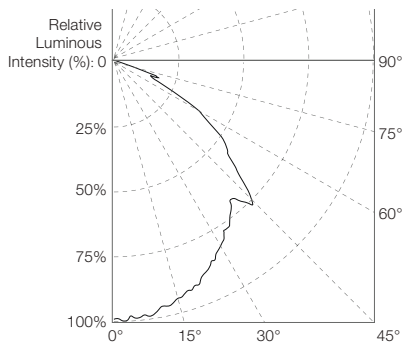
Allegro Dot S RGB (Clear Cover)

Photometrics

Source Specifications

	Dot S RGB
Source	4 LEDs packaged in RGB (One AL Dot S)
Optics	100° (Clear cover)

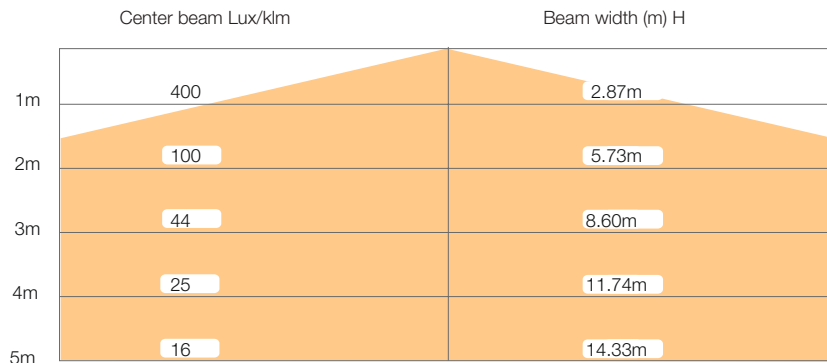
Candela Distribution



Light Output

	Color	Luminous Flux (lm)	Candela Distribution @100%	Efficacy (lm/W)
Dot S RGB	White	36.38	14.56	24.75
	Red	10.63	4.25	17.15
	Green	26.59	10.64	45.84
	Blue	3.62	1.45	7.39

Illuminance at a Distance



● Horiz. Spread: 110.2°
For feet multiply by 3.28

For fc divide by 10.7

IES and LDT files are available for download from the Traxon website.

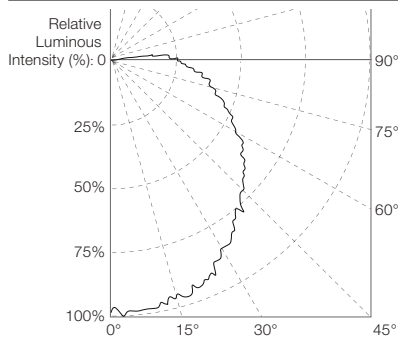
Allegro Dot S RGB (Diffuser Dome Cover)

Photometrics

Source Specifications

	Dot S RGB
Source	4 LEDs packaged in RGB (One AL Dot S)
Optics	135° (Diffuser Dome cover)

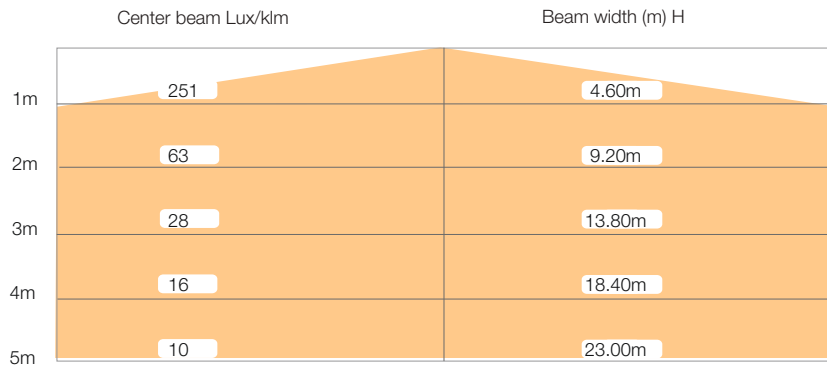
Candela Distribution



Light Output

	Color	Luminous Flux (lm)	Candela Distribution @100%	Efficacy (lm/W)
Dot S RGB	White	32.02	8.05	21.78
	Red	8.97	2.26	14.47
	Green	19.46	4.89	33.55
	Blue	3.08	0.77	6.29

Illuminance at a Distance (Diffuser Dome Cover)



For fc divide by 10.7

IES and LDT files are available for download from the Traxon website.

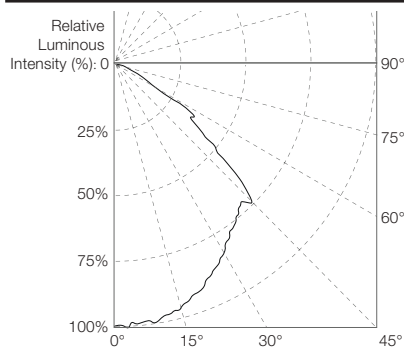
● Horiz. Spread: 133.0°

For feet multiply by 3.28

Source Specifications

Dot S RGBW	
Source	(One AL Dot S) 4 LEDs packaged in RGB 2 LEDs packaged in White
Optics	100° (Clear Cover)

Candela Distribution



Light Output

	Color	Luminous Flux (lm)	Candela Distribution @100%	Efficacy (lm/W)
Dot S RGBW	White (full on)	47.61	20.13	40.01
	White (RGB off)	26.74	11.31	50.45
	RGB	21.15	8.94	24.31
	Red	6.25	2.64	12.76
	Green	12.99	5.49	33.31
	Blue	1.79	0.76	5.42

Illuminance at a Distance (Clear Cover)

	Center beam Lux/klm	Beam width (m) H
1m	423	2.47m
2m	106	4.94m
3m	47	7.41m
4m	26	9.88m
5m	17	12.35m

For fc divide by 10.7

IES and LDT files are available for download from the Traxon website.

● Horiz.Spread: 102.0°

For feet multiply by 3.28

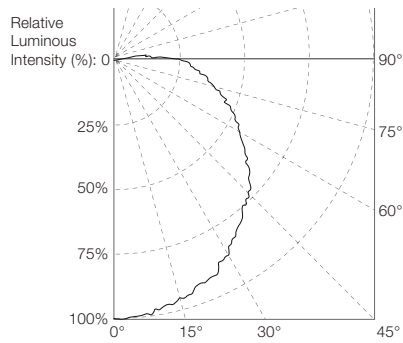
Allegro Dot S RGBW (Diffuser Dome Cover)

Photometrics

Source Specifications

Dot S RGBW	
Source	(One AL Dot S) 4 LEDs packaged in RGB 2 LEDs packaged in White
Optics	135° (Diffuser Dome cover)

Candela Distribution



Light Output

	Color	Luminous Flux (lm)	Candela Distribution @100%	Efficacy (lm/W)
Dot S RGBW	White (full on)	40.48	10.13	34.02
	White (RGB off)	22.62	5.66	42.68
	RGB	18.76	4.69	21.56
	Red	4.57	1.14	9.33
	Green	11.61	2.91	29.77
	Blue	1.55	0.39	4.7

Illuminance at a Distance (Diffuser Dome Cover)

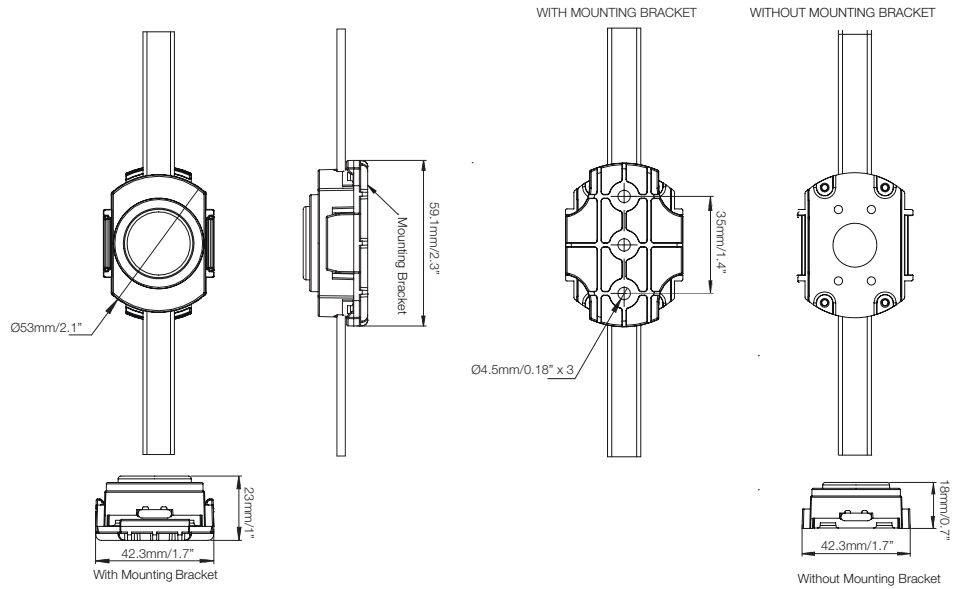
	Center beam Lux/klm	Beam width (m) H
1m	250	4.88m
2m	63	9.75m
3m	28	14.63m
4m	16	19.51m
5m	10	24.38m

● Horiz.Spread: 135.4°
For feet multiply by 3.28

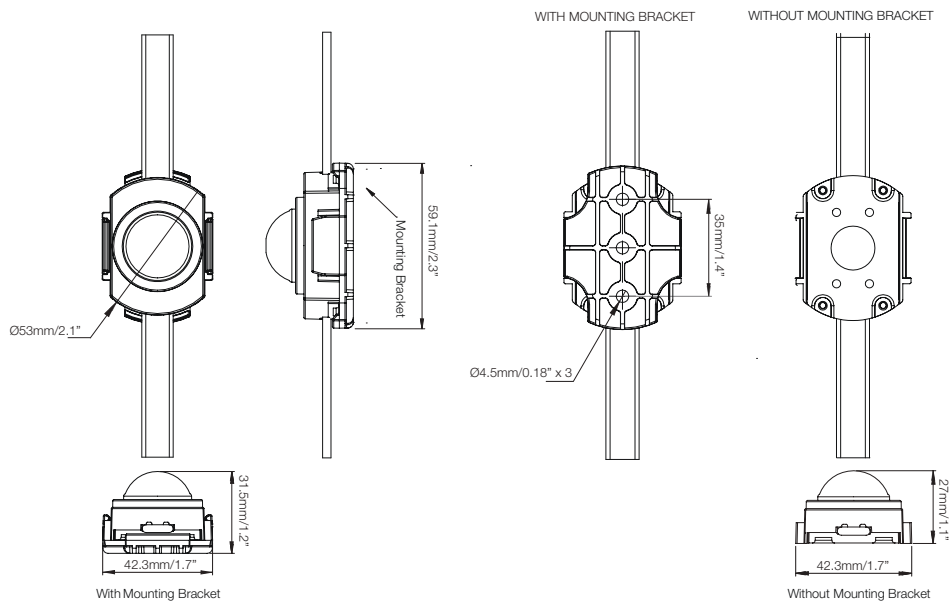
For fc divide by 10.7

IES and LDT files are available for download from the Traxon website.

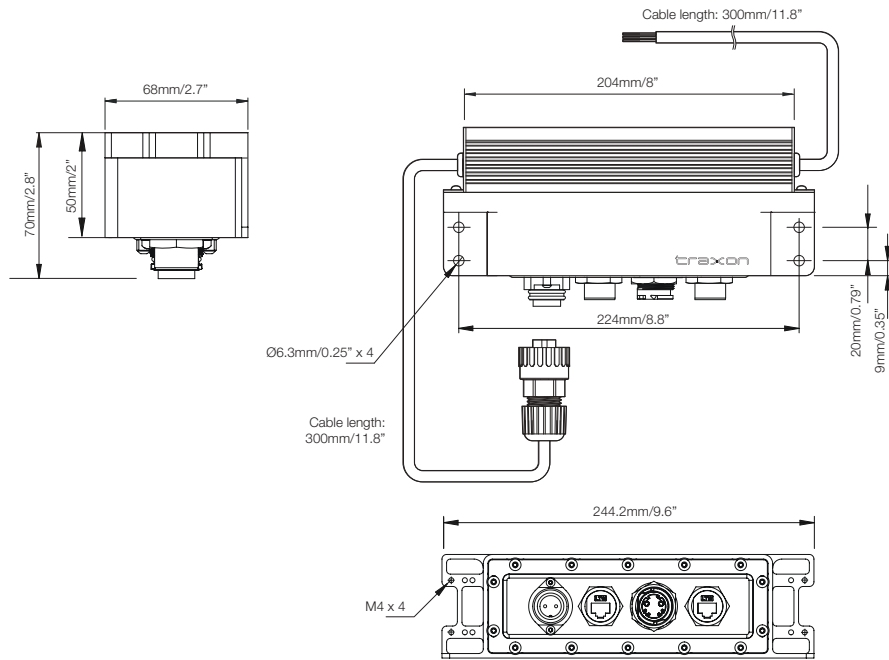
Dot S Direct View



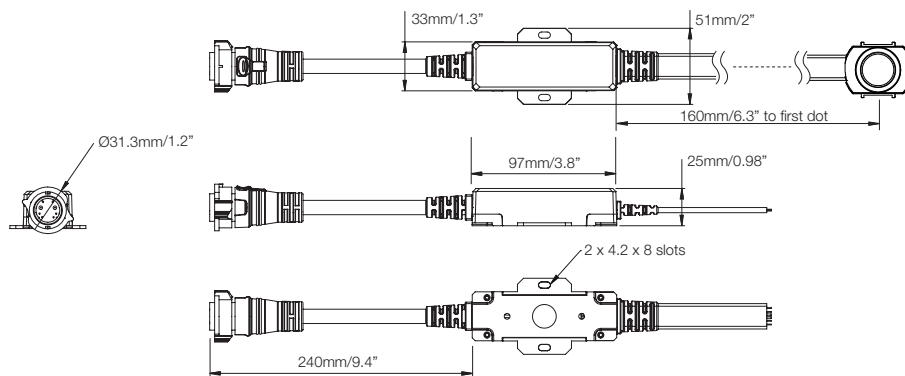
Dot S Diffused View



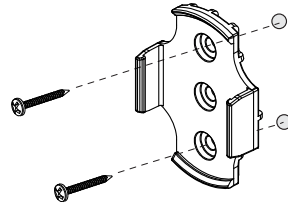
Pixel Distributor with Power Supply (Outdoor 100W)



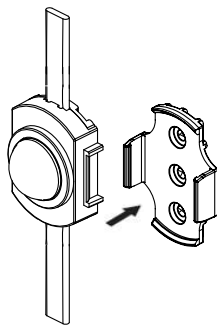
Dot S Smart Junction



Dot S

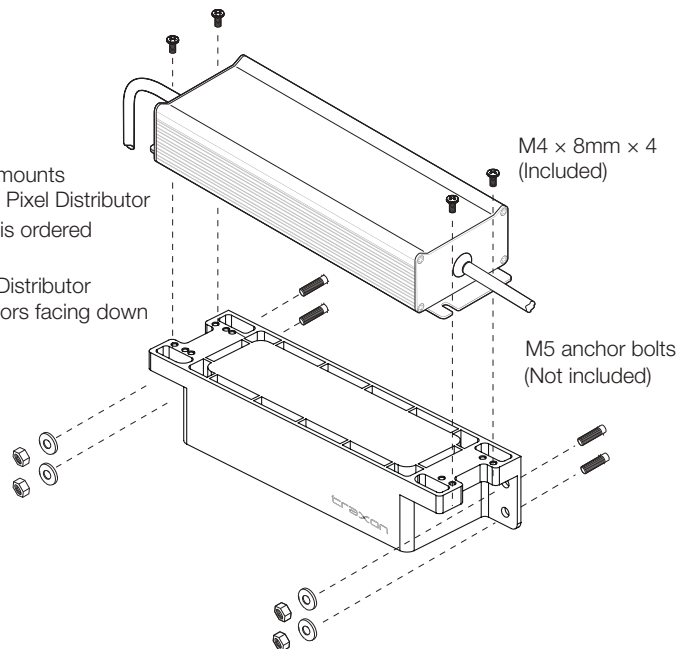


(M4 Screws not included)



Pixel Distributor

LED Engine mounts
on top of the Pixel Distributor
(LED Engine is ordered
separately)
Mount Pixel Distributor
with connectors facing down



M4 x 8mm x 4
(Included)

M5 anchor bolts
(Not included)



Allegro Dot S RGB/RGBW

Ordering

Fixtures

Model No.	Description	Item Code
DO.A1.1110020	AL DO S CR RGBW65 48PPF 150P 0.5M WT	AM294630055
DO.A1.2110020	AL DO S CR RGB 48PPF 150P 0.5M WT	AM294640055
DO.A1.1210020	AL DO S DF RGBW65 48PPF 150P 0.5M WT	AM294650055
DO.A1.2210020	AL DO S DF RGB 48PPF 150P 0.5M WT	AM294660055
DO.A1.1110030	AL DO S CR RGBW65 48PPF 300P 0.5M WT	AM305830055
DO.A1.2110030	AL DO S CR RGB 48PPF 300P 0.5M WT	AM305840055
DO.A1.1210030	AL DO S DF RGBW65 48PPF 300P 0.5M WT	AM305850055
DO.A1.2210030	AL DO S DF RGB 48PPF 300P 0.5M WT	AM305860055

Standard Accessories

Model No.	Description	Item Code
DO.AD.0001020	ALLEGRO DOT PXL DISTRIBUTOR	AM278810055
DO.AC.0100300	X-LOCK LEAD CABLE 5M 14AWG VS15 TX	AM061830055
DO.AC.0100400	X-LOCK LEAD CABLE 10M 14AWG VS10 TX	AM061850055
N/A	AL DOT S MOUNTING CLIP	AM286870055

Optional Accessories

Model No.	Description	Item Code
N/A	AL DOT S FIELD CUT END CAP	AM354990055

E:cue Control

Model No.	Description	Item Code
N/A	SYMPL Core S	AB447060035
N/A	SYMPL DMX Node	AB444180035
N/A	SYMPL e:pix Node	AB443930035
EN.BP.0000100	Butler Pro DMX/RDM	AA628600035
EN.BP.0000200	Butler Pro e:pix	AA628610035
EN.BU.0000001	Butler S2	AB436200031
AC.BG.0000001	Butler S2 Garage (Optional)	AA611800031

TX Connect

Model No.	Description	Item Code
DE.AC.0000100	TX CONNECT Data Indoor/Outdoor Bridge Cable, 5m/16.4ft	AA508850055
DE.IC.0060000	TX CONNECT Data Outdoor Cable, 0.6m/1.97ft	AA664580055
DE.IC.0300000	TX CONNECT Data Outdoor Cable, 3m/9.84ft	AA438810055
DE.AC.0100000	RJ45 Male Connector Housing IP67	AA556100155

TX Power

Model No.	Description	Item Code
N/A	LED ENG 100W 30V IP67 AL DO	AM019490055



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