# **TITAN 320**

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

Electronic, LED control gear driving 72 LEDs at 1.4A 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

Nominal Flux:38,209 lmNet Flux:35,534 lmPower Absorption:326WOptoelectronicsImage: Status of the status of	Performance	
Power Absorption:326WOptoelectronicsLED Type:CREE XP-GCircuit Board:Ceramic PCB 1.6 mmCRI:70 < R < 90	Nominal Flux:	38,209 lm
OptoelectronicsLED Type:CREE XP-GCircuit Board:Ceramic PCB 1.6 mmCRI:70 < R < 90	Net Flux:	35,534 lm
LED Type:CREE XP-GCircuit Board:Ceramic PCB 1.6 mmCR:70 < R < 90	Power Absorption:	326W
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Circuit Board:Ceramic PCB 1.6 mmCR:70 < R < 90	Optoelectronics	
CRI:70 < R < 90Luminous Eff Loss:< 1% per annum	LED Type:	CREE XP-G
Luminous Eff Loss:< 1% per annum	Circuit Board:	Ceramic PCB 1.6 mm
Colour Temperature:3,000K to 5,700KLumen Maintenance L90:74,000hLumen Maintenance L70:>100,000hOpticsRefraction ArraySystem Treatment:IP67, Anti-yellowingAvailable optics:FL / FH / SW / SM / STNo of LEDs / module:36No of modules:2Luminaire BodyStructure:Stainless steelMetal coating:Powder paintedHeatsinks:Extruded AluminiumBracket:Central Bolt 20mmWeight:15m to 40mInstallation height:15m to 40mInstallation angle:Tilt Adjustment 360°Dimensions:546L x 561W x 245H mmIK Rating:IK 09	CRI:	70 < R < 90
Lumen Maintenance L90:74,000hLumen Maintenance L70:>100,000hOpticsSecondary Lens:Secondary Lens:Refraction ArraySystem Treatment:IP67, Anti-yellowingAvailable optics:FL / FH / SW / SM / STNo of LEDs / module:36No of modules:2Luminaire BodyStructure:Structure:Stainless steelMetal coating:Powder paintedHeatsinks:Extruded AluminiumBracket:Central Bolt 20mmWeight:20 KgInstallation height:15m to 40mInstallation angle:Tilt Adjustment 360°Dimensions:546L x 561W x 245H mmIK Rating:IK 09	Luminous Eff Loss:	< 1% per annum
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Luminaire BodyStructure:Stainless steelMetal coating:Powder paintedHeatsinks:Extruded AluminiumBracket:Central Bolt 20mmWeight:20 KgInstallation height:15m to 40mInstallation angle:Tilt Adjustment 360°Dimensions:546L × 561W × 245H mmIK Rating:IK 09	No of LEDs / module:	36
Structure:Stainless steelMetal coating:Powder paintedHeatsinks:Extruded AluminiumBracket:Central Bolt 20mmWeight:20 KgInstallation height:15m to 40mInstallation angle:Tilt Adjustment 360°Dimensions:546L × 561W × 245H mmIK Rating:IK 09	No of modules:	2
Structure:Stainless steelMetal coating:Powder paintedHeatsinks:Extruded AluminiumBracket:Central Bolt 20mmWeight:20 KgInstallation height:15m to 40mInstallation angle:Tilt Adjustment 360*Dimensions:546L × 561W × 245H mmIK Rating:IK 09		
Metal coating:Powder paintedHeatsinks:Extruded AluminiumBracket:Central Bolt 20mmWeight:20 KgInstallation height:15m to 40mInstallation angle:Tilt Adjustment 360°Dimensions:546L × 561W × 245H mmIK Rating:IK 09	Luminaire Body	
Heatsinks:Extruded AluminiumBracket:Central Bolt 20mmWeight:20 KgInstallation height:15m to 40mInstallation angle:Tilt Adjustment 360°Dimensions:546L × 561W × 245H mmIK Rating:IK 09	•••••••••••••••••••••••••••••••••••••••	Stainless steel
Bracket:Central Bolt 20mmWeight:20 KgInstallation height:15m to 40mInstallation angle:Tilt Adjustment 360°Dimensions:546L × 561W × 245H mmIK Rating:IK 09	Metal coating:	Powder painted
Weight:20 KgInstallation height:15m to 40mInstallation angle:Tilt Adjustment 360°Dimensions:546L × 561W × 245H mmIK Rating:IK 09	Heatsinks:	Extruded Aluminium
Installation height:I 5m to 40mInstallation angle:Tilt Adjustment 360°Dimensions:546L × 561W × 245H mmIK Rating:IK 09	Bracket:	Central Bolt 20mm
Installation angle:Tilt Adjustment 360°Dimensions:546L × 561W × 245H mmIK Rating:IK 09	Weight:	20 Kg
Dimensions: 546L × 561W × 245H mm   IK Rating: IK 09	Installation height:	I 5m to 40m
IK Rating: IK 09	Installation angle:	
	Dimensions:	546L x 561W x 245H mm
Windage Area: 0.045 m <sup>2</sup> .	IK Rating:	IK 09
	Windage Area:	0.045 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:	I-10V
Surge Protection:	15kA, IEEE C62.41.2 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 +55°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

EN 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





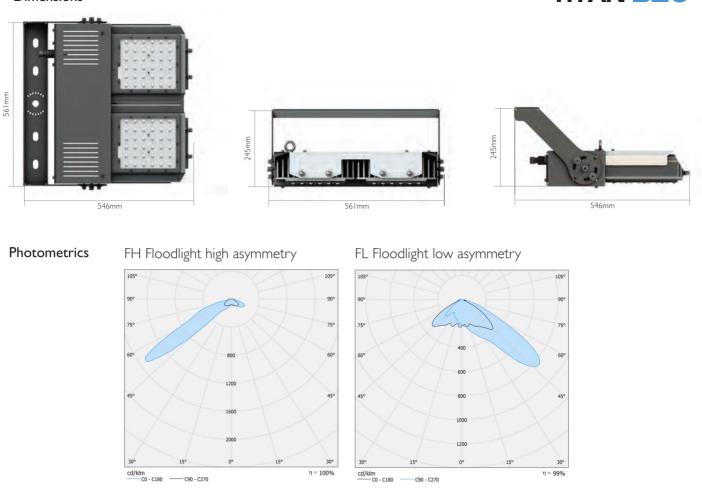
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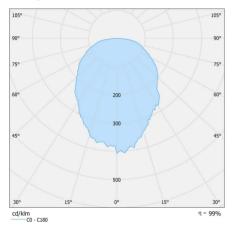
#### > +64 9 570 5267 > info@ellis.co.nz **ELLISCC** > www.ellis.co.nz

#### Dimensions

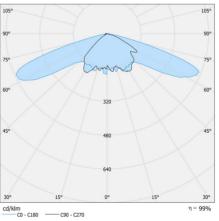




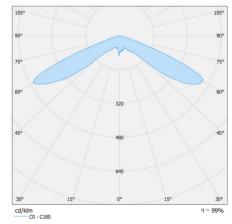
#### SM symmetrical medium











### Ordering codes

Product Family	Power	Optic	CCT	Bracket	Control system	Body colour	Optional
T (Titan)	32	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 )		
		SM (Symmetric Med)	D (5700K)		CL (Custom Line)		
		ST (Street)					

Example: T32FHATDAT02

Note:Specifications are subject to change without notice



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