ZONE 1 ZONE 2 INDUSTRIAL

SPARTAN BULKHEAD BL24

LED Zone 1 Bulkhead Standard and Emergency Variants



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 1 applications and rated for T4 and T5 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 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 2,500 lumens, SPARTAN Bulkhead is also available as an emergency fitting with integral battery back-up which can run up to 100% light output under emergency conditions.

Features

- ATEX and IEC Ex pending Zone 1 (UL/CSA pending, including C1D2)
- Ultra long life LED
- High lumen output LED
- Easy installation, maintenance and inspection
- · Emergency variants

- Wide operating temperature range of -50° to +55°C
- VARIO lens technology easy modification of beam patterns
- Integral photocell (optional)
- Clear external tear off strips on outer optics available
- 5 year warranty

Why Raytec

- UK Designed & Manufactured
- Manufacturing precision engineered LED products
- Worldwide distributor support

- · Lighting design and full technical support
- ISO9001 and ISO140001 accredited
- Award Winning Technology



Raytec Americas

Extended Features

Ultra-Powerful

High lumen output - up to 2,500 lumens Latest high power LED technology

Ultra-Flexible

Beam patterns from 10° to 120° both circular and elliptical.

Operating temperature range of -50° C to $+55^{\circ}$ C with a T4 and T5 rating for even the most challenging conditions. (-20°C to $+46^{\circ}$ C 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

Ultra-Modular

Both the LED and PSU modules are easily accessible for maintenance and inspection Available as a standard or emergency fitting – upgradeable on site.

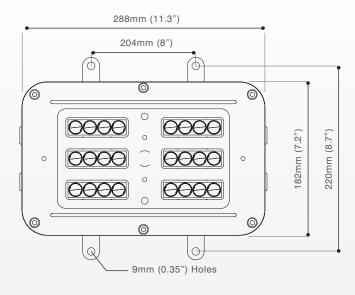
Ultra-Efficient

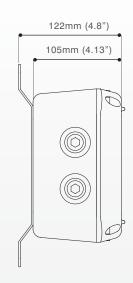
LEDs are thermally managed to deliver class leading energy efficiency Significant running and maintenance savings compared to traditional lighting technologies SMART access wiring system for safe and efficient installation, set-up and ongoing inspection

Ultra-Support

Photometric files available (.ies & .ldt)
Full Lighting Design Service
Site specific Energy and Cost Saving Report available

Product Dimensions







ushazsales@raytecled.com

Technical Specifications

Certification

ATEX Rating: ATEX and IEC Ex rated for Gas and Dust

Hazardous Area rating: Zone 1 & 2 - Gas and Dust

Certificates: CML13ATEX3007 & IECEx CML14.0001

UL/CSA pending, including C1D2

Gas: II 2 GD Ex emb IIC T4 Gb

Ta -50°C to +55°C (-20°C to +46°C emergency variants)

II 2 GD Ex emb IIC T5 Gb

Ta -50°C to +48°C (-20°C to +46°C emergency variants)

Dust: Ex tb IIIC T82°C Db

IP66 & IP67 -

Ta -50°C to +55°C (-20°C to +46°C emergency variants)

Electrical

Input: 110-254V 50/60Hz AC only

18-30V AC/DC

Power: 34W standard

37W emergency

Termination: Incoming terminal block suitable for looping 4 core

4mm² 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

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: $35^{\circ}x \ 10^{\circ}\text{or} \ 60^{\circ}x \ 25^{\circ}\text{or} \ 80^{\circ}x \ 30^{\circ} \ \text{or} \ 120^{\circ}x \ 50^{\circ} \ (VARIO)$

 $Lumen\ output\ on\ mains: \quad 2{,}500\ lm-circular\ beam\ patterns$

2,250 lm - elliptical beam patterns (VARIO)

LED type: Platinum SMT LEDs

Number of LEDs: 24
CRI: 70+
Colour Temperature: 6,000K+

Mechanical/Environmental

Burning position: Universal IP rating: IP66 & IP67

Temperature range: -50°C to $+55^{\circ}\text{C}$ (-20°C to $+46^{\circ}\text{C}$ 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: Silver (RAL 9006)

Installation instructions: Raytec ref 940-M-0003 -

please contact Raytec for copy

Dimensions: 288 x 220 x 122mm (11.3 x 8.7 x 4.8 inch)

Mounting: Comes complete with stainless steel brackets

(as shown on previous page)

Other options available

Emergency

Duration: Up to 180mins @25% power

Other options available

Battery: Ni/cd 12V Charge time: 20 hours

Circular beam pattern

Elliptical beam pattern

Part Codes Description (T4 variants as standard)

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

For emergency versions add '-EM25' to the above codes For low voltage versions add '-LV' to the above codes For options fitted with photocell add '-PC' to the above codes

Contact Raytec for T5 variants

Part Codes

Description (T4 variants as standard)

SPX-BL24-W-3510

SPARTAN Bulkhead, 24 LED, White-Light, 35°x 10° beam

SPX-BL24-W-6025

SPARTAN Bulkhead, 24 LED, White-Light, 60°x 25° beam

SPX-BL24-W-8030

SPARTAN Bulkhead, 24 LED, White-Light, 80°x 30° beam

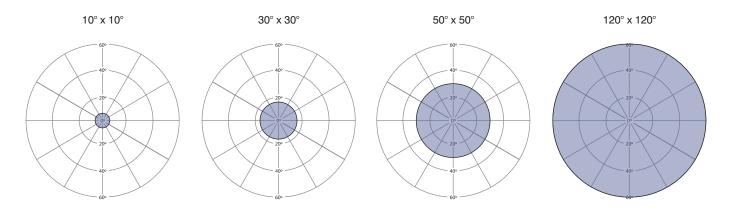
SPX-BL24-W-12050

SPARTAN Bulkhead, 24 LED, White-Light, 120°x 50° beam

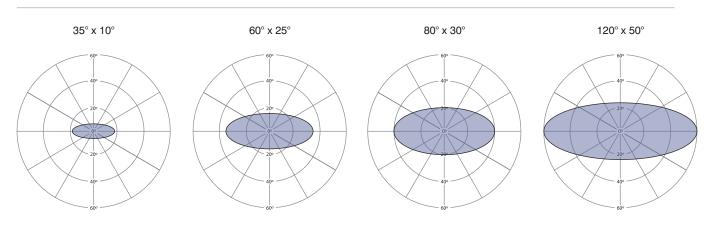
For emergency versions – add '-EM25' to the above codes
For low voltage versions add '-LV' to the above codes
For options fitted with photocell add '-PC' to the above codes
Contact Raytec for T5 variants



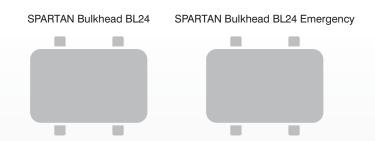
Beam patterns - Circular



Beam patterns - Elliptical (VARIO)



Products in the SPARTAN Bulkhead Range



Other Products in the SPARTAN Zone 1 Family

