# **TITAN 720**

Highly efficient LED floodlight designed specifically for high mast and large area lighting.

Electronic, LED control gear driving 96 LEDs at 2.1A with asymmetrical distribution. IP67, Class I protection with 15kA Surge Protection.

Body: recyclable, extruded aluminium and powder-coated steel. Optic Enclosure: PMMA Weather-proof lenses. Reversible mounting bracket supplied, optional spigot adaptors available separately for post-top mounting.



## C€LED IP67 ⊕ 🕸

#### Technical data

| Performance                             |                        |  |  |  |
|---|------------------------|--|--|--|
| Nominal Flux:                           | 87,000 lm              |  |  |  |
| Net Flux:                               | 80,555 lm              |  |  |  |
| Power Absorption:                       | 705W                   |  |  |  |
|   |                        |  |  |  |
| Optoelectronics                         |                        |  |  |  |
| LED Type:                               | CREE XP-L              |  |  |  |
| Circuit Board:                          | MPCB 1.6 mm            |  |  |  |
| CRI:                                    | 70 ≤ R ≤ 90            |  |  |  |
| Luminous Eff Loss:                      | < 1% per annum         |  |  |  |
| Colour Temperature:                     | 3,000 to 5,700K        |  |  |  |
| Lumen Maintenance L90:                  | 63,000h                |  |  |  |
| Lumen Maintenance L70:                  | >100,000h              |  |  |  |
|   |                        |  |  |  |
| Optics                                  | ••••••                 |  |  |  |
| Secondary Lens:                         | Refraction Array       |  |  |  |
| System Treatment:                       | IP67, Anti-yellowing   |  |  |  |
| Available optics:                       | FL / FH / SW / SM / ST |  |  |  |
| No of LEDs / module:                    | 48                     |  |  |  |
| No of modules:                          | 2                      |  |  |  |
|   | ••••••                 |  |  |  |
| Luminaire Body                          |                        |  |  |  |
| Structure:                              | Stainless steel        |  |  |  |
| Metal coating:                          | Powder painted         |  |  |  |
| Heatsinks:                              | Extruded Aluminium     |  |  |  |
| Bracket:                                | Central Bolt 20mm      |  |  |  |
| Weight:                                 | 32 Kg                  |  |  |  |
| Installation height:                    | 15m to 55m             |  |  |  |
| Installation angle: Tilt Adjustment 330 |                        |  |  |  |
| Dimensions:                             | 719L × 561W × 245H mm  |  |  |  |
| Windage Area:                           | 0.085 m <sup>2</sup>   |  |  |  |

| Electronics               |   |
|---------------------------|---|
| Voltage input range:      | 90-305 VAC 50-60Hz                              |
| Power Factor:             | 0.95  |
| Mean time to Failure:     | 200,000 hrs                                     |
| Dimming Function:         | 1-10V / DALI                                    |
| Surge Protection:         | 15kA, IEEE C62.41.2<br>Location Category C High |
| Insulation Class:         | IEC Class I                                     |
| IP Rating:                | IP 67   |
| Short Circuit Protection: | Auto-recovery                                   |
| Over Heat Protection:     | Drops output current                            |
| Rel. Humidity Range:      | 0% - 94%  |
| Operating Temp:           | -40°C up to +65°C                               |

#### Normative references

EN 60598-1: 2015 - Luminaires - Part 1: General requirements and tests
EN 60598-2-5: 2015 Luminaires - Part 2-5: Particular requirements - Floodlights
EN 62031: 2008 + A2:2015 - LED modules for general lighting - Safety
specifications

EN 60598-2-3: 2003 + A1: 2011 - Luminaires - Part 2-3: Particular requirements - Luminaires for road and street lighting

EN 62493: 2015 Assessment of lighting equipment related to human exposure to electromagnetic fields

EN 60529: 1992 + A2: 2013 - Degrees of protection provided by enclosures (IP Code)

IEC 60068-2-52: 1996 Environmental test - Part 2:Tests - Test Kb - Salt mist cyclic (sodium chloride solutions)

EN 55015: 2013 + A1: 2015 - Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment

 $\ensuremath{\mathsf{EN}}\xspace\,61547{:}\,2009$  - Equipment for general lighting purposes - EMC immunity requirements

EN 61000-3-2: 2014 - Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current  $\leq$  16 A per phase)

EN 61000-3-3: 2013 - Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current  $\leq$  16 A per phase and not subject to conditional connection

EN 61643-11: 2012 - Low-voltage surge protective devices. Part 11: Surge protective devices connected to low-voltage power systems - Requirements and test methods

IEEE C62.41.2-2002 - Recommended practice on characterization of surges in low-voltage AC power









#### Dimensions

### **TITAN 720**

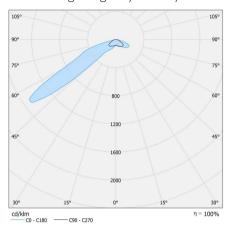




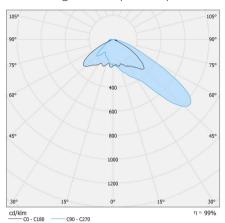


#### **Photometrics**

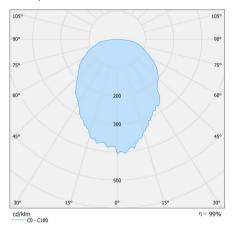
FH Floodlight high asymmetry



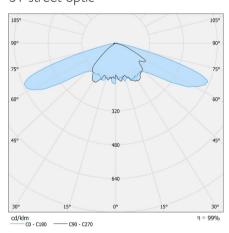
FL Floodlight low asymmetry



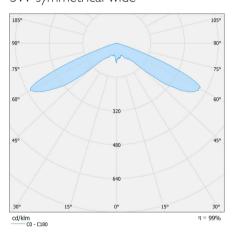
SM symmetrical medium



ST street optic



SW symmetrical wide



#### Ordering codes

| Product Family | Power | Optic                | CCT       | Bracket           | Control system        | Body colour   | Optional      |
|----------------|-------|----------------------|-----------|-------------------|-----------------------|---------------|---------------|
| T (Titan)      | 72    | FL (Low Asymmetric)  | A (5000K) | T (Flood Bracket) | 10 (1-10V)            | T (Standard)  | 00 (No SPD)   |
|                |       | FH (High Asymmetric) | B (4000K) | P (Pole Bracket)  | DA (DALI)             | H (High Heat) | 02 (15kA SPD) |
|                |       | SW (Symmetric Wide)  | C (3000K) |                   | CW (Custom Wireless ) | M (Military)  |               |
|                |       | SM (Symmetric Med)   | D (5700K) |                   | CL (Custom Line)      |               |               |
|                |       | ST (Street)          |           |                   |                       |               |               |

Example: T72FHATDAT02

 $Note: Specifications \, are \, subject \, to \, change \, without \, notice \,$ 



