













- ATEX and IEC Ex approved Zone 1/21 UL/CSA approved, including C1D2 and ABS
- · Zone 2 variant available
- Intelligent Emergency variants up to 100% light 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 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 as an intelligent emergency variant which self-tests the emergency battery to proactively monitor and maintain the overall health status of the luminaire. 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.



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# Intelligent Emergency - Self-testing Functions

| LED Indication | Condition                                |
|----------------|--|
| •              | Battery charged and PSU OK               |
| •              | Emergency mode activated                 |
|                | Function Test                            |
|                | Self-test                                |
| - <del>-</del> | Commissioning                            |
| <del>_</del>   | 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 2,500 lumens<br>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 1 (Gas), Zone 21 (Dust)   |
| Certificates:          | CML13ATEX3007 & IECEx CML14.0001<br>UL/CSA pending, including C1D2   |
| Gas:                   | II 2 G D<br>Ex e mb op is IIC T4 Gb<br>Ta= Up to -52°C to +55°C (-20°C to<br>+46°C for emergency variants) |
| Dust:                  | Ex tb op is IIC T98°C Db Ta= Up to -52°C to +55°C (-20°C to +46°C for emergency variants) IP66 & IP67      |

### 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<br>120°x 50° (VARIO)  |
| Lumen output on mains:    | 2,500 lm – circular beam patterns<br>2,250 lm – elliptical beam patterns<br>(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<br>Low voltage: 18-48V AC and 18-69V DC<br>Extra low voltage: 12V AC/DC                                     |
|---------------|--|
| Power:        | 34W standard<br>37W emergency  |
| Termination   | Incoming terminal block suitable for looping 4 core 4mm² cable   |
| Power Factor: | >0.95  |
| Cable Entries | 4xM20 as standard (other entries<br>available upon request), dispatched<br>complete with three ATEX/IEC Ex<br>approved blanking plug |

### Mechanical/Environmental

| Burning position:          | Universal   |
|----------------------------|---|
| IP rating:                 | IP66 & IP67   |
| Temperature range:         | -50°C to $+55$ °C (-20°C to $+46$ °C for emergency variants)  |
| Weight:                    | 5kg (11.0lbs) Standard<br>6kg (13.2lbs) Emergency   |
| Enclosure:                 | Marine grade aluminium epoxy powder<br>coated, toughened glass, all external fasteners<br>and brackets are marine grade stainless steel |
| Unit Colour:               | 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)<br>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<br>Other options available |
| Emergency Battery:       | 2.5 Ah  |
| Emergency Charge Time:   | 20 hours  |

### Product Codes - Zone 1/21

### Circular beam pattern

| Part Codes        | Description (T4 variants as standard)                  |
|-------------------|--|
| 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 |

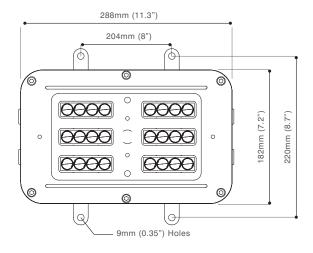
### Elliptical beam pattern

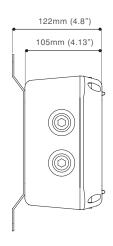
Intelligent Emergency variant available, add -EMX25 to the above codes 18-69V variants available, add -LV to the above codes 12V variants available, add -ELV to the above codes For options fitted with photocell add '-PC' to the above codes Contact Raytec for T5 variants

| 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 |  |

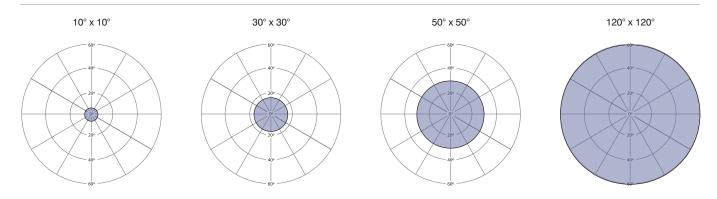
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### **Product Dimensions**

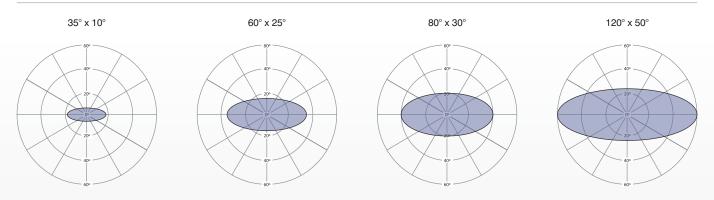




### Beam patterns - Circular



## Beam patterns - Elliptical (VARIO)



### Products in the SPARTAN Family



