Midstream Product Series

LED Lighting products engineered to your precise environmental needs.

MIDSTREAM

AVIATION | SPORTS
MARITIME | HORTICULTURE

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About us and you

We’re dedicated to designing the most highly advanced, efficient and innovative LED lighting solutions for the world’s most critical and major infrastructure.

Our products are manufactured to the highest quality standards to provide long-lasting, best-in-class lighting solutions. And our technology is specifically engineered for applications that solve the challenging and complex needs of our clients. Needs like:

- Reducing energy consumption.
- Cutting maintenance costs.
- Minimising environmental damage.
- All whilst vastly improving the quality of their lighting.

Our clients include major international airports, sports stadia, busy maritime container terminals, and commercial horticulturalists – and more.

Thats not all. We’re an innovation and knowledge hub that works with designers and architects on lighting design too. Our hub is also there to educate and guide clients through this technically challenging space.

Midstream Solutions
Our product range

The Titan Series
AVIATION, MARITIME

- Highly asymmetric floodlight providing an excellent solution for low glare applications.
- Propriety optics deliver maximum light levels on designated areas.
- Designed for maximum heat dissipation.
- Manufactured to survive the harshest of environments, whilst delivering high performance and long life.

The Modus Series
AVIATION, MARITIME

- Cost effective solution for high power applications.
- Available in symmetric and asymmetric distributions.
- Modular design allowing for versatile applications and solutions.
- Integrated drivers for high reliability and ease of installation.
- Provides high-colour rendering and comes with full control capability as standard.

The Modus R Series
SPORTS STADIA

- A lightweight, high-power floodlight designed specifically for sports venues.
- Remote mounted single driver allows for ease of access.
- Available in 90CRI for the highest definition broadcasting.
- Delivers up to 144,000 lumen to meet the requirement of world class facilities.
- Integrates with wired or wireless controls (DMX, DALI, 1-10v).

The Modus S Series
SMALL & MEDIUM-SIZED SPORTS FACILITIES

- Offers a high lumen package with limited weight minimising the number of floodlights required per pole.
- Designed to specifically reduce light spill for neighbours and residents providing an ideal solution for areas such as community / inner city facilities.
- Manufactured for easy retrofit onto existing structures.
- Remote mounted single driver allows for ease of access.
- Designed to support wireless control.

The Atlas Series
MARITIME, AVIATION

- UL certified and DLC listed.
- Proprietary high asymmetry optics provide a low glare solution.
- Versatile bracket and adapters to fit any existing mast infrastructure for ease of install and quick retrofit applications.
- Modular design allowing for versatile applications and solutions.
- Integrated drivers for high reliability and ease of installation.

The Atlas R Series
LARGE SPORTS AREAS

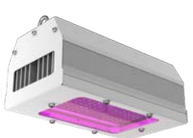
- UL certified and DLC listed.
- Remote drivers provide a high light to weight ratio.
- Can be delivered with 90CRI for ultra high definition TV broadcasting.
- A great retrofit solution for 2kW metal halide floodlights.
- Stainless steel construction, critical for use in challenging sporting environments to improve structural integrity and life of product.

The Docker Series
MARITIME (MOBILE EQUIPMENT)

- Heavy Duty LED floodlights built to resist the harshest environments and for applications needing high performance and high durability.
- Manufactured with 316 stainless steal to resist corrosion in saline environments.
- Tested on STS & RTG Cranes.
- Low weight, compact size, easy to install.
- Designed with a wide range of optics to support tailormade solutions.
- Tested for Salt spray for 1000h according to ASTM B117 and for Vibrations up to 6G and 100.000 Cycles according to ANSI C136.31-2010.

Mobile Tower Series
AVIATION

- Delivers instant compliance to ICAO for airport operators.
- Multi-directionally adjustable mobile floodlight tower with four highly efficient, asymmetric 326W LED floodlights.
- Designed specifically for large area lighting with low-glare conditions. And for heavy-duty mission-critical application where quality and reliability are paramount.
- Compact and easy to transport and handle.



Flare
HORTICULTURE

- An effective alternative to natural sunlight or HPS / SON-T grow lights.
- Proprietary technology allows stable spectrum for product lifetime.
- The Flare PCB is completely waterproof to resist corrosive environments.
- Extremely low LED temperatures, for high performance and durability – over a long lifespan.
- Can be customized to deliver any spectrum.

The Titan Series
Overview

Midstream's flagship line was developed as a high power solution to provide the performance and reliability required in mission-critical applications.

A highly efficient LED floodlight designed specifically for high mast and large area lighting, the Titan Series delivers the maximum level of lighting performance possible to a range of environments.

Easily configured and optimised for very specific applications, Titan has been designed by our experienced engineers to survive the harshest of conditions. Extremely reliable, it continues to be the go-to product for many of our aviation and maritime clients year on year.

The go-to product for many of our aviation and maritime clients for years.

Applications

- Aviation (Aprons, de-icing areas, etc)
- Maritime (Container Terminals, docks, shore side infrastructure)

Features and benefits of the Titan Series:

- Manufactured with a stainless steel construction that improves structural integrity and life of product, a critical need when used in challenging environments.
- An in-house designed extruded heat sink allows for highly efficient heat dissipation due to its large surface area, when compared with a die-cast product. This keeps lumen degradation to a minimum, extending life and performance.
- Proprietary optic lenses designed and developed in house provide the highest level of asymmetric distribution in the market allowing clients to achieve required light levels with less power, fewer luminaries and all with lower glare.
- Designed as standard with an integrated 2 step surge protection up to 15kA / 20kV which protects the luminaire against power surges meaning more reliability and longer performance.
- Manufactured in the UK to provide the highest level of quality control.
- Comes as standard with DALI controls for plug and play capability.
- A uniquely designed bracket and cable retractor allow for ease of install for both retrofit and new build projects.
- All components are individually IP66 certified.
- Product is certified to ENEC and CB requirements.
- Tried and tested in some of the world biggest and busiest airports and seaports.

The Titan Series
In detail

Products

Titan 160

Titan 220

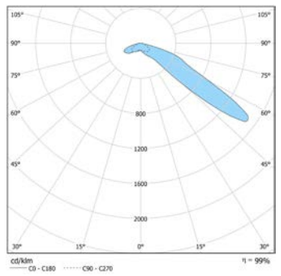
Titan 320

Titan 420

Titan 560

Titan 720

Photometrics



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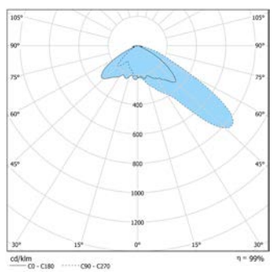

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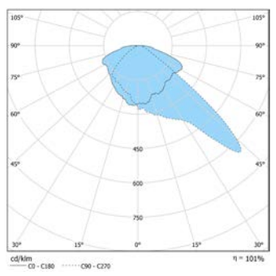

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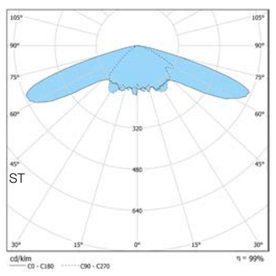


ST

Technical specs

	T160	T220	T320	T420	T560	T720
PERFORMANCE						
Luminaire Output	Up to 20.000lm	Up to 26.000lm	Up to 38.000lm	Up to 54.000lm	Up to 67.000lm	Up to 84.000lm
Power Absorption	161w	220w	321w	450w	565w	700w
Lumen Maintenance [L80 B10]	119.000h	119.000h	119.000h	119.000h	77.000h	150.000h
Lumen Maintenance [L70 B50]	190.000h	190.000h	190.000h	190.000h	122.000h	241.000h
OPTOELECTRONICS						
CRI	70 - 80 - 90					
Colour Temperature	3000K Warm White / 4000K Neutral White / 5000K Pure White / 5700K Cool White					
Secondary Optics	Weather proof, Anti-yellowing PMMA refraction matrix					
No of LEDs	36	48	72	96	96	96
LUMINAIRE BODY						
Chassis and Bracket	Stainless Steel					
Metal Finish	Powder Coating					
Heatsinks	Anodized Extruded Aluminium (Copper Content <0.1%)					
Bracket	Angled Reversible bracket, M16 or 2 x M12 Fixing points		Angled Reversible bracket, M20 or 2 x M16 Fixing points			
Weight	12.5 kg	13.5 kg	20 kg	24 kg	25 kg	32 kg
Dimensions (L-W-H)	389 - 340 - 145 mm	445 - 340 - 145 mm	446 - 515 - 145 mm	502 - 515 - 145 mm	502 - 515 - 145 mm	727 - 515 -155 mm
Protection Level	IP66	IP66	IP66	IP66	IP66	IP66
Impact Resistance	IK09	IK09	IK09	IK09	IK09	IK09
Windage EPA	0.059 m^2	0.065 m^2	0.088 m^2	0.088 m^2	0.088 m^2	0.102 m2
ELECTRONICS						
Voltage input	90-305 VAC 50-60Hz					
Active Power F.C.	0.95					
Surge Protection	15kA, IEEE C62.41.2 Location Category C High					
Insulation Class	IEC Class I					
Short Circuit Protection	Auto-recovery					
Over Heat Protection	Drops output current					
OPERATING CONDITIONS						
Working Temperature	-40°C / +50°C					
Humidity Range	0% - 94%					

Ordering codes

PRODUCT FAMILY	POWER	OPTIC	CCT	BODY MATERIAL	CONTROL SYSTEM	BODY COLOUR	OPTIONAL
T (Titan)	16	FH	A (5000k)	T (AISI 3CR12 Stainless Steel)	10 (0-10v)	T (Black and White)	00
	22	FL	B (4000k)	M (AISI 316 Stainless Steel)	DA (DALI)	H (High Heat White)	02 (Integrated SPD)
	32	SA	C (3000K)				
	42	ST	D (5700k)				
	56						
	72						

The product family can be tailored to the specifications outlined above. Example ordering code: T-72-FH-A-T-10-T02

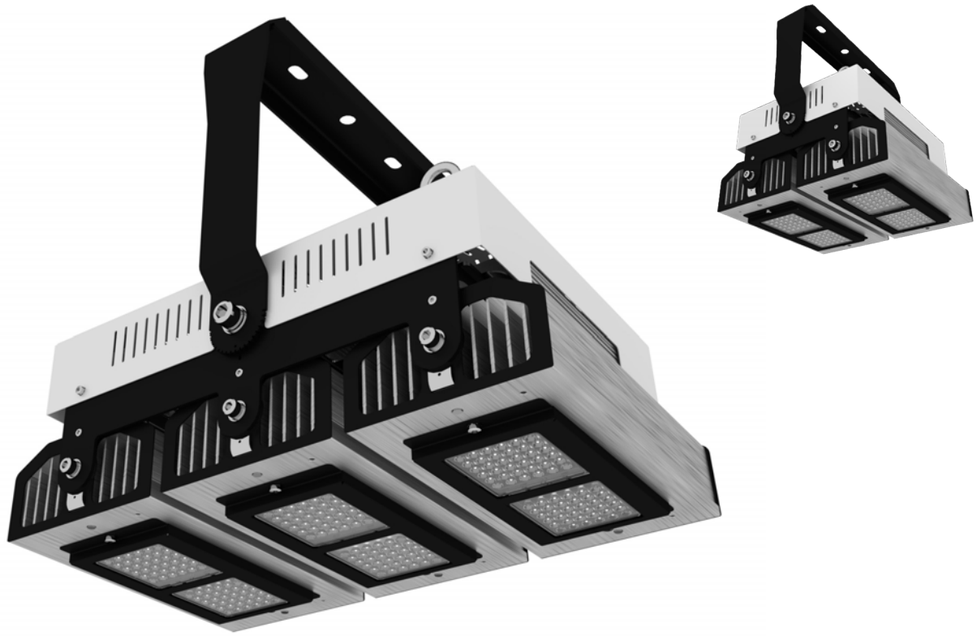
The Modus Series
Overview

The Midstream Modus Series was developed to provide a solution for environments that need to replace 2 kW Metal Halide projectors.

These environments can range from military airfields to open-air repair bays requiring a high lumen package but long-life and low maintenance products. The modular design of the Modus Series allows for a versatile approach to lighting design, enabling new ways to combine different power products in the same location.

Meanwhile, an extruded aluminium heatsink and stainless steel construction allow this range to be used in harsh environmental conditions.

The single 330w module with either asymmetric or symmetric optic can be used as an adaptable floodlight solution for wide-ranging simple and complex applications, whereas the Modus 900 with 990w LED power and narrow optics can provide an excellent solution for high-lux application.



Modular design allowing for versatile and tailored applications and solutions.

Applications

- Maritime (Container Terminals, docks, shore side infrastructure)
- Military airfields
- Aviation (Aprons, de-icing areas, etc)

Features and benefits of the Modus Series:

- Manufactured with a stainless steel construction that improves structural integrity and life of product a critical need when used in challenging environments.
- Modular design allowing for versatile and tailored applications and solutions.
- High lumen package delivering over 112,000 lumens to meet the highest requirements and standards.
- Designed to have either asymmetric or symmetric distribution allowing for a flexible solution that can be used in a wide range of applications.
- An in-house designed extruded heat sink allows for highly efficient heat dissipation due to its large surface area, when compared with a die-cast product. This keeps lumen degradation to a minimum, extending life and performance.
- Designed as standard with an integrated 2 step surge protection up to 15kA / 20kV which protects the luminaire against power surges meaning more reliability and longer performance.
- DALI controls for plug and play capability.

The Modus Series
In detail

Products

Modus 150

Modus 300

Modus 600

Modus 900

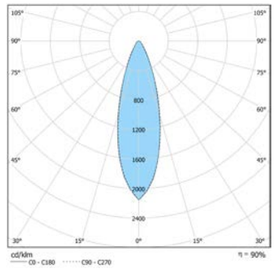
Photometrics

FH

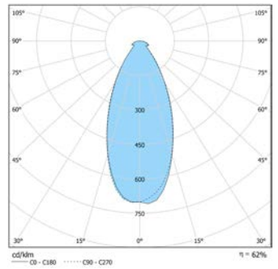
FV

S1

S2



S3



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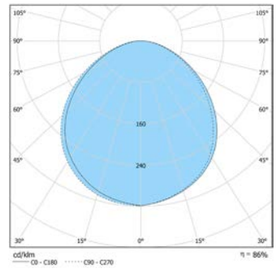


S5

Technical specs

	M150	M300	M600	M900
PERFORMANCE				
Luminaire Output	Up to 16.000lm	Up to 39.000lm	Up to 78.000lm	Up to 117.000lm
Power Absorption	145w	330w	660w	990w
Lumen Maintenance [L80 B10]	119.000h	119.000h	119.000h	119.000h
Lumen Maintenance [L70 B50]	190.000h	190.000h	190.000h	190.000h
OPTOELECTRONICS				
CRI	70 - 80 - 90			
Colour Temperature	3000K Warm White / 4000K Neutral White / 5000K Pure White / 5700K Cool White			
Secondary Optics	Weather proof, Anti-yellowing PMMA refraction matrix			
No of LEDs	32	72	144	216
LUMINAIRE BODY				
Chassis and Bracket	Stainless Steel			
Metal Finish	Powder Coating			
Heatsinks	Anodized Extruded Aluminium (Copper Content <0.1%)			
Bracket	Reversible bracket, M12 or 2 x M10 Fixing points	Reversible bracket, M16 or 2 x M12 Fixing points	Reversible bracket, M20 or 2 x M16 Fixing points	
Weight	6.5 kg	10.5 kg	23 kg	36 kg
Dimensions (L-W-H)	201 - 255 - 170 mm	201 - 373 - 224 mm	416 - 393 - 269 mm	631 - 393 - 278 mm
Protection Level	IP67	IP67	IP67	IP67
Impact Resistance	IK09	IK09	IK09	IK09
Windage EPA	0.05 m^2	0.094 m^2	0.187 m^2	0.280 m^2
ELECTRONICS				
Voltage input	90-305 VAC 50-60Hz			
Active Power F.C.	0.95			
Surge Protection	15kA, IEEE C62.41.2 Location Category C High			
Insulation Class	IEC Class I			
Short Circuit Protection	Auto-recovery			
Over Heat Protection	Drops output current			
OPERATING CONDITIONS				
Working Temperature	-40°C / +55°C			
Humidity Range	0% - 94%			

Ordering codes

FAMILY	POWER	OPTIC	CCT	CRI	VOLTAGE INPUT	CONTROL SYSTEM	BODY MATERIAL	BRACKET	OPTIONAL	VISOR
M (Modus)	01	FH	A (5000k)	70	EU (100-277 VAC)	10 (0-10v)	T (AISI 3CR12 Stainless Steel)	C (Angled Bracket)	00	Sx (Visor for S Optics)
	03	FV	B (4000k)	80		DA (DALI)	M (AISI 316 Stainless Steel)	T (Straight Bracket)		Fx (Visor for F Optics)
	06	S1	C (3000K)	90				P (Pole Clamping)		00 (No Visor)
	09	S2	D (5700k))							
		S3								
		S4								
		S5								

The product family can be tailored to the specifications outlined above. Example ordering code: M-01-S3-A-70-EU-DA-T-C-02-Sx

The Modus R Series
Overview

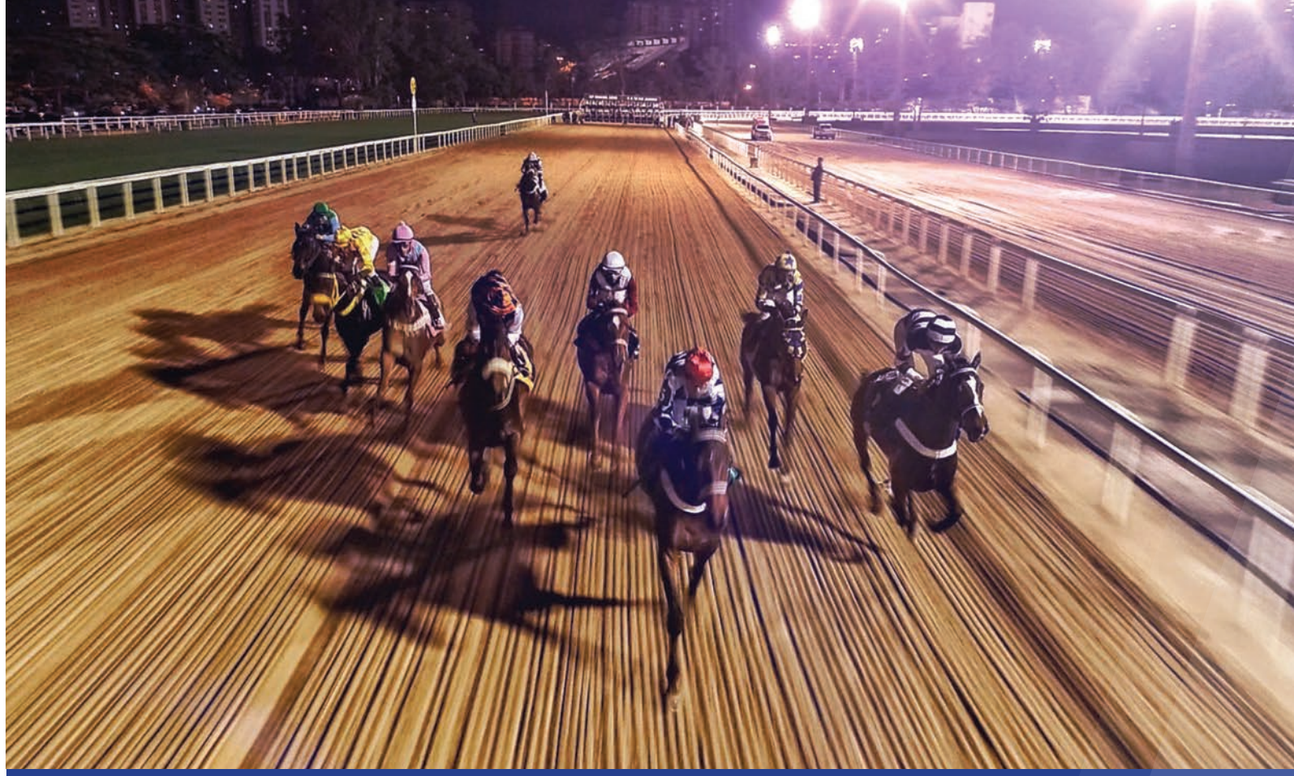
A lightweight, extremely versatile product engineered for both retrofit and newbuilds. Low glare, broadcast-ready, flicker-free LED floodlight designed specifically for sport, field and large area lighting. Remotely mounted single IP67 driver allows for easy maintenance whilst the most advanced LED chips available in the market deliver the highest performance with multiple photometric distributions.

Feature rich dynamic controls and remote monitoring capability provides a highly scalable solution, for a high-end user experience in UHD and super slow-motion conditions.

Applications

- Stadiums
- Arenas
- Football Field
- Rugby Field
- MUGA Pitch
- Hockey Field
- Basketball Court

A lightweight, extremely versatile product designed for both retrofit and new builds.



Features and benefits of the Modus R Series:

- Manufactured with a stainless steel construction that improves structural integrity and life of product a critical need when used across sporting environments.
- Modular design allowing for versatile and tailored applications and solutions.
- High lumen package delivering up to 144,000 lumens to meet the requirement of world class sporting facilities.
- Integrates with wired or wireless controls including DMX, DALI and 1-10v solutions to provide the ultimate in lighting control for event light shows or dimming.
- Highly versatile asymmetric or symmetric distribution for use in a wide range of sporting applications.
- A heavy duty, extruded aluminum proprietary designed heat sink allows for highly efficient heat dissipation due to it's large surface area compared to a dye cast design. LED formation is improved providing a low level of lumen degradation extending life and quality in a whole range of environments, from high heat to extreme cold.
- The integrated 10kV surge protection coupled with a panel mounted Type 2 surge suppressor guarantees high protection against power surges and a longer product lifetime.
- Certified IP 67 for highest level of ingress protection.
- Easy 1 vs 1 replacement / retrofit solution for 2kW metal halide floodlights.
- Single remote driver that is outdoor rated for ease of access and maintenance.
- Manufactured as standard with specialist light shields to control light spill, reduce glare and increase uniformity.
- Ceramic plated metal-core PCB with latest generation Cree (USA) 90 CRI chips for enhanced performance, which is especially important for UHD TV and slow motion cameras.
- Manufactured in Europe for fast delivery.

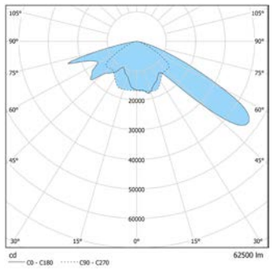
The Modus R Series
In detail

Products

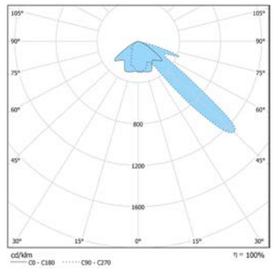
Modus R 800

Modus R 1200

Photometrics



FH



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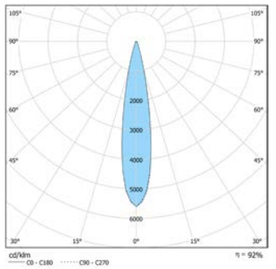
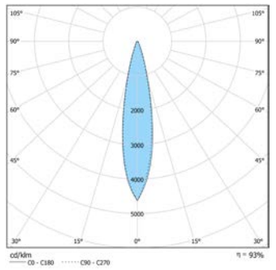


S1



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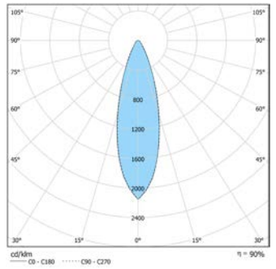

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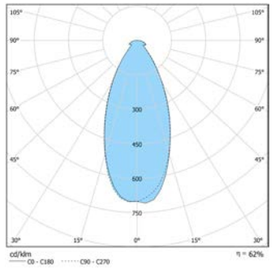

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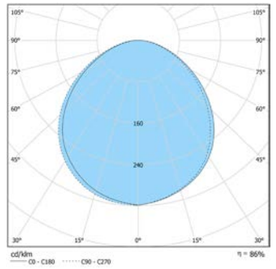


S5

Technical specs

	R800	R1200
PERFORMANCE		
Luminaire Output	Up to 96.000lm	Up to 144.000lm
Power Absorption	800w	1200w
Lumen Maintenance [L80 B10]	77.000h	77.000h
Lumen Maintenance [L70 B50]	122.000h	122.000h
OPTOELECTRONICS		
CRI	70 - 80 - 90	
Colour Temperature	3000K Warm White / 4000K Neutral White / 5000K Pure White / 5700K Cool White	
Secondary Optics	Weather proof, Anti-yellowing PMMA refraction matrix	
No of LEDs	144	216
LUMINAIRE BODY		
Chassis and Bracket	Stainless Steel	
Metal Finish	Powder Coating	
Heatsinks	Anodized Extruded Aluminium (Copper Content <0.1%)	
Bracket	Angled Reversible bracket, M20 or 2 x M16 Fixing points	
Weight	19.5 kg	26 kg
Dimensions (L-W-H)	416 - 389 - 236 mm	631 - 389 - 245 mm
Protection Level	IP67	IP67
Impact Resistance	IK09	IK09
Windage EPA	0.179 m^2	0.27 m^2
DRIVER UNIT		
Dimensions (L-W-H)	398 - 230 - 152 mm	
Weight	9 kg	
Protection Level	IP67	
ELECTRONICS		
Voltage input	200-480 VAC 50-60Hz	
Active Power F.C.	0.97	
Surge Protection	10kV line-earth, 6kV line-line	
Insulation Class	IEC Class I	
Short Circuit Protection	Auto-recovery	
Over Heat Protection	Drops output current	
OPERATING CONDITIONS		
Working Temperature	-40°C / +50°C	
Humidity Range	0% - 94%	

Ordering codes

FAMILY	POWER	OPTIC	CCT	CRI	VOLTAGE INPUT	CONTROL SYSTEM	VISOR
MR (Modus R)	08	FH	A (5000k)	70	EU (200-480 VAC)	10 (0-10v)	Sx (Visor for S Optics)
	12	FV	B (4000k)	80		DA (DALI)	Fx (Visor for F Optics)
		S1	C (3000K)	90		DX (DMX)	00 (No Visor)
		S2	D (5700k))				
		S3					
		S4					
		S5					

The product family can be tailored to the specifications outlined above. Example ordering code: MR-08-S1-A-70-EU-10-00

The Modus S Series
Overview

The Modus S Series is built for small to medium-sized sports applications and offers high lumen packages with greatly reduced weight.

The lightweight design minimises the number of floodlights required per mast and the uniquely designed light shields allow the Modus S to have a high level of uniformity across sports areas whilst delivering limited light spill for neighbours and residents. A great solution for both new-build and retrofit projects with features such as remote drivers for flexible installation and a 2 module configuration design to help light optimization of specific applications.

Modus S 900

Designed to specifically reduce light spill.

Applications

- Small and Medium-Sized Sport Facilities
- Public Football Field
- Public Rugby Field
- MUGA Pitch
- Hockey Field
- Tennis Courts

Key Features

- Designed with specialty light shields to provide high uniformity for sports fields and facilities as well as to specifically reduce light spill for neighbours and residents providing an ideal solution for areas such as community and inner city facilities
- Features a newly developed proprietary light engine that delivers up-to 30% higher efficiency compared to previous series.
- The 2 module configuration design allows the use of multiple optics in order to optimize the light beam for each field type and installation height.
- Offers a high lumen package with limited weight minimising the number of floodlights required per mast.
- Equipped with a single remote driver for flexible installation and weight saving.
- Manufactured with a reversable angled bracket that allows for seamless retrofit on existing masts, in both overhang and underhung configuration.
- Designed to support wireless control.
- Manufactured with a stainless steel construction that improves structural integrity and life of product a critical need when used across sporting environments.
- Midstream proprietary optics deliver full compliance to spill light regulations
- IP67 Rated

The Atlas Series
Overview

The Atlas Series is constructed with an extruded aluminium heatsink and stainless-steel housing, providing protection in the harshest conditions including high temperatures and salinity environments. The series is available with symmetric optics for multi-spot environments (e.g. remote aprons) and highly asymmetric for low-glare environments (e.g. MARS contact stands).

Applications

- Maritime (Container Terminals, docks, shore side infrastructure)
- Aviation (Aprons, de-icing areas, etc)
- Military airfields

UL certified and DLC listed.

Key features

- UL certified and DLC listed.
- Proprietary optic lenses designed and developed in house provide the highest level of asymmetric distribution in the market allowing clients to achieve required light levels with less power, fewer luminaries / fixtures and all with low glare for pilots and ground staff.
- Designed to have either asymmetric or symmetric distribution allowing for a flexible solution that can be used in a wide range of applications.
- Manufactured with a stainless steel construction that improves structural integrity and life of product a critical need when used in challenging environments.
- Modular design allowing for versatile and tailored applications and solutions.
- High lumen package delivering over 112,000 lumens to meet the highest requirements and standards.
- An in-house designed extruded heat sink allows for highly efficient heat dissipation due to its large surface area, when compared with a die-cast product. This keeps lumen degradation to a minimum, extending life and performance.
- Designed as standard with an integrated 2 step surge protection up to 15kA / 20kV which protects the luminaire against power surges meaning more reliability and longer performance.
- Versatile bracket and adapters to fit any existing mast infrastructure for ease of install and quick retrofit applications
- DALI controls for plug and play capability.
- Certified IP 67 for highest level of ingress protection.
- Easy 1 vs 1 replacement / retrofit solution for HID floodlights.
- Integrated drivers for high reliability and ease of installation.
- Manufactured in Europe, stocked in the USA for fast deliveries

The Atlas Series
In detail

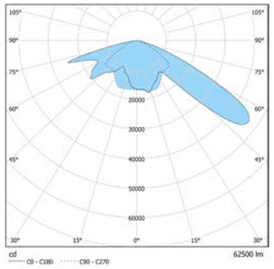
Products

Atlas 300

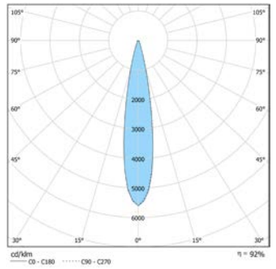
Atlas 600

Atlas 900

Photometrics



FH



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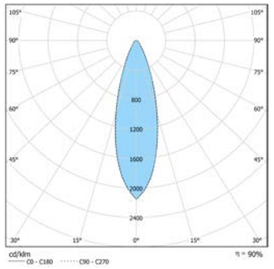

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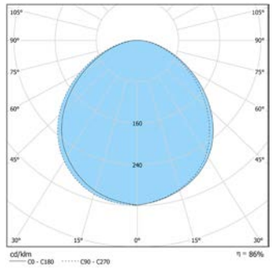


S5

Technical specs

	A300	A600	A900
PERFORMANCE			
Luminaire Output	Up to 40.000lm	Up to 80.000lm	Up to 120.000lm
Power Absorption	330w	660w	990w
Lumen Maintenance [L80 B10]	119.000h	119.000h	119.000h
Lumen Maintenance [L70 B50]	190.000h	190.000h	190.000h
OPTOELECTRONICS			
CRI	70 - 80 - 90		
Colour Temperature	3000K Warm White / 4000K Neutral White / 5000K Pure White / 5700K Cool White		
Secondary Optic	Weather proof, Anti-yellowing PMMA refraction matrix		
Protective Screen	4mm Tempered Glass		
No of LEDs	72	144	216
LUMINAIRE BODY			
Chassis and Bracket	Stainless Steel		
Metal Finish	Powder Coating		
Heatsinks	Anodized Extruded Aluminium (Copper Content <0.1%)		
Bracket	Yoke Bracket (Central Bolt 1-¼) / Tenon Bracket (Clamping 2in Pipe) Mount		
Weight	25.5 lb	61.5lb	93 lb
Dimensions (L-W-H)	7.9 - 14.7 - 9.3 in	16.4 - 15.5 - 11 in	24.9 - 15.5 - 11.4 in
Protection Level	IP67 - UL1598 Suitable for Wet Locations	IP67 - UL1598 Suitable for Wet Locations	IP67 - UL1598 Suitable for Wet Locations
Impact Resistance	IK10	IK10	IK10
Windage EPA	1.02 ft^2	2.02 ft^2	3.02 ft^2
ELECTRONICS			
Voltage input	277-480 VAC 50-60Hz		
Active Power F.C.	0.95		
Surge Protection	20kA, ANSI C136.2-2015 : Extreme Level		
Insulation Class	IEC Class I		
Short Circuit Protection	Auto-recovery		
Over Heat Protection	Drops output current		
OPERATING CONDITIONS			
Working Temperature	-40°F up to +130°F		
Humidity Range	0% - 98%		

Ordering codes

FAMILY	POWER	OPTIC	CCT	CRI	VOLTAGE INPUT	CONTROL SYSTEM	BODY MATERIAL	BRACKET	OPTIONAL	VISOR
A (Atlas)	03	FH (Type IV)	A (5000k)	70	US (277-480 VAC)	10 (0-10v)	T (AISI 3CR12 Stainless Steel)	C (Angled Bracket)	00	Sx (Visor for S Optics)
	06	S1 (NEMA 1)	B (4000k)	80		DA (DALI)	M (AISI 316 Stainless Steel)	T (Straight Bracket)		Fx (Visor for F Optics)
	09	S2 (NEMA 2)	C (3000K)	90		CW (Synapse Wireless)		P (Pole Clamping)		00 (No Visor)
		S3 (NEMA 3)	D (5700k)							
		S4 (NEMA 4)								
		S5 (NEMA 6)								

The product family can be tailored to the specifications outlined above. Example ordering code: A-03-S1-A-70-US-10-T-C-00-00

The Atlas R Series
Overview

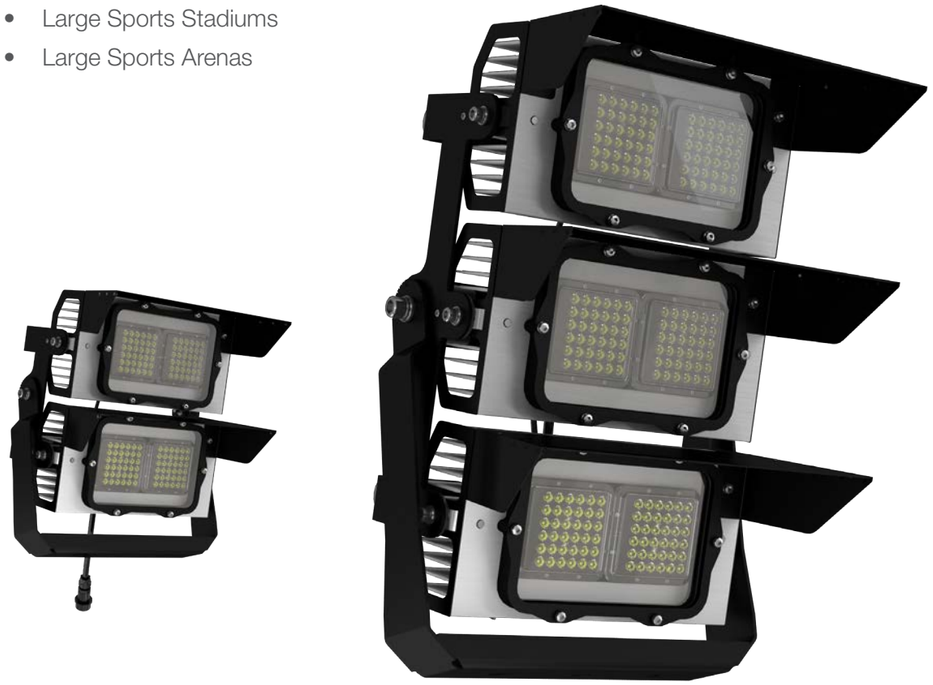
The Atlas R series is a highly efficient LED floodlight designed specifically for large area sports and stadia lighting. It offers a very high lumen packages with limited weight and is built with remote driver capability, a mounted single IP67 electronic control gear for ease of installation and can be used for both retrofit projects and new builds.

The body is made from recyclable, extruded aluminium and powder-coated stainless steel and the optic enclosure has PMMA weather-proof lenses and anti-reflective tempered glass screen.

The Atlas R Series is also a perfect solution for the North American market; complying with the requirements of UL1598.

Applications

- Large Sports Stadiums
- Large Sports Arenas



Perfect retrofit solution for
1.5kW & 2kW metal halide floodlights.

Features and benefits of the Atlas R Series:

- UL certified and DLC listed.
- Manufactured with a stainless steel construction that improves structural integrity and life of product a critical need when used across sporting environments.
- Modular design allowing for versatile and tailored applications and solutions.
- High lumen package delivering up to 144,000 lumens to meet the requirement of world class sporting facilities.
- Integrates with wired or wireless controls including DMX, DALI and 1-10v solutions to provide the ultimate in lighting control for event light shows or dimming.
- Highly versatile asymmetric or symmetric distribution for use in a wide range of sporting applications.
- A heavy duty, extruded aluminum proprietary designed heat sink allows for highly efficient heat dissipation due to it's large surface area compared to a dye cast design. LED formation is improved providing a low level of lumen degradation extending life and quality in a whole range of environments, from high heat to extreme cold.
- The integrated 10kV surge protection coupled with a panel mounted Type 2 surge suppressor guarantees high protection against power surges and a longer product lifetime.
- Certified IP 67 for highest level of ingress protection
- Easy 1 vs 1 replacement / retrofit solution for 2kW metal halide floodlights.
- Single remote driver that is outdoor rated for ease of installation and maintenance.
- Manufactured as standard with specialist light shields to control light spill, reduce glare and increase uniformity.
- Ceramic plated metal-core PCB with latest generation Cree (USA) 90 CRI chips for enhanced performance, which is especially important for UHD TV and slow motion cameras.
- Manufactured in Europe, stocked in the USA for fast deliveries

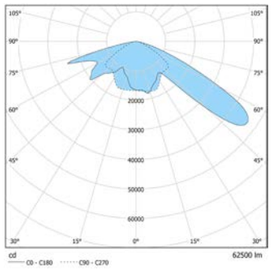
The Atlas R Series
In detail

Products

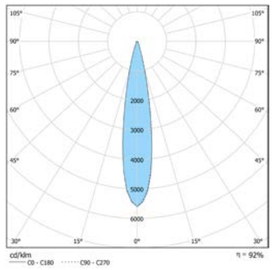
Atlas R 800

Atlas R 1200

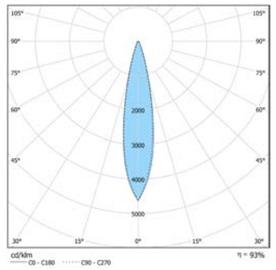
Photometrics



FH (Type IV)



S1 (NEMA 1)



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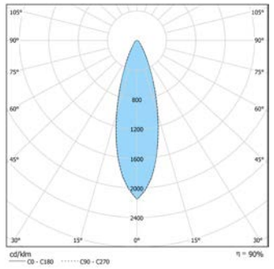

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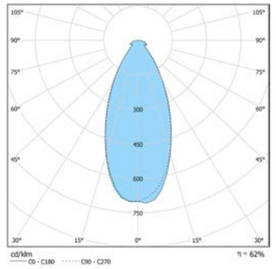


S4 (NEMA 4)

Technical specs

	R800	R1200
PERFORMANCE		
Luminaire Output	Up to 96.000 lm	Up to 144.000 lm
Power Absorption	800w	1200w
Lumen Maintenance [L80 B10]	77.000h	77.000h
Lumen Maintenance [L70 B50]	122.000h	122.000h
OPTOELECTRONICS		
CRI	70 - 80 - 90	
Colour Temperature	3000K Warm White / 4000K Neutral White / 5000K Pure White / 5700K Cool White	
Secondary Optics	Weather proof, Anti-yellowing PMMA refraction matrix	
Protective Screen	4mm Tempered Glass	
No of LEDs	144	216
LUMINAIRE BODY		
Chassis and Bracket	Stainless Steel	
Metal Finish	Powder Coating	
Heatsinks	Anodized Extruded Aluminium (Copper Content <0.1%)	
Bracket	Yoke Bracket (Central Bolt 3/4")	
Weight	46 lb	66 lb
Dimensions (L-W-H)	16.4 - 15.3 - 9.3 in	24.9 - 15.3 - 9.6 in
Protection Level	IP67 - UL1598 Suitable for Wet Locations	IP67 - UL1598 Suitable for Wet Locations
Impact Resistance	IK09	IK09
Windage EPA	1.93 ft^2	2.91 ft^2
DRIVER UNIT		
Dimensions (L-W-H)	15 - 9 - 6 in	
Weight	19 lbs	
Protection Level	IP67 - UL1598 Suitable for Wet Locations	
ELECTRONICS		
Voltage input	277-480 VAC 50-60Hz	
Active Power F.C.	0.97	
Surge Protection	10kV line-earth, 6kV line-line	
Insulation Class	IEC Class I	
Short Circuit Protection	Auto-recovery	
Over Heat Protection	Drops output current	
OPERATING CONDITIONS		
Working Temperature	-40°C / +130°F	
Humidity Range	0% - 94%	

Ordering codes

FAMILY	POWER	OPTIC	CCT	CRI	VOLTAGE INPUT	CONTROL SYSTEM	VISOR
AR (Atlas R)	08	FH (Type IV)	A (5000k)	70	US (200-480 VAC)	10 (0-10v)	Sx (Visor for S Optics)
	12	S1 (NEMA 1)	B (4000k)	80		DA (DALI)	Fx (Visor for F Optics)
		S2 (NEMA 2)	C (3000K)	90		DX (DMX)	00 (No Visor)
		S3 (NEMA 3)	D (5700k))			CW (Synapse Wireless)	
		S4 (NEMA 4)					
		S5 (NEMA 6)					

The product family can be tailored to the specifications outlined above. Example ordering code: AR-08-S1-A-70-US-10-Sx

The Docker Series
Overview

Heavy Duty LED floodlight designed for applications requiring high performance and high durability. Full AISI 316 Stainless Steel body built to resist the harshest environments. Docker Series floodlights ensure maintenance free operation for mission critical applications.

Applications

- Maritime
- RTG Cranes
- STS Cranes
- Bulk Handling Cranes
- Construction sites
- Mining operations
- Military applications
- Mobile Equipment

Manufactured with 316 stainless steel to resist corrosion in harsh, saline environments.

Features and benefits of the Docker Series:

- Heavy Duty LED floodlights built to resist the harshest environments and for applications needing high performance and high durability.
- A low weight design and compact size allows for an easy to install solution.
- Designed with a wide range of optics to provide a solution that maximises safety across all areas and allows for the provision of a tailor-made lighting layout for your environment, using the optimum choice of optics to reduce glare, increase uniformity and avoid any dark spots on the ground.
- Manufactured with Midstream's proprietary Asymmetric optic that guarantees a wide coverage of luminance levels for improved obstacle recognition and the light emission allows light to cover an area four times larger than currently achievable with traditional symmetric optics, removing the need for additional front-facing floodlights for example on cranes, resulting in a low glare installation.
- Manufactured with 316 stainless steal to resist corrosion in harsh, saline environments.
- Certified IP 67 for highest level of ingress protection
- Tested on STS & RTG Cranes.
- Tested for Salt spray for 1000h according to ASTM B117 and for Vibrations up to 6G and 100.000 Cycles according to ANSI C136.31-2010.
- UL certified and DLC listed (US Version)

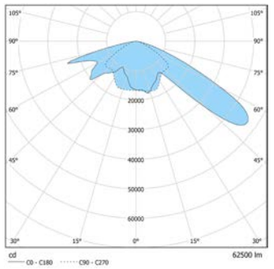
The Docker Series
In detail

Products

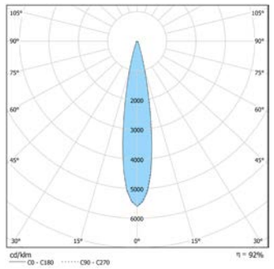
Docker 150

Docker 300

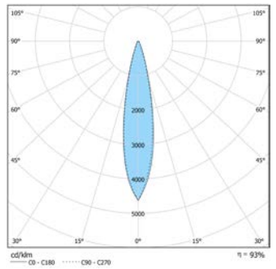
Photometrics



FH



S1



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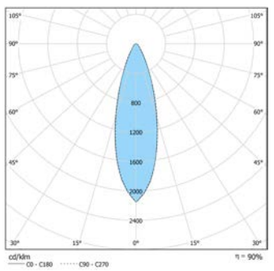

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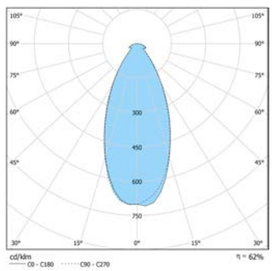

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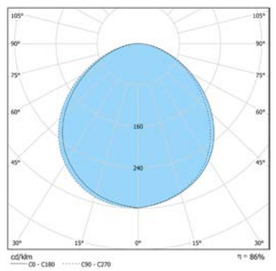


S5

Technical specs

	150 (EU)	300 (EU)	150 (US)	300 (US)
PERFORMANCE				
Luminaire Output	Up to 17.500lm	Up to 35.000lm	Up to 17.500lm	Up to 35.000lm
Power Absorption	145w	300w	160w	330w
Lumen Maintenance [L80 B10]	119.000h	119.000h	119.000h	119.000h
Lumen Maintenance [L70 B50]	190.000h	190.000h	190.000h	190.000h
OPTOELECTRONICS				
CRI	70 - 80 - 90			
Colour Temperature	3000K Warm White / 4000K Neutral White / 5000K Pure White / 5700K Cool White			
Secondary Optics	Weather proof, Anti-yellowing PMMA refraction matrix			
No of LEDs	32	72	72	72
Protective Screen	N/A	N/A	4mm Tempered Glass	4mm Tempered Glass
LUMINAIRE BODY				
Chassis and Bracket	AISI 316 Stainless Steel			
Metal Finish	Powder Coating			
Heatsinks	Anodized Extruded Aluminium (Copper Content <0.1%)			
Bracket	Customizable AISI 316			
Weight	8 Kg	11.5 Kg	28 lb	
Dimensions (L-W-H)	201 - 255 - 196 in	201 - 376 - 202 in	7.9 - 14.8 - 8.4 in	
Protection Level	IP67	IP67	IP67 - UL1598 Suitable for Wet Locations	
Impact Resistance	IK09	IK09	IK10	
VIBRATIONS RESISTANCE				
ANSI C136.31-2010	Up to 6G for 100.000 cycles			
CORROSION RESISTANCE				
UL 1598A:2000	Salt Spray ASTM B117 for 1000 hours with 5% salinity			
ELECTRONICS				
Voltage input	100 - 305 VAC 50-60Hz		277 - 480 VAC 50-60Hz	
Active Power F.C.	0.97		0.97	
Surge Protection	10kV line-earth, 6kV line-line		10kV line-earth, 6kV line-line	
Insulation Class	IEC Class I		IEC Class I	
Short Circuit Protection	Auto-recovery		Auto-recovery	
Over Heat Protection	Drops output current		Drops output current	
OPERATING CONDITIONS				
Working Temperature	-40°C / +50°C		-40°F / + 130°F	
Humidity Range	0% - 94%		0% - 98%	

Ordering codes

FAMILY	POWER	OPTIC	CCT	CRI	VOLTAGE INPUT	CONTROL SYSTEM	BODY TYPE	BRACKET	OPTIONAL
D (Docker)	15	FH	A (5000k)	70	EU (100-277 VAC)	10 (0-10v)	M (AISI 316 SS)	A (Type A)	00
	30	S1	B (4000k)	80	US (277-480 VAC)			B (Type B)	
		S2	C (3000K)	90					
		S3	D (5700k))						
		S4							
		S5							

The product family can be tailored to the specifications outlined above. Example ordering code: D-30-FH-A-70-US-10-M-A-00

The Mobile Tower
Overview

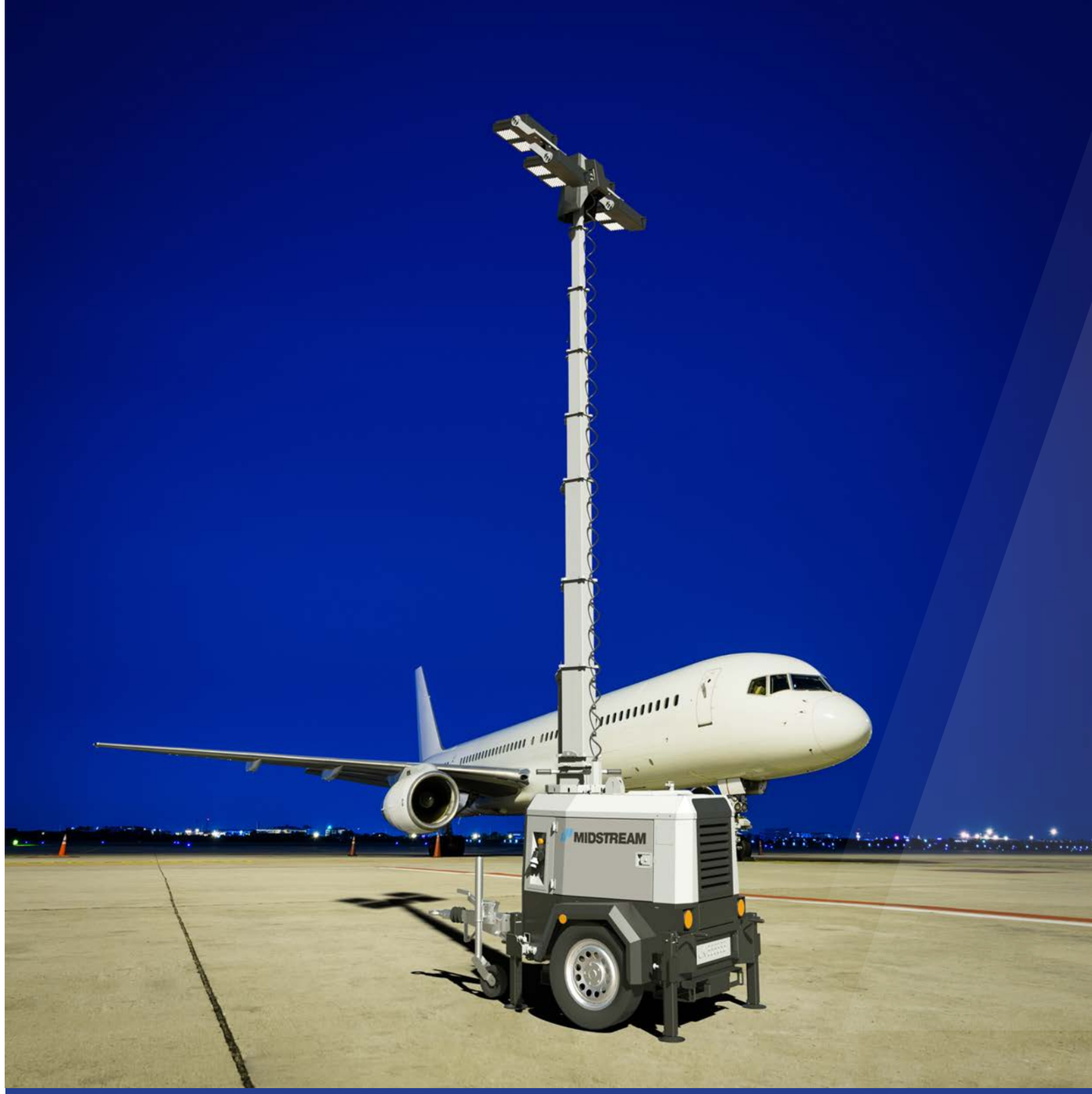
A resilient solution for our global aviation and sports clients, the Mobile Tower features an adjustable 9-metre vertical, hydraulic mast delivering an impressive average 20 Lux coverage over 3600m^2 via four highly efficient, asymmetric 326W LED Titan floodlights.

For sporting clients, this mobile solution can immediately enhance the lighting quality for temporary events or provide a semi-permanent solution for lighting requirements at speed and to exacting standards.

Within the aviation sector, Midstreams Mobile Tower continues to be a steadfast solution for many global clients, with its primary use being to fulfil the precise requirements of apron applications allowing for the commissioning of Code F and Code E aircraft stands in full compliance with ICAO and EASA requirements.

The unique features of the Midstream Mobile Tower are based around our sophisticated proprietary optics, and deliver a highly asymmetric beam to reach the minimum lux requirements, even at the back of the aircraft stand.

By using our specially developed optics, we can provide the ICAO compliance without the high levels of glare typically found with traditional generator lights. Beneficially, the Midstream Mobile Tower also comes complete with official ICAO compliant lighting design. This can be submitted as a part of the certification documentation.



- A multi-directionally adjustable, mobile floodlight tower with 4 highly efficient, asymmetric 326W LED floodlights, designed specifically for large area lighting with low glare conditions.
- Luminaire Midstream Titan 320 LED Floodlight x 4 Tower 7-section hydraulic vertical tower, up to 9m height, 340° rotatable. Galvanized metalwork with 80 µm powder coating. Guided main coiled cable to avoid damage during tower operation. Certified wind stability up to 110 km/h.

Products

The Midstream Mobile Tower is available in a number of other versions and configurations and can be customised according to the end-user's requirements.

- **Plug-in power:** M-Mast unit is operated through a 230V power line for locations where electricity is readily available but infrastructure works or liquid fuels are inappropriate or prohibited. Zero noise emissions. Low maintenance.
- **Hybrid Power:** M-Hybrid unit is operated with a series of rechargeable batteries together with a diesel engine to reduce fuel usage, C02 emissions and noise levels. Also available as M-Hybrid Mobile version.
- **Military Power:** Military application may require some bespoke features and colours. Our products are customisable and can be tailored to individual use. Robust design to survive harsh conditions.

Applications

- Remote aprons
- VIP Aprons
- Runway resurfacing
- Airport road network
- Parking areas
- Special events
- Temporary Aprons
- Emergency response
- Law enforcement use
- Construction projects
- Fuel farms
- Military applications
- Security checkpoints

Key Features

- Automatic Mast Operating Safety System
- Light sensor for automatic start
- Longitudinal and transversal forklift pockets
- Optional power inlet socket to power lights from mains supply
- IP67 certified
- European manufacturing
- Up to 200 hours running time
- Tower 340° rotatable
- Certified wind stability up to 110 km/h
- Stabilizers adjustable in height
- Central lifting hook
- Remote operation available
- Complies with ICAO Annex 14 requirements
- Asymmetric floodlights for low glare operation

Technical specs

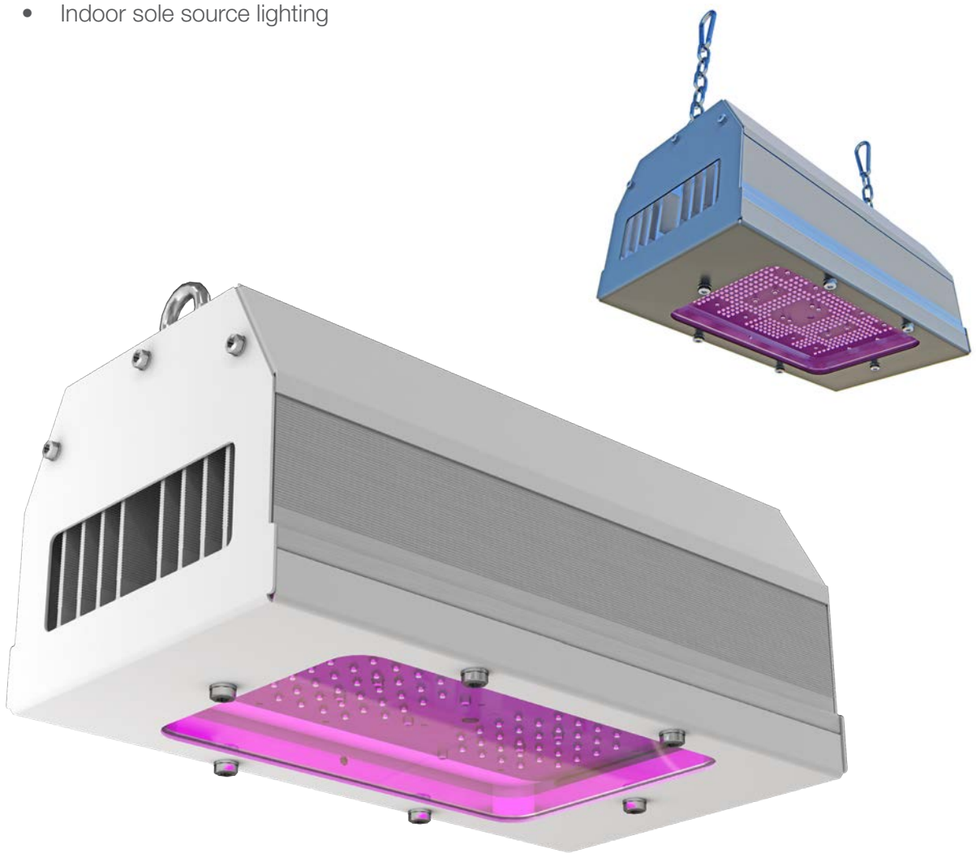
DIMENSIONS MIN.	2320 x 1380 x 2420 mm
DIMENSIONS MAX.	2320 x 1550 x 9000 mm
TOTAL WEIGHT WITHOUT FUEL	960 kg
ROTATION	340°
ILLUMINATED AREA	4800 m^2
FLOODLIGHTS	4 x 326W LED
ENGINE MODEL	Kubota Z482
FUEL	Diesel
RPM	1500
CONSUMPTION (L/H)	0.55
TANK CAPACITY (L)	110
RUNTIME BEFORE REFUELLING (H)	200
NOISE LEVEL AT 7M (DB)	65
ALTERNATOR MODEL	Synchronous
FREQUENCY (HZ)	50
INSULATION CLASS	H
DEGREE OF PROTECTION	IP67
SINGLE PHASE VOLTAGE	3.5 kVA - 48V
AUXILIARY OUTLETS	1kVA

Flare
Overview

The challenges the horticulture industry face – increased demand, environmental, and political – continue to rise. To help growers to overcome them we've created Flare. An effective alternative to natural sunlight or HPS / SON-T grow lights, Flare is an innovative and pioneering solution for commercial horticulture growers. And, even better, it can be tailored for your exact needs.

Applications

- Horticulture
- Greenhouses
- Indoor sole source lighting



Engineering Growth

The expertise you need

We've completed many horticultural projects around the globe in different environments and on different crops. So, our team of experts can guide you on how to optimise your environment and advise on the lighting solution needed.

Key features of Flare

Versatility – it can be used in a broad variety of applications.

Reliability – Flare is built for heavy-duty usage.

Practicality – the compact design reduces significantly the shadowing during the day.

Flexibility – Flare can be equipped with integrated or remote drivers.

Performance – very low LED temperatures deliver high performance and a long lifetime.

Durability – it's entirely waterproof and constructed to resist wet corrosive environments.

Flare
In detail

Flare benefits include:

- Faster germination and root growth.
- Earlier flowering and controlled plant growth.
- Environmental and space maximisation.
- Significant energy use reduction
- And, most importantly – increased yields.

Plus, as with all Midstream LED solutions, there are environmental and financial benefits thanks to the energy savings and efficiencies Flare offers.

Technical specs

PERFORMANCE	
PPF	1440 - 1980 mol/s
Efficacy	2.3 - 3.2 mol/J
Power Absorption	620 W
LUMINAIRE BODY	
Structure	Corrosion proof Stainless Steel
Metal Coating	Powder Painted
Heatsinks	Extruded Aluminum
Bracket	Hanging / Busway / Adjustable ropes
Weight	8 kg
Dimensions (LxWxH mm)	375L x 202W x 161H mm
ELECTRONICS - REPLACEABLE REMOTE POWER SUPPLY UNIT	
Voltage Input	249-528 VAC 50-60 Hz
Power Factor	0 95
Mean Time to Failure	200,000 hrs
Surge Protection	Line to Earth 10kV; Line to Line 6kV
Insulation Class	IEC Class 1
IP Rating	IP 67
Short Circuit Protection	Auto-recovery
Over Heat Protection	Drops output current
Rel. Humidity Range	0 - 98%
Operating Temp	-40°C up to +75°C

Ordering codes

FAMILY	POWER	SPECTRUM	CONTROL	VOLTAGE 3F	VOLTAGE INPUT	DRIVER	MOUNTING HARDWARE
F (Flare)	62	SFLO (Supplemental)	00	3F (249 - 528 Vac)	WG (Weiland Green)	I (Integrated Driver)	S (Suspension Rings)
		IVGF (Indoor)	CW (Synapse Wireless)		WB (Weiland Black)	R (Remote Driver)	B (Busway Clamp)
		ALGA (Algea Spectrum)			NC (No Connector)		R (Adjustable Ropes)

The product family can be tailored to the specifications outlined above. Example ordering code: F-62-ALGA-00-3F-WG-I-R

For more information:

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