Pulsestar White-Light
High Intensity Pulsed Lighting for ANPR/LPR

rayLED

w72 series

w48 series &
w96 series (2x)
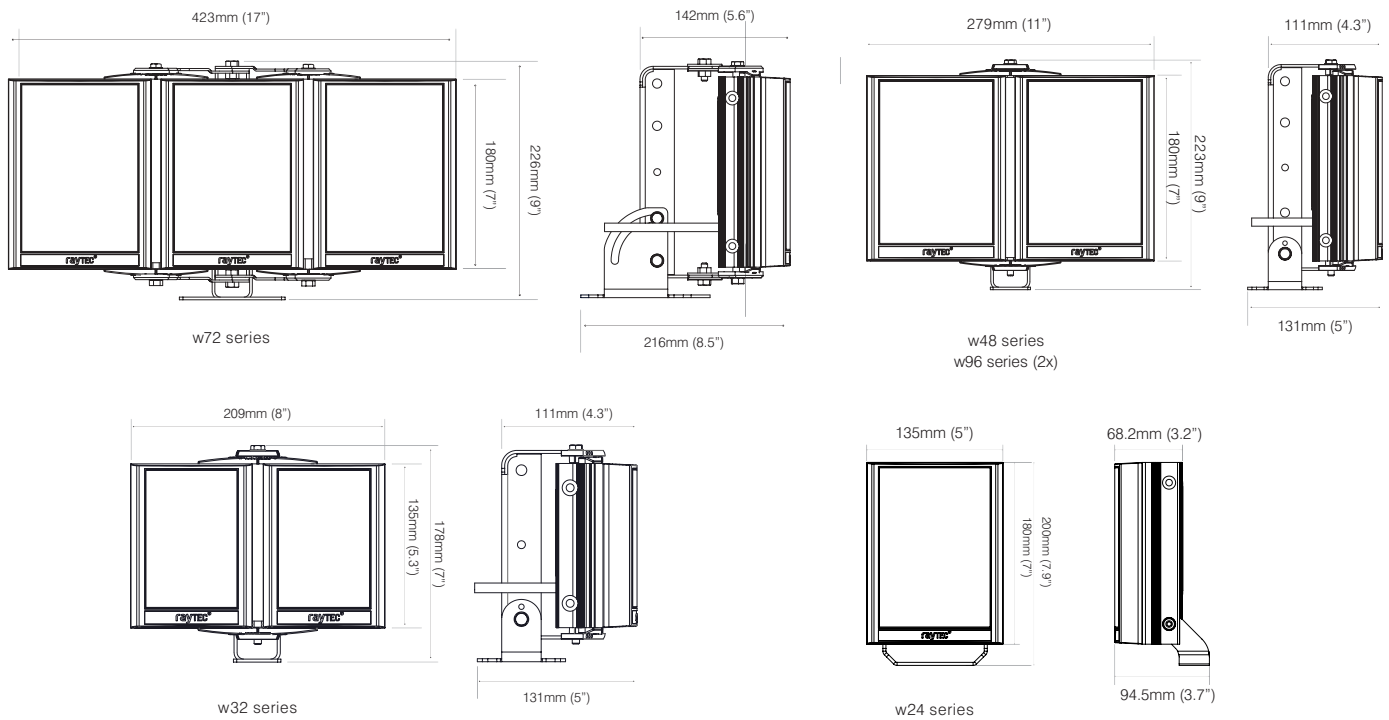

w32 series

w24 series

- High Intensity - up to 440W Lighting Drive Power
- Easily link Lighting Pulse with Camera Shutter
- Platinum Elite twin-core SMT LEDs
- Hot-spot Reduction Technology
- VARIO Interchangeable Lens System

- Angles from 10-35 degrees – from 1 product
- Extreme Long-Life and Low Maintenance
- Wide Trigger Input Range (TTL - 3.3-24V DC)
- Integrated Pulse Controller
- Universal 100-230V AC PSU (24V DC optional)

Pulsestar White-Light illuminators deliver powerful pulsed lighting for traffic and machine vision applications including ANPR / LPR.

Every Pulsestar illuminator features PLATINUM Elite twin-core SMT LED technology to deliver outstanding illumination power, and provides significant uplifts in illuminator performance compared to equivalent non-pulsed illuminators. A TTL signal from the camera is required to synchronise the lighting pulse with the exposure of the camera, and the power, duration, and frequency of the pulse can all be adjusted for optimal results at each site. Pulsestar illuminators are long life and low maintenance - perfect for difficult to reach transporation applications.

Pulsestar features an interchangeable lens system with Hot-spot Reduction Technology to deliver highly even illumination, where it is most needed, for outstanding images. Pulsestar White-Light illuminators produce up to 440W of Lighting Drive power for traffic applciations.

Product Dimensions

423mm (17")
180mm (7")
226mm (9")

w72 series

142mm (5.6")
216mm (8.5")

279mm (11")
180mm (7")
223mm (9")

w48 series
w96 series (2x)

111mm (4.3")
131mm (5")

209mm (8")
135mm (5.3")
178mm (7")

w32 series

111mm (4.3")
131mm (5")

135mm (5")
200mm (7.9")
180mm (7")

w24 series

68.2mm (3.2")
94.5mm (3.7")

Features	Benefits
High Intensity Pulsed Illumination	Delivering up to 440W of pulsed White-Light illumination, Pulsestar illuminators deliver lighting on-demand for ANPR/LPR and Machine vision applications. Pulsed illumination ensures the highest levels of light on scene to illuminate fast moving objects while extending LED life and maximising energy savings.
Camera Sync	A TTL trigger input allows the illumination to be pulsed in syncronisation with the camera shutter to deliver maximum light levels precisely when needed.
Integrated Pulse Controller	An in-built pulse controller allows the timing, height and width, and the lighting pulse to be tailored for the exact needs of the application, and includes an Ethernet-based communication interface making installation, operation, and maintenance safer and easier.
PLATINUM Elite twin-core SMT LED technology	PLATINUM Elite twin-core SMT LED technology allows Pulsestar illuminators to deliver the highest possible pulse intensities for the maximum amount of light on scene.
Individual Illuminator Control System	Each LED panel on Adaptive Illumination™ models can be controlled and operated indivdually via dedicated channels from the PSU, offering greater flexibility for multi-lane installations, mobile applications etc.
VARIO Interchangeable lens system	Angle of illumination can be easily, quickly and precisely adjusted by changing the VARIO holographic lens insert, to match the specific camera field of view.
Hot-spot Reduction Technology (HRT)	HRT - Hot-Spot Reduction Technology delivers a highly diffused, elliptical beam shape to deliver more light where it is needed, generating both longer distances and minimizing light wastage. The HRT system also prevents overexposure of foreground objects.
Active LED Life Control	An Advanced Cool Running™ system draws heat away from the LEDs, shielding the LED from abnormal stress, and allows RayLED LED products to deliver outstanding performance and consistency of illumination throughout the operational life of the illuminator. A long operational life also ensures the lowest maintenance costs, ideal for installations in difficult to reach areas.
Choice of Wavelengths	Lighting to suit a wide range of imaging requirements – Infra-Red 850nm or 940nm, White-Light, and bespoke colour options available.

Technical Specifications

Illuminator

Model	Pulsestar w24	Pulsestar w32	Pulsestar w48	Pulsestar w72	Pulsestar w96
Lighting Drive Power (pulsed)*	110W	150W	220W	330W	440W
Consumption	11W	15W	22W	33W	44W
Number of LEDs	24	32	48	72	96
Input	Universal 100-230V AC (PSU included - Details below) 24V DC options available - Contact RayLED				
LED type	Platinum Elite twin-core SMT LEDs				
Illumination Angle	Standard pack includes 10°x10°, 20°x10° and 35°x10° lenses Other angles available on request				
Beam Shape	Elliptical with HRT (Hot-Spot Reduction Technology)				
Beam Angle System	VARIO Interchangeable Lens System				
Typical Pulse Width	2 ms				
Trigger Input	TTL - 3.3 - 24V DC				
12V DC Power Output	1A				
Control / Communication	Ethernet				
Wavelength	White-Light				
IP Rating	IP66				
Temperature Range	-20° to +50°C (-4 to 122°F)				
Colour	Silver				
Weight	1.65kg (3.6lbs)	2.25kg (5 lbs)	4.5kg (9.9lbs)	6kg (13.2lbs)	2 x 4.5kg (9.9lbs)
Dimensions	135 x 180 x 68.2mm (5" x 7" x 2.6" approx.)	209 x 178 x 67mm (8" x 7" x 3" approx.)	279 x 223 x 68mm (11" x 9" x 3" approx.)	423 x 226 x 68mm (17" x 9" x 3" approx.)	2 off 279 x 223 x 68mm (11" x 9" x 3" approx.)
Bracketry	U bracket included	Adaptive Illumination mounting bracket included	Adaptive Illumination mounting bracket included	Adaptive Illumination mounting bracket included	2 x Adaptive Illumination mounting brackets included
Country of Manufacture	United Kingdom				

External Power Supply (included)

Input	Universal 100-230V AC auto-sensing				
Output	11W	15W	22W	33W	44W
Weight	1.7kg (3.75lbs)	1.7kg (3.75lbs)	2.0kg (4.4lbs)	2.3kg (5.1lbs)	2.3kg (5.1lbs)
Dimensions	181 x 287 x 107mm (8" x 12" x 4" approx.)				

Product Codes

Part Codes	Description	Angles	Distances
PSTR-w96-HV	Pulsestar w96, White-Light, with 3 angle options included, 100-230V AC	10˚x10˚	Contact RayLED
		20˚x10˚	Contact RayLED
		35˚x10˚	Contact RayLED
PSTR-w72-HV	Pulsestar w72, White-Light, with 3 angle options included, 100-230V AC	10˚x10˚	Contact RayLED
		20˚x10˚	Contact RayLED
		35˚x10˚	Contact RayLED
PSTR-w48-HV	Pulsestar w48, White-Light, with 3 angle options included, 100-230V AC	10˚x10˚	Contact RayLED
		20˚x10˚	Contact RayLED
		35˚x10˚	Contact RayLED
PSTR-w32-HV	Pulsestar w32, White-Light, with 3 angle options included, 100-230V AC	10˚x10˚	Contact RayLED
		20˚x10˚	Contact RayLED
		35˚x10˚	Contact RayLED
PSTR-w24-HV	Pulsestar w24, White-Light, with 3 angle options included, 100-230V AC	10˚x10˚	Contact RayLED
		20˚x10˚	Contact RayLED
		35˚x10˚	Contact RayLED

Other angles are available - Contact RayLED *

Distances are camera and set-up dependant