

# SPARTAN

## FLOOD FL72



### LED Zone 1 Floodlight Standard and Emergency Variants

The SPARTAN Flood range is designed specifically for hazardous environments which require high performance, high reliability, White-Light illumination. Available in both standard and emergency versions and using Raytec's field-proven, long-life LED technology, SPARTAN floodlights are ATEX and IEC Ex approved for all Zone 1 applications, C1D2, UL, CSA, ABS and rated for T4 environments.

SPARTAN Flood has been designed with maintenance in mind. A unique modular design allows key components to be easily accessed and serviced if required, making inspection and maintenance quicker and easier. It also allows for the most flexible installation. The PSU chassis can be removed and located remotely at ground level for areas with difficult access, while standard units can also be upgraded to an emergency fitting at any time with an additional battery back-up module.

SPARTAN Flood 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.

SPARTAN uses **COOLEXTRUDE™** thermal management technology, ensuring a much cooler LED operating temperature and up to 60% better heat dissipation compared to traditional lighting solutions, allowing the product to operate for > 10 years while still delivering a high lumen output of up to 15,000 lumens.

### Key Features

- ATEX and IEC Ex approved – Zone 1  
UL/CSA approved, including C1D2 and ABS
- 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)
- Anchor point for safety suspension cord
- 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

## Extended Features

### Ultra-Powerful

High lumen output - up to 15,000 lumens  
 Latest high power LED technology  
 Emergency variant provides up to 33% light output under emergency conditions.

### Ultra-Flexible

Beam patterns from 10° to 120° both circular and elliptical.  
 Operating temperature range of -50°C to + 55°C with a T4 rating for even the most challenging conditions. (-20°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.  
 Removable PSU housings allows power supply to be fitted remotely

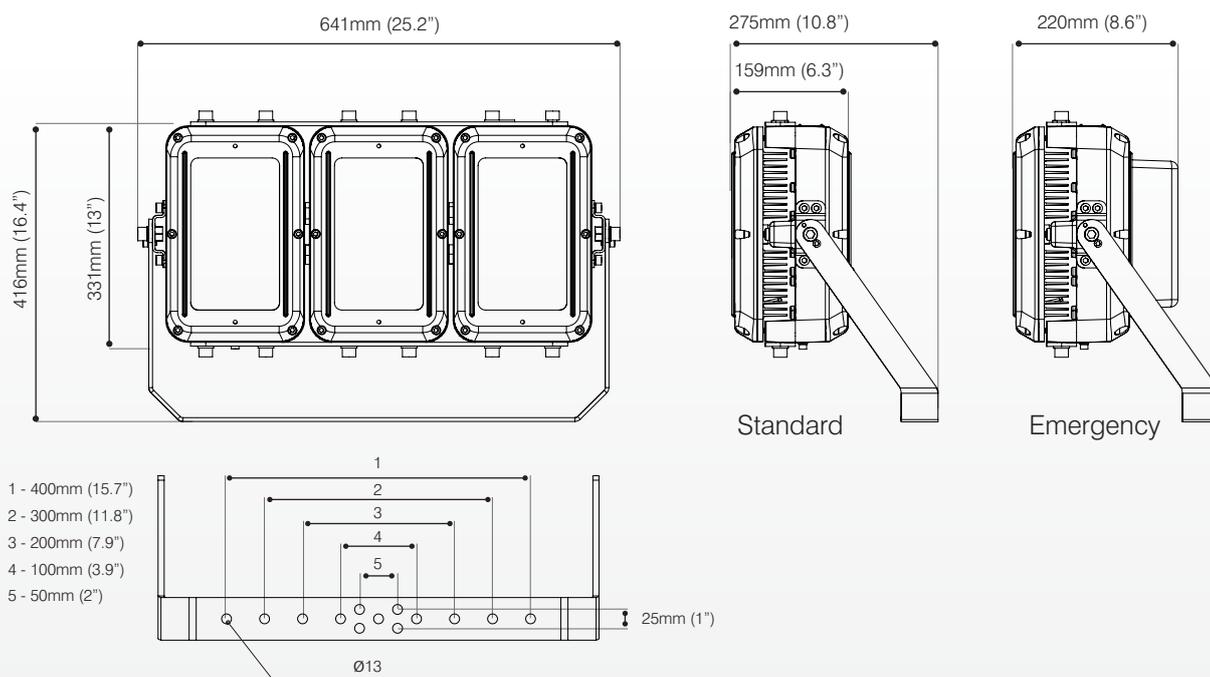
### Ultra-Efficient

**COOLEXTRUDE™** thermal management delivers 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



# 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 & IEC Ex CML 14.0001 UL/CSA including C1D2
Gas:	II 2 GD Ex emb IIC T4 Gb Ta -50°C to +55°C (-20°C emergency variants)
Dust:	Ex tb IIIC T82°C Db IP66 & IP67 - Ta -50°C to +55°C (-20°C emergency variants)
North America Rating:	Class I, Division 2 Groups A, B, C, D, T5 Class II, Division 1 & 2 Groups E, F, G Class III, Division 1 & 2 NEMA 4x, IP66/IP67 UL50E, UL8750, UL 1203 C22.2 No Emergency Variants - Certification Pending ABS Certificate # 15-LD1364539-1-PD

## Electrical

Input:	110-254V 50/60Hz AC only Low voltage option also available for standard variants only - 18-30V AC/DC
Power:	Standard - 204W Emergency - 207W
Termination:	Incoming terminal block suitable for looping 4 core 4mm <sup>2</sup> cable
Power Factor	>0.95
Cable entries	2xM20 as standard (other entries available upon request), dispatched complete with one ATEX/IEC Ex approved blanking plug 3/4" NPT as standard on C1D2

## 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:	Up to 15,000 lm – circular beam patterns Up to 13,500 lm – elliptical beam patterns (VARIO)
LED type:	Platinum Elite SMT LEDs
Number of LEDs:	72
CRI:	70+
Colour Temperature:	6,000K+

## Mechanical/Environmental

Burning position:	Universal
IP rating:	IP66 & IP67
Temperature range:	-50°C to +55°C (-20°C emergency variants)
Weight:	Standard - 27kg (59.5lbs) Emergency - 29Kg (63.9lbs)
Enclosure:	Marine grade aluminium epoxy powder coated, toughened glass, all external fasteners and brackets are marine grade stainless steel
Unit Colour:	Silver (RAL 9006) Red (RAL3024) - Emergency cover
Installation instructions:	Raytec ref 910-M-0094 – please contact Raytec for copy
Dimensions:	Standard - 641 x 416 x 159mm (25.2 x 16.4 x 6.3") Emergency - 641 x 416 x 220mm (25.2 x 16.4 x 8.6")
Mounting:	U bracket (see dimension drawings on Page 2) – complete with locking screw

## Emergency

Duration:	Up to 90 mins at 17% power Other options available
Battery:	Ni/Cd 12V 4.5Ah
Charge time:	20 hours

## Circular beam pattern

Part Codes	Description (T4 variants as standard)
SPX-FL72-W-1010	SPARTAN Flood, 72 LED, White-Light, 10°x 10° beam
SPX-FL72-W-3030	SPARTAN Flood, 72 LED, White-Light, 30°x 30° beam
SPX-FL72-W-5050	SPARTAN Flood, 72 LED, White-Light, 50°x 50° beam
SPX-FL72-W-120120	SPARTAN Flood, 72 LED, White-Light, 120°x 120° beam

Add -C1D2 to part code for North American standards

For emergency versions add '-EM17' to the above codes  
For standard versions add '-LV' to the above codes  
For options fitted with photocell add '-PC' to the above codes  
Contact Raytec for T5 and T6 variants

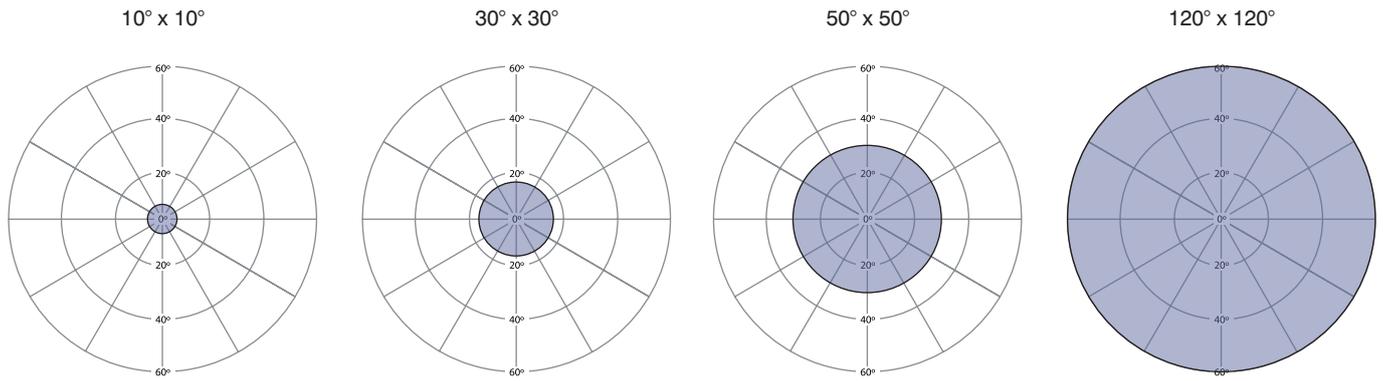
## Elliptical beam pattern

Part Codes	Description (T4 variants as standard)
SPX-FL72-W-3510	SPARTAN Flood, 72 LED, White-Light, 35°x 10° beam
SPX-FL72-W-6025	SPARTAN Flood, 72 LED, White-Light, 60°x 25° beam
SPX-FL72-W-8030	SPARTAN Flood, 72 LED, White-Light, 80°x 30° beam
SPX-FL72-W-12050	SPARTAN Flood, 72 LED, White-Light, 120°x 50° beam

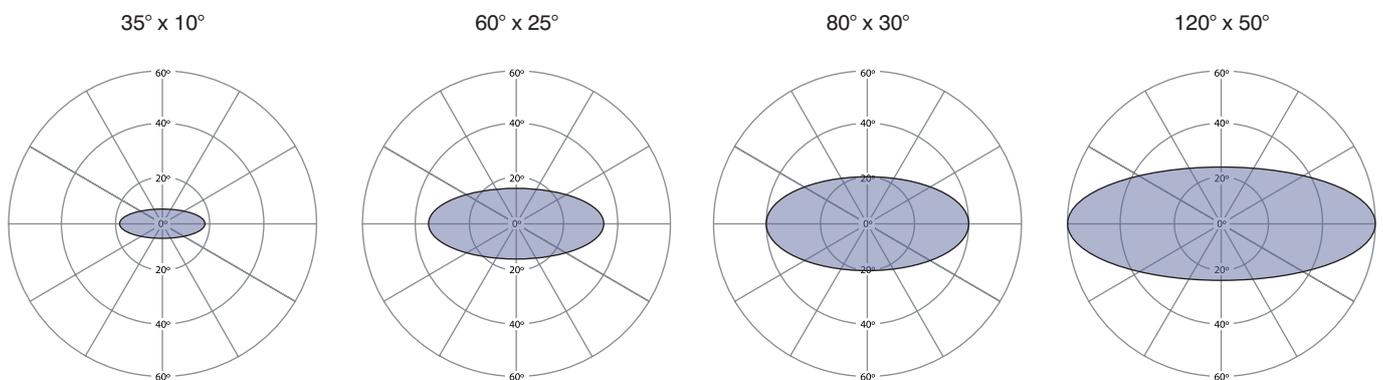
Add -C1D2 to part code for North American standards

For emergency versions – add '-EM17' to the above codes  
For standard versions add '-LV' to the above codes  
For options fitted with photocell add '-PC' to the above codes  
Contact Raytec for T5 and T6 variants

## Beam patterns - Circular



## Beam patterns – Elliptical (VARIO)



## Products in the SPARTAN Flood 72 range

SPARTAN Flood 72



SPARTAN Flood 72 Emergency



## Other Products in the SPARTAN Zone 1 Family

SPARTAN Flood 24



SPARTAN Flood 48



SPARTAN Bulkhead 24



SPARTAN Linear WL84  
2 x 18W equivalent

SPARTAN Linear WL168  
2 x 36W equivalent

