






- ATEX and IEC Ex approved – Zone 2  
UL/CSA approved, including C1D2 and ABS
- Zone 1 variant available
- Intelligent Emergency variants - up to 100%  
output
- Ultra long life, high lumen output LED
- Easy installation, maintenance and inspection
- Wide operating temperature range -50° to +55°C
- VARIO lens technology – easy modification of  
beam patterns
- Integral photocell (optional)
- 5 year warranty
- 'Op is' approved (EN60079-28)

The SPARTAN Bulkhead range is designed specifically for hazardous environments which require high performance, high reliability, White-Light illumination. Using Raytec's field-proven, long-life LED technology, SPARTAN Bulkhead is ATEX and IEC Ex approved for all Zone 2 applications and rated for T4 environments.

SPARTAN Bulkhead is ideal for applications where space is restricted with its compact, low profile design, which also allows easy access to the back of the unit with rear cable entries, so cabling can be hidden and protected from damage. Housed in marine grade aluminium, SPARTAN Bulkhead is IP66 and IP67 rated and can survive the most extreme environments.

SPARTAN Bulkhead is available as an intelligent emergency variant which self-tests the emergency battery to proactively monitor and maintain the overall health status of the luminaire, and provides class leading emergency performance. Available in a range of different beam patterns, both circular and elliptical, with revolutionary interchangeable VARIO lens inserts which can be easily altered on site delivering the ultimate flexibility to specifiers, distributors and end users. Delivering high performance illumination of up to 2,750 lumens.

# Intelligent Emergency - Self-testing Functions

LED Indication	Condition
	Battery charged and PSU OK
	Emergency mode activated
	Function Test
	Self-test
	Commissioning
	Fault - further troubleshooting required



Features	Benefits
Intelligent Emergency	Self-testing emergency battery which proactively monitors and maintains the overall health of the luminaire Easy inspection thanks to a tri-colour LED indicator
Modular Design	Both the LED and PSU modules are easily accessible for maintenance and inspection Available as a standard or emergency fitting – upgradeable on site.
Ultra-Powerful	High lumen output - up to 2,750 lumens Latest high power LED technology
Ultra-Flexible	Beam patterns from 10° to 120° both circular and elliptical. Operating temperature range of -52°C to + 55°C with a T4 and T5 rating for even the most challenging conditions. (-20°C to +46°C for emergency variants) Models incorporating VARIO Technology allow for easy modification of beam pattern.
Ultra-Reliable	Industry leading 5 year warranty Designed and manufactured in the UK to the highest standards including both ISO9001 & ISO14001. Advanced electronics and LED's protected by vibration resistant and water proof potting compound Intelligent emergency with automatic self-testing
Ultra-Efficient	LEDs are thermally managed to deliver class leading energy efficiency Significant running and maintenance savings compared to traditional lighting technologies SMART access wiring system for safe and efficient installation, set-up and ongoing inspection
Support Services	Photometric files available (.ies & .ldt) Full Lighting Design Service Site specific Energy and Cost Saving Report available

## 5 YEAR WARRANTY

All Raytec luminaires are provided with an industry leading 5 year warranty and have an expected useful life in excess of 10 years



# Technical Specifications

## Certification

ATEX Rating:	ATEX and IEC Ex rated for Gas and Dust
Hazardous Area rating:	Zone 2 (Gas), Zone 22 (Dust)
Certificates:	CML17ATEX4231 & IECEX CML17.0135 UL/CSA, including C1D2
ATEX and IEC Ex	Gas: II 3 GD Ex ec mc op is IIC T4 Gc Ta= -50°C to +55°C (-20°C to +46°C for emergency variants) Dust: Ex tb IIIC T82°C Db IP66 & IP67 - Ta -50°C to +55°C (-20°C to +46°C emergency variants)
C1D2	Class I, Div. 2 Gr ABCD T5 Class II, Div. 1, Div. 2 Gr EFG Tamb= -52°C to + 50°C Enclosure Type 4X

## Optical

Beam Patterns-circular:	10°x 10° or 30°x 30° or 50°x 50° or 120°x 120° (10 x 10 option can be upgraded to Vario Technology)
Beam Patterns-elliptical:	35°x 10° or 60°x 25° or 80°x 30° or 120°x 50° (VARIO)
Lumen output on mains:	2,750 lm – circular beam patterns 2,500 lm – elliptical beam patterns (VARIO)
LED type:	Platinum Elite SMT LEDs
Number of LEDs:	24
CRI	80+
Colour Temperature:	6,000K

## Electrical

Input:	110-254V 50/60Hz AC only Low voltage: 18-48V AC and 18-69V DC Extra low voltage: 12V AC/DC
Power:	34W standard 37W emergency
Termination	Incoming terminal block suitable for looping 4 core 4mm <sup>2</sup> cable
Power Factor:	>0.95
Cable Entries	4xM20 as standard (other entries available upon request), dispatched complete with three ATEX/IEC Ex approved blanking plug

## Mechanical/Environmental

Burning position:	Universal
IP rating:	IP66 & IP67
Temperature range:	-50°C to +55°C (-20°C to +46°C emergency variants)
Weight:	5kg (11.0lbs) Standard, 6kg (13.2lbs) Emergency
Enclosure:	Marine grade aluminium epoxy powder coated, toughened glass, all external fasteners and brackets are marine grade stainless steel
Unit Colour:	Front - Dark Grey (RAL 7012) Back - Silver (RAL 9006)
Installation instructions:	Please contact Raytec for copy
Dimensions:	288 x 220 x 122mm (11.3 x 8.7 x 4.8")
Mounting:	Comes complete with stainless steel brackets (as shown on previous page) Other options available

## Intelligent Emergency Battery Back-Up

Function:	Self-testing intelligent emergency
System health indicator:	Tri-colour LED indicator
Emergency Duration:	Up to 3hrs @ 25% power Other options available
Emergency Battery:	2.5 Ah
Emergency Charge Time:	20 hours

# Product Codes - Zone 2/22

## Circular beam pattern

Part Codes	Description
SPZ-BL24-W-1010	SPARTAN Bulkhead, 24 LED, White-Light, 10°x 10° beam
SPZ-BL24-W-3030	SPARTAN Bulkhead, 24 LED, White-Light, 30°x 30° beam
SPZ-BL24-W-5050	SPARTAN Bulkhead, 24 LED, White-Light, 50°x 50° beam
SPZ-BL24-W-120120	SPARTAN Bulkhead, 24 LED, White-Light, 120°x 120° beam

Add -C1D2 to part code for North American standards

Intelligent Emergency variant available, add -EMX25 to the above codes  
18-69V variants available, add -LV to the above codes  
12V variants available, add -ELV to the above codes  
For options fitted with photocell add '-PC' to the above codes

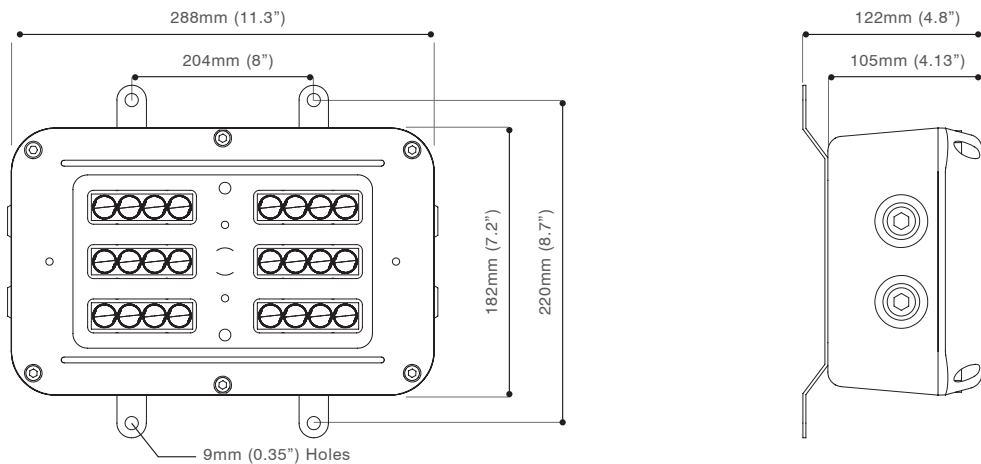
## Elliptical beam pattern

Part Codes	Description
SPZ-BL24-W-3510	SPARTAN Bulkhead, 24 LED, White-Light, 35°x 10° beam
SPZ-BL24-W-6025	SPARTAN Bulkhead, 24 LED, White-Light, 60°x 25° beam
SPZ-BL24-W-8030	SPARTAN Bulkhead, 24 LED, White-Light, 80°x 30° beam
SPZ-BL24-W-12050	SPARTAN Bulkhead, 24 LED, White-Light, 120°x 50° beam

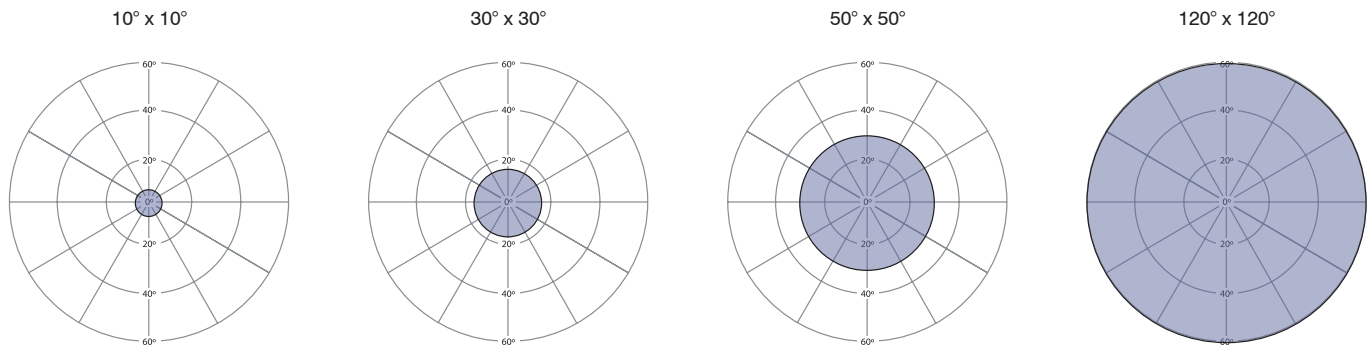
Add -C1D2 to part code for North American standards

Intelligent Emergency variant available, add -EMX25 to the above codes  
18-69V variants available, add -LV to the above codes  
12V variants available, add -ELV to the above codes  
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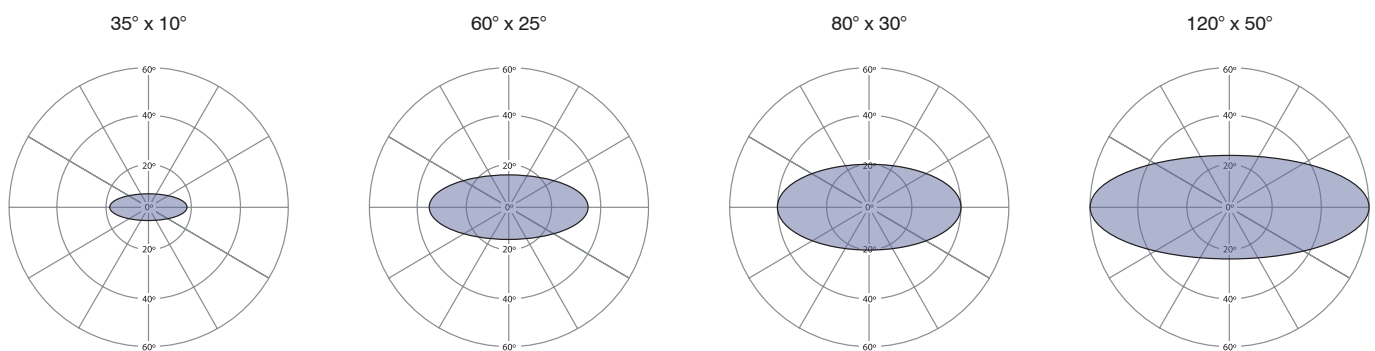
# Product Dimensions



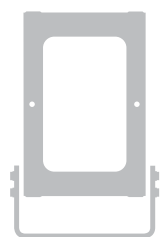
## Beam patterns - Circular



## Beam patterns – Elliptical (VARIO)



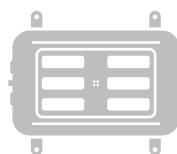
## Products in the SPARTAN Family



SPARTAN Flood



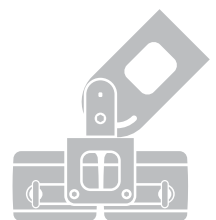
SPARTAN Linear



SPARTAN Bulkhead



SPARTAN Bay



SPARTAN Crane