



 COOLON

STELLAR

500W LED High Bay

Heavy-duty industrial high bay for extreme heights.

Poor light levels are a problem in high-ceilinged applications. But with STELLAR, they are not your problem. Beam shaping optics push lumens from extreme heights of as much as 30 metres, focusing light exactly where you need it.

Engineered to perfection to be the most heavy-duty high bay on the market, STELLAR feels right at home in dirty, dusty, high-temperature environments. Resistant to dirt bake-in and protected from overheating, STELLAR delivers predictably outstanding performance where you need it most.

Day-bright illumination from extreme heights. Outstanding performance in hot and dirty environments. Versatility in installation.

Designed for use in:

- Mobile plant workshops
- Hangars
- Smelters
- Warehousing
- Aircraft storage facilities
- Spacecraft and defence storage facilities
- Construction yards

 DESIGNED &
MANUFACTURED
IN AUSTRALIA



Beam shaping optics

Delivering exceptional illuminance levels from as high as 30m installations, even the sky is barely the limit for STELLAR.

Installation versatility

Equipped with a robust bracket and traditional chain suspension, STELLAR offers diverse installation options for different applications.



COOL SURFACE TEMPERATURE

Coolon's Industrial LED fittings have a much lower surface temperature than traditional HID equivalents which prevents dirt from baking onto the luminaire. This allows for easier cleaning and will prolong the lifespan of the luminaire.



INSTANT ON/OFF

LEDs do not require warm up. Instant on to 100% output translates to no downtime, improved safety and the ability to utilize sensor switching to significantly save energy.



NO FLICKERING

LED luminaires run on constant low voltage DC power and do not produce any visible stroboscopic effects, thus reducing the strain on eyes and significantly improving safety in areas where moving machinery is present.

IP66

HIGH IP RATING - IP66

Coolon's Industrial LEDs are designed specifically to withstand the harsh conditions in mining environments. The robust design allows our LED products to be used in many different applications and are high pressure washable.



LOW SUSCEPTIBILITY TO VIBRATION

This luminaire is designed to handle continuous exposure to vibration. A typically critical issue affecting the life and operation of most common gas discharge lamp based light sources is mechanical shock and vibration.

L70

LONG USEFUL OPERATING LIFE

At Coolon we believe the lifetime of a luminaire is so much more than just the LED's. Coolon product lifetime takes the entire luminaire into consideration and each product is backed by a comprehensive warranty – that's the Coolon confidence.

5
YEARS

5 YEARS FACTORY WARRANTY

Coolon luminaires are covered by a solid comprehensive manufacturer's warranty that covers a range of possible defects and performance parameters throughout the duration of the warranty period.

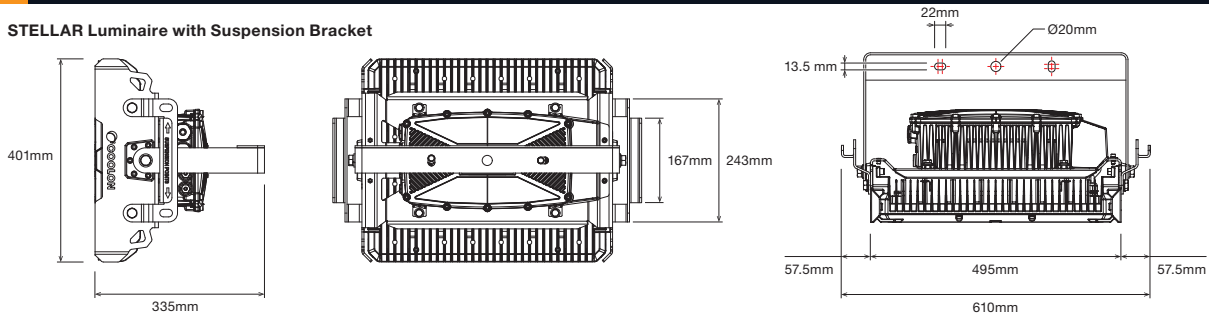


PROUDLY MADE IN AUSTRALIA

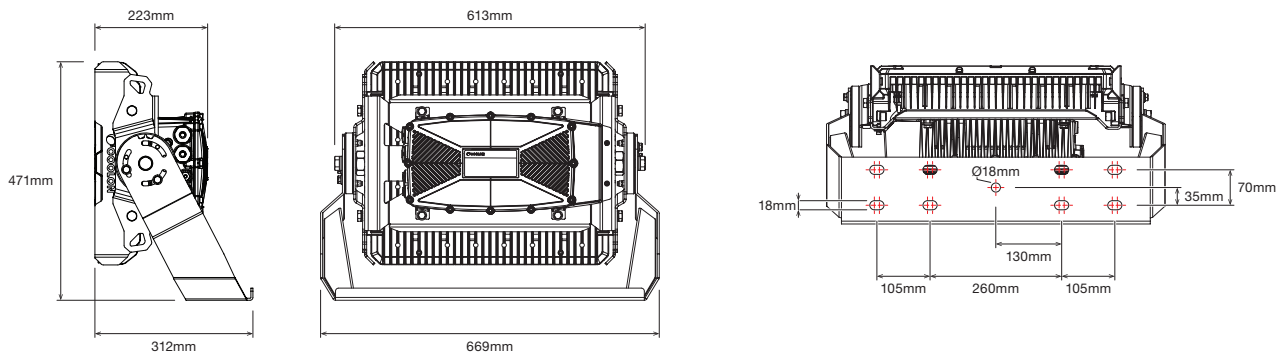
Engineered to perfection, using only the highest quality components and highly skilled labour, each luminaire is assembled and thoroughly tested to ensure that it exceeds the highest standards.

DIMENSIONS

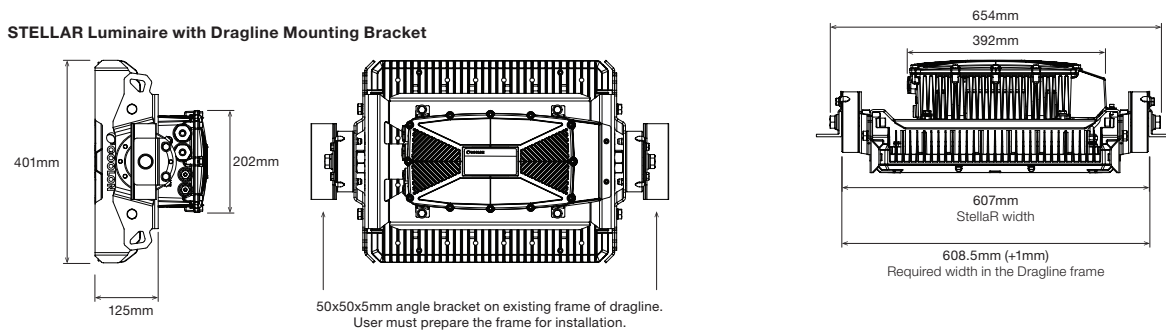
STELLAR Luminaire with Suspension Bracket



STELLAR Luminaire with Mobile Plant Bracket



STELLAR Luminaire with Dragline Mounting Bracket



TECHNICAL SPECIFICATIONS

Product	STELLAR LED High Bay	
Model	STELLAR-MP230	STELLAR-MP415

Optical Characteristics

Luminous Flux (Photometered)	63,000 – 63,472 lm	
CCT	CWT / NWT / AMB	
CRI	>70 excluding amber	

Electrical Characteristics (MP Luminaire)

Power Consumption	520W	
Nominal Voltage	230VAC	415VAC
Voltage Range	90 – 305VAC 127 – 250VDC	249 – 440VAC 352 – 500VDC
Frequency Range (AC)	47 – 63Hz	
Power Factor	0.96	0.95
Surge Protection	DM 6kV, CM 10kV	
Inrush Current (I_{in})¹	4.70 A ² s	20.4 A ² s
Total Harmonic Distortion (THD)	<20%	
Leakage Current	<1.4mA @ 240VAC / 60Hz	<0.70mA @ 440VAC / 60Hz

Electrical Characteristics (RPS Luminaire)

Power Consumption	500
Voltage Input	48 – 50VDC
Max Current	5000mA
Cable Extension	Distance between the power supply and luminaire can be extended up to 100 metres using 1.5mm ² cable.

Electrical Characteristics (RPS230 Power Supply)

Model Part Number	PWR-CLN-600-CC5000-381AL-MP230
Voltage Range	90 – 305VAC / 127 – 250VDC
Frequency Range	47 – 63Hz
Power Factor	0.96
Leakage Current	<0.70mA IEC 60598-1; 240VAC/ 60Hz; Grounding effectively
Surge Protection	DM 6kV, CM 10kV

Electrical Characteristics (RPS415 Power Supply)

Model Part Number	PWR-CLN-600-CC5000-381AL-MP415
Voltage Range	249 – 440VAC / 352 – 500VDC
Frequency Range	47 – 63Hz
Power Factor	0.95
Leakage Current	<0.70mA IEC 60598-1; 480VAC/ 60Hz; Grounding effectively
Surge Protection	DM 6kV, CM 10kV

¹Note: At 220VAC input, 25° cold start, duration=7.64 ms, 10%lpk-10%lpk.
At 480VAC input, 25° cold start, duration=869µs, 10%lpk-10%lpk.

Optical and electrical characteristics are measured using Cool White LEDs (CWT)

Reading taken while test unit operating in steady state. Ambient temperature during testing is typically 25°C. Individual unit behaviour may differ due to electronic component tolerance and ambient conditions. Product parameters and application suitability shall be checked by the user prior to commissioning.

TECHNICAL SPECIFICATIONS (CONTINUED)

Environmental	
IP Rating	IP66
IK Rating	IK09
Operating Temp. Range	-20 to +60°C
Thermal Management Type	Active
Expected Lifespan	100,000 hours
Material Composition (Body)	Aluminium Polyester powder coated
Material Composition (Optics)	Polycarbonate
Material Composition (Bracket)	Stainless Steel
Material Composition (Suspension Bracket)	Stainless Steel
Material Composition (Optical Cover)	Glass

Weight/Packaging	
Luminaire Weight (MP)	31.5kg
Luminaire Weight (RPS)	20.5kg
Packaging Dimensions	710 x 560 x 310mm

Weight/Packaging	
PWR-CLN-600-CC5000-381AL-MP230	
Power Supply Weight	7.1kg
Packaging Dimensions	W 350mm H 130mm D 230mm
Packaged Weight	7.4kg

Weight/Packaging	
PWR-CLN-600-CC5000-381AL-MP415	
Power Supply Weight	7.1kg
Packaging Dimensions	W 350mm H 130mm D 230mm
Packaged Weight	7.4kg

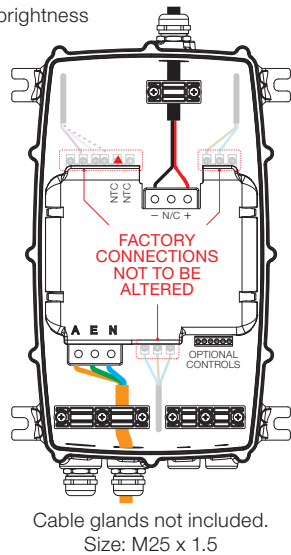
Warranty	
Warranty	5 years warranty as standard

REMOTE POWER SUPPLY CONFIGURATION

STELLAR - XXX - XXX - XXX - RPSXXX

STELLAR - *** - *** - *** - DC

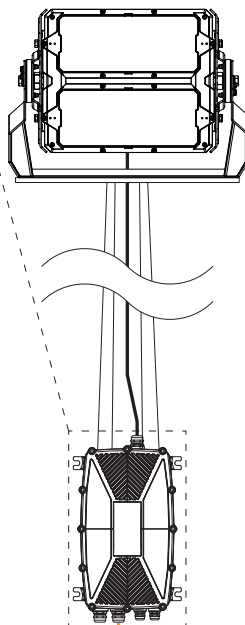
▲ 47k NTC Thermistor is connected between NTC terminals for full brightness



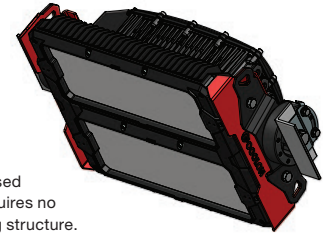
230VAC or 415VAC

nominal input voltage options available

PWR-CLN-600-CC5000-381AL-MPXXX



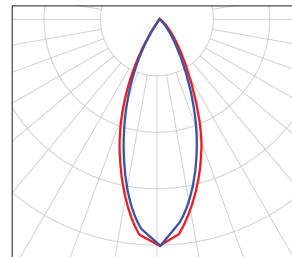
DRAGLINE MOUNT BRACKET



For draglines utilising the M.I.D. MK1763-A bracket, we've designed a customised mounting solution that requires no modification to the existing structure.

ILLUMINANCE AT DISTANCE

MEDIUM Beam Optics

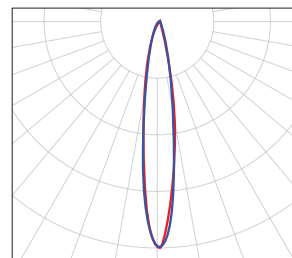


10m	1,220
15m	543
20m	305
25m	195
30m	136

E_c at Centre (Lux)

Polar Distribution

NARROW Beam Optics



10m	4,326
15m	1,922
20m	1,081
25m	692
30m	480

E_c at Centre (Lux)

Polar Distribution

ORDERING EXAMPLE

STELLAR - 500 - CWT - MEDIUM - SBR - MP230

PRODUCT	TYPE	COLOUR TEMP.	OPTICS	MOUNTING OPTIONS	SUPPLY OPTIONS
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PRODUCT	TYPE	COLOUR TEMP.	OPTICS	MOUNTING OPTIONS	SUPPLY OPTIONS
STELLAR	500	CWT Cool White	MEDIUM Medium Optics	SBR Suspension Bracket	MP230 Mains Powered, 230VAC nominal input voltage
		NWT Neutral White	NARROW Narrow Optics	FPB Fixed Plant Bracket	MP415 Mains Powered, 415VAC nominal input voltage
		AMB Amber		DLM Dragline Mounting Bracket	RPS230 ¹ Remote Power Supply, 230VAC nominal input voltage
					RPS415 ¹ Remote Power Supply, 415VAC nominal input voltage

¹ Refer to KIT OPTIONS for detail

KIT OPTIONS

KIT	PART #	DESCRIPTION
RPS230	STELLAR-***-***-***-DC	STELLAR Luminaire, Low Voltage DC Supply**
	PWR-CLN-600-CC5000-381AL-MP230	Coolon Industrial Power Supply 600W IP66, 5A constant current, 230VAC nominal input voltage, 10kV protection in 381 Aluminium Enclosure
RPS415	STELLAR-***-***-***-DC	STELLAR Luminaire, Low Voltage DC Supply**
	PWR-CLN-600-CC5000-381AL-MP415	Coolon Industrial Power Supply 600W IP66, 5A constant current, 415VAC nominal input voltage, 10kV protection in 381 Aluminium Enclosure