

Product name	Animation Waterproof¹
Product code	AN-W04-STR64

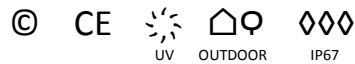
Introduction

The Animation Waterproof is our waterproof version of the original Animation.

In combination with a rugged high tech netting, it is ready to resist the most severe weather conditions (rain, snow and burning sun). In combination with other outdoor fabrics, like PVC mesh or banner drape, creative minds can explore new boundaries.

Extensive changes had to be made to the existing indoor Animation LED strings. Water and UV proof cabling, moulded connectors and switching to an SMD RGB LED were required.

To keep the wide viewing angle and the excellent RGB colour mixing of the indoor version, a new lens was developed and applied to the moulded LED sockets.



Product specific properties

Type	Animation WP - 64 pixels - 350mm pitch
LED	1 SMD RGB per pixel
Colour range	16.7 million colours
Viewing angle	120° FWHM ²
Luminous Flux	2.3 lm / pixel ³
Efficacy	n/a ⁴
Cover lens	Polycarbonate (frost)
Housing	Automotive grade hot melt
Surfaces	Fabrics – Hook and loop fasteners Walls and panels – n/a Netting – PC clip
Size	ø 7.0mm x 7.0mm lens ø 36.0mm x 9.0mm housing
Weight	1150g per string
Pitch	350mm – standard 160mm – minimum (any pitch on request)
Operating temp.	-20°C to 50°C
Storage temp.	-20°C to 70°C
Environment	IP67 version

Electrical properties

String supply	24 volt
Power per pixel	0.35 watt (0.14 average ⁵)
Power per string	22.4 watt (9.0 average ⁵)

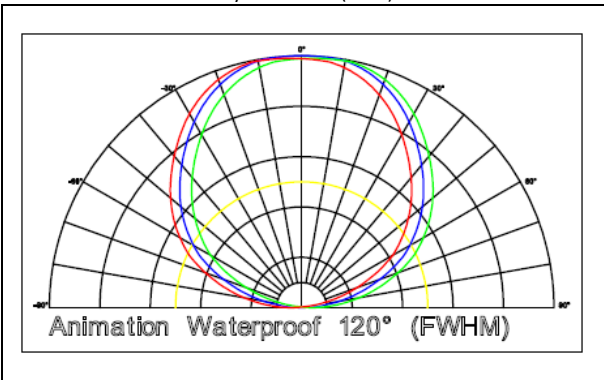
Control requirements

Control	ShowLED Animation controller 90 – 250 VAC / 450Watt input 3.32 Kg
Switch	ShowLED Giga Switch 90 – 250 VAC / 20 Watt input 3.60 Kg
Data processing	ShowLED V-box (input: CVBS, S-VIDEO, VGA) 90 – 250 VAC / 15 Watt input 2.00 Kg
Source	Computer, media server or other video source



Photometrical properties

LED	1 SMD RGB per pixel	
Colour range	16.7 million colours	
Viewing angle	120° FWHM ²	- white
	120° FWHM	- red
	120° FWHM	- green
	120° FWHM	- blue
Luminous Flux	2.3 lm / pixel ³	- white
	n/a	- red
	n/a	- green
	n/a	- blue
Efficacy	n/a	
Ambient temp.	20° C ⁶	
Colour temp.	n/a	
Cover lens	Polycarbonate (frost)	



- 1 – version: 2011 rev 8.0.1
- 2 – full width at half maximum
- 3 – when operating on full white
- 4 – not applicable
- 5 – average power when displaying video content
- 6 – operating temperature during test reading

LED CHARACTERISTICS: As 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 present 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. ShowLED 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 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.

