



**Performance is everything**  
Midstream. Experts in Sports Lighting

 **MIDSTREAM**

**ELLISCO** > +64 9 570 5267  
> [info@ellis.co.nz](mailto:info@ellis.co.nz)  
> [www.ellis.co.nz](http://www.ellis.co.nz)



## Welcome to Midstream

Midstream Lighting is a leading global manufacturer, designer and solutions architect of advanced LED floodlighting for the sport stadium, aviation, marine port, and horticulture industries.

Established in the UK, we have a strong global footprint, with clients and projects all over the world. Our products and solutions feature cutting edge LED technology and our proprietary optic lens system delivers bespoke light distributions for best-in-class spectator experiences.

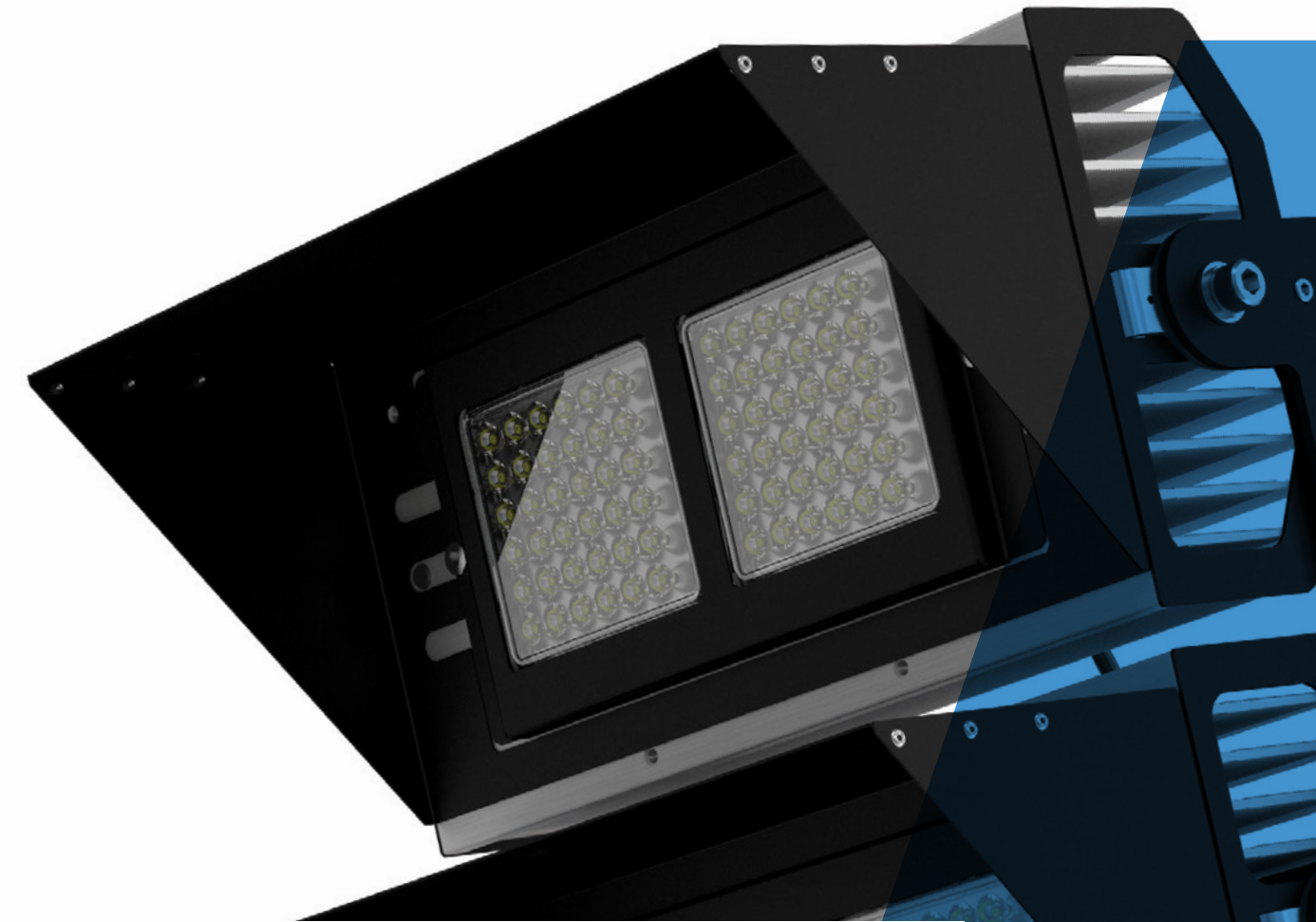


Lighting of stadia, arenas and multipurpose venues demand the most intelligent luminaire technologies. When the lights go on, spectators, athletes, sponsors and broadcasters all expect total performance. Our bespoke low-cost yet high-definition solutions are the perfect match for the technically challenging and complex requirements of professional sports lighting.

We are not just a manufacturer, we are an innovation hub, working with design consultants and architects to assist with lighting design, from master-planning through to detailed design phase. We pride ourselves on our reliability, affordability and innovative, integrated designs and solutions that will truly transform your venue.



Our clients include major international airports, busy container terminals, sports stadiums, railway operators, large asset operators and blue-chip corporates. We understand experience matters. That's why we are trusted with lighting some of the world's most critical infrastructure.



### Reaching Peak Performance

At Midstream reaching the peak of our performance is done via seeking excellence across the board. We therefore offer both the best in class and pioneering LED Technology products alongside superior support and service, each as important as the other. We constantly re-invest into research and development ensuring always that the products we offer incorporate the latest technology, know-how and processes. We also lead the industry with our client partnership strategy, working each and every time in unison to develop products suited to the task and sector they are designed for, with innovation and reliability at the forefront of our solutions. We know we have the right solution for you, whether building a new airport, retrofitting a container terminal or the replacement of 2,000W metal halide projectors in stadium applications.

### Only the best in quality & reliability

Midstream products are manufactured to the highest quality at sites in both the UK and Europe. All metal parts are laser cut, bent and painted on-site. All finished products undergo end-of-line testing before packaging and shipping and we implement full component traceability across all our sites. We operate an ISO 9001, 14001 and 45001 Integrated Management System which means we continually monitor and improve our processes. In addition, since our products certified against the requirements of ENEC (Europe) and UL (USA), we have periodic audits of our facilities by independent third-party certification bureaus which assess our compliance with these requirements.

Midstream is the first choice for customers who cannot compromise on quality and reliability.



## Experts in sports lighting

Midstream specialises in the delivery of innovative lighting solutions for stadiums, training areas, all-weather pitches, indoor facilities, outdoor football and rugby applications, aqua centres and many other critical sporting arenas.

Our clients include international, national and club stadiums for all sport types as well as working with small and medium sized contractors, who are commissioned by sport development clients.



### Through our experience we know that the needs of each sporting environment vary, for example;

- Aqua centres, leisure pools, indoor and outdoor training pools often have demanding atmospheric conditions which require high quality, trouble-free and long-lasting lighting solutions.
- Golf driving ranges are usually key supplementary source of income for many clubs, effective, low-cost and low-maintenance lighting is essential to maximise facility availability, customer satisfaction and revenue streams.
- Show jumping, evening race meets, gymkhanas, dressage and many other equestrian disciplines require artificial light solutions that can extend training and event duration, optimise scheduling flexibility and increase revenue generation.

- Professional and high-level sports stadia require only the very best so that viewing can be optimised both inside the stadium and on television screens around the world. Alongside this failure rates must be non-existent; events cannot be delayed for both revenue and reputational reasons.

Whatever the sport, stadium or arena size, or the lighting requirements, Midstream offer in-house design services to create full lighting packages with a breakdown of the luminaire numbers, complete installation, handling and maintenance guidance, as well as detailed mounting instructions to support the installation teams.

Performance is everything.

We are trusted by many global names to deliver projects to specification, on time and within budget.





## The Midstream Offering

Sport and stadium lighting with LED technology requires the right products with the right level of expertise to deliver results in line with the design specification. Our knowledge of high-power lighting means we are the right choice to design and deliver your next project for stadium, arena or recreational use facilities.



Our range of high-power LED lighting products, developed for this sector, allow us to deliver projects to the most exacting specification, whether working to FIFA or UEFA rules, or to local government or sporting bodies' requirements. Whether the target is a new-built stadium or upgrading of existing sport and track facilities, we can deliver energy savings and improvement in lighting conditions, reduced glare and optimised controls.

### We offer:

- Full turnkey solutions: from start to finish Midstream have you covered, whether you're in design or planning phases, product supply or installation.
- Extended Service & Warranty
- Best in class product innovation
- New build & easy retrofit solutions
- The highest standards for all: Whether smaller facilities or the largest of stadia
- Guaranteed Quality via European manufacturing and standards control
- Proven Energy savings to support your environmental goals
- Reduced cost of replacement and maintenance meaning less downtime
- Fully integrated solution for remote control and management

The challenges of delivering products with very high power and advanced thermal management properties, at a cost that is economically viable, has been the research focus of Midstream from its foundation. Those challenges have been successfully met with a suite of proven LED products suited to a full range of application sectors and performance criteria.

- Significant energy savings vs Metal Halide
- CAPEX savings from reduced power connection costs
- Reduced backup generator capacity
- Smart control capability and dimming functions
- Robust construction for all-weather play
- Instant on/instant off
- FIFA, UEFA, FIBA, FIH, MLB, IBAF, ITF design Compliant

## Design

Experience matters, not just in product development but in every aspect of the design process also. Our in-house design team have years of experience and knowledge in generating compliant designs for complex projects whether newly built or on existing infrastructure.

We work on some of the world's most critical infrastructure and with some of the world's leading design engineers on projects around the globe, from small island aerodromes, port terminals, international transport hubs to sports stadiums and playing fields

### Our design offering

We offer a full lighting package to our clients, which includes a fully compliant design to local and international standards with a breakdown of the luminaire numbers, complete installation, handling and maintenance guidance, as well as detailed mounting instructions to support the installation teams. The package includes a lux value chart and a financial investment analysis model.

We support our clients from concept and master planning to commissioning and hand over.

We only work with  
the best of the best.





# Midstream Modus R Series

Low glare, broadcast-ready, flicker-free LED floodlight designed specifically for sport, field and large area lighting.

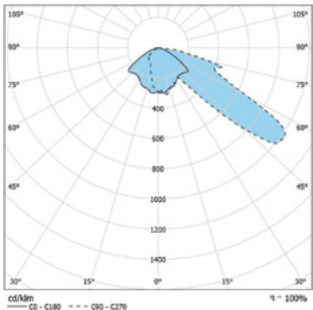
Remotely mounted single IP67 electronic control gear for ease of installation, driving up to 216 LEDs with multiple photometric distributions.

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.

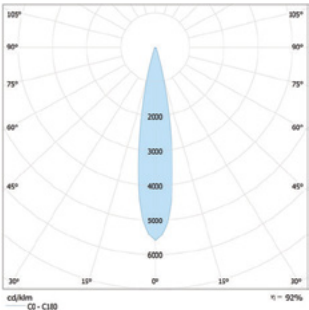


### Photometrics

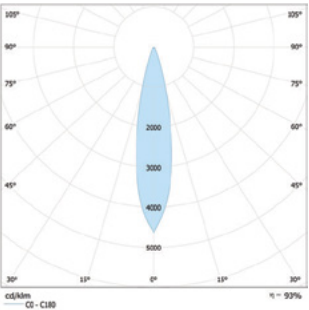
FV (Asymmetrical Wide)



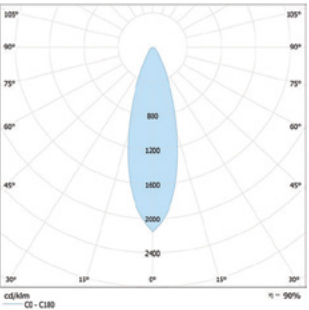
S1 (Symmetrical Narrow)



S2 (20° Symmetrical)



S3 (30° Symmetrical)



### Technical Data

#### Performance

Net Lumen Output (Flux) -	100,000 lm / 150,000 lm
MR800/MR1200	800 W / 1200 W
Power Absorption	3,000 / 4,000 / 5,000 / 5,700 K
Color Temperature	>100,000 h
Lumen Maintenance L70	CRI 70 / 80 / 90
Colour Rendering Index	

#### Luminaire Body

Structure	3CR12 Stainless Steel
Metal Coating	Powder Painted
Heatsinks	Extruded Aluminum
Weight - MR800/MR1200	19.5 kg / 26 Kg
IP Rating	IP67

IK Rating	IK09
Glass Screen	Optional - 4mm Tempered
<b>Electronics</b>	
Voltage Input	200-528 VAC 50-60 Hz
Power Factor	0.96
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 - 99%
Operating Temp	-40°C up to +75°C

### Ordering codes

Product	Powe	Optic-1	CCT	CRI	Voltage	Control System	Body Type	Bracket	Connector	Visor
Family	r	S1	A (5000K)	70	EU (200/528	10 (1-10V)	T (3CR12SS)	A (Type A)	02 (Ext IP	01
MR (Modus	12	S2	B (4000K)	80	AC)	DA (Dali)			Connector)	
R)	08	S3	C (3000K)	90		WF (Wi-fi)				
		FV	D (5700K)			DX (DMX)				
		FH								

Example: MR-12-S1-A-70-EU-10-T-T-02-01

CE LED IP67



# Stadia and Arena

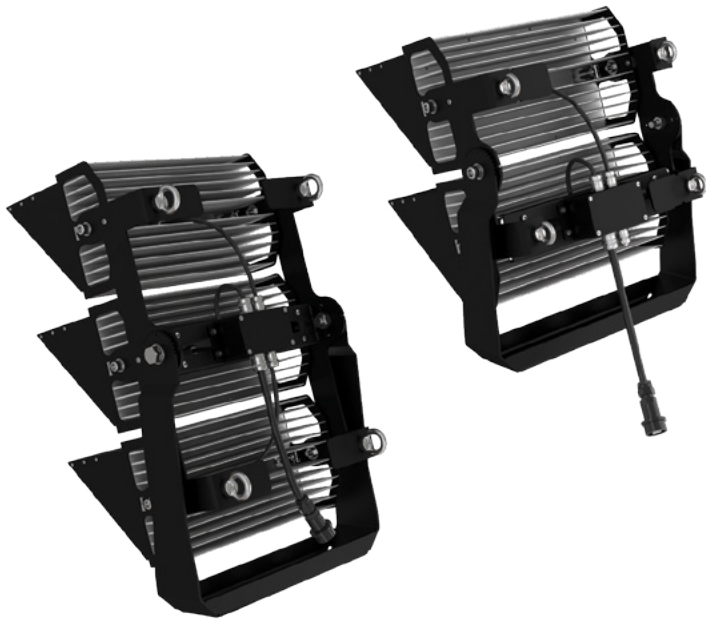
Modus R Series is the perfect solution for high end indoor arenas and Stadiums.

Its compact size and limited weight allows for easy retrofit on existing structures.

The wide optics range allows the product to adapt to different mounting heights.

The high lumen package allows to reach light levels compliant with the latest regulations for top level competition of UEFA, FIFA, IAAF and other leagues.

CRI90 options delivers vibrant colors for HDTV broadcasting.



# Imagine, Illuminate, Enable

Turn your arena in a full scale lighting show, thanks to the DMX enabled drivers every Modus R becomes a high responsive piece in a show that brings the spectator experience to a whole new level.



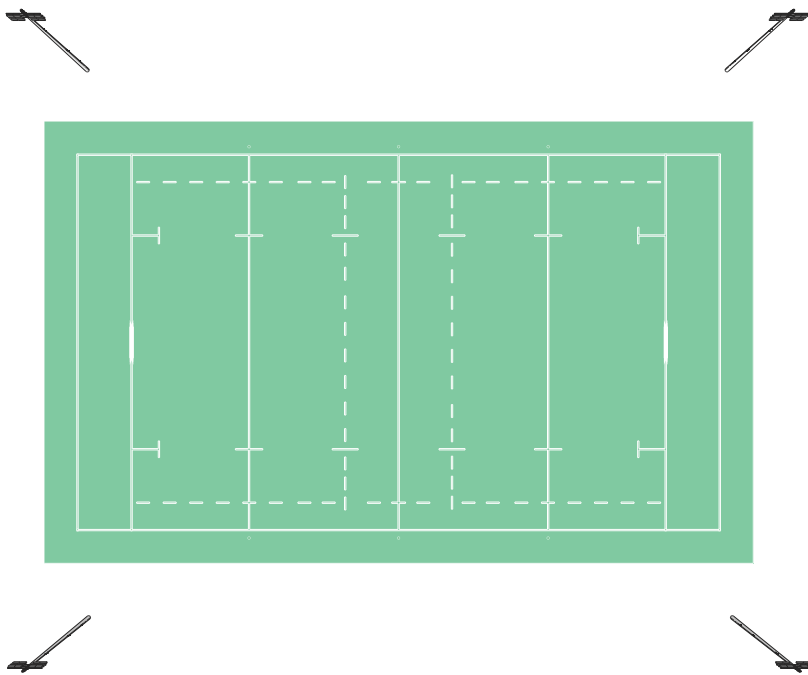
# Rugby Field

Typical Layout



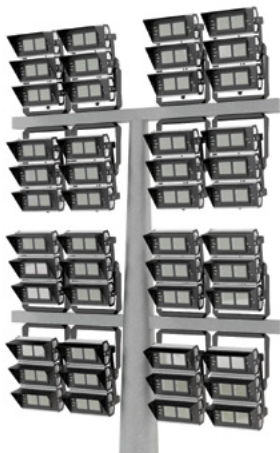
## Rugby Field 4 Masts

EN 12193	Class I
Floodlights :	48 x Modus R 1200
Poles Height :	30m
Illuminance Level	500 Lux
Min/Av Uniformity :	0,8
Min/Max Uniformity :	0,6
Glare Rating :	GR <40



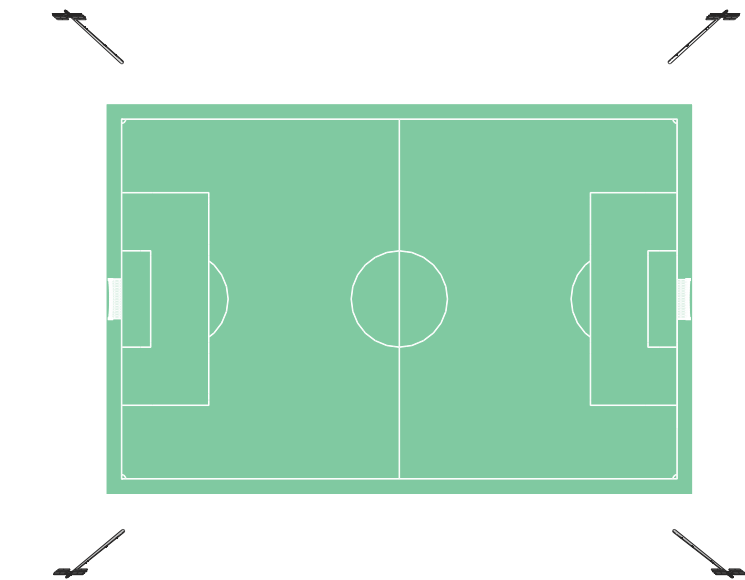
# Football Field

Typical Layout



## Football Field 4 Masts

EN 12193	Class I
Floodlights :	40 x Modus R 1200
Poles Height :	30m
Illuminance Level	500 Lux
Min/Av Uniformity :	0,8
Min/Max Uniformity :	0,6
Glare Rating :	GR <40



# Connect, Manage, Control

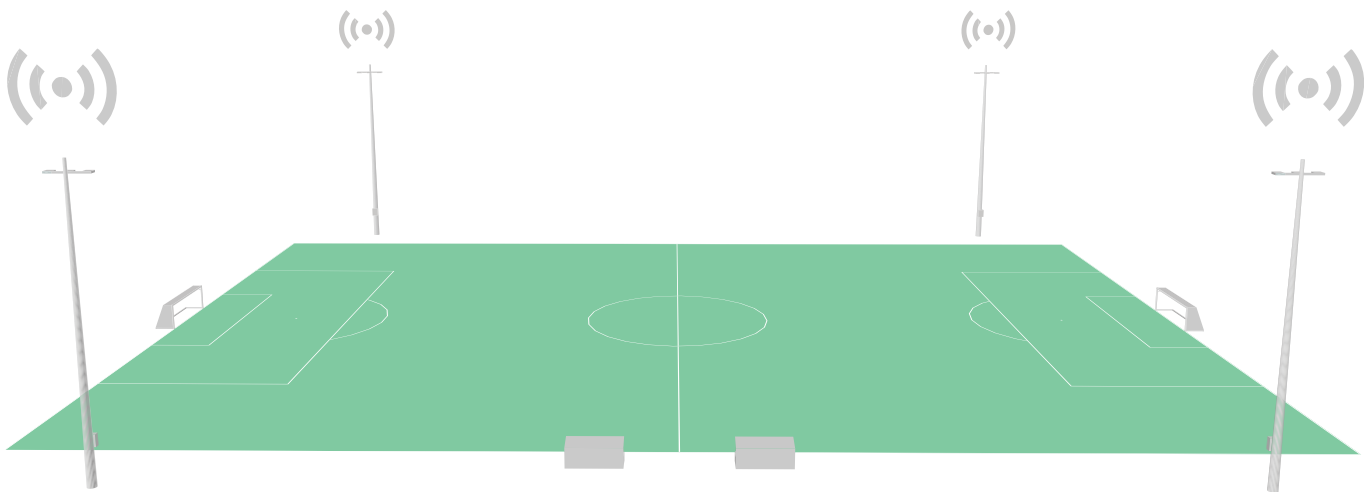
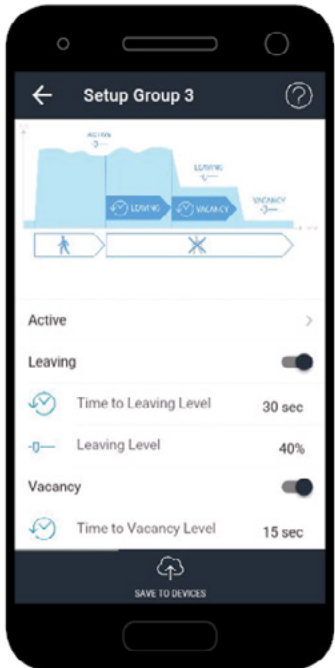
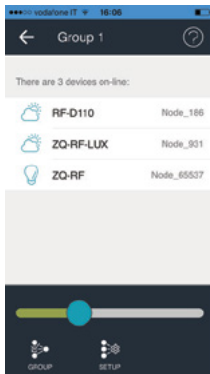
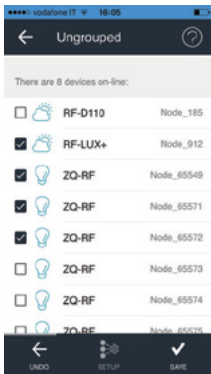
Modus R Lighting System comes with a fully integrated control system that allows you to keep all your courts under control at you finger tips.

No wiring, No special training, No headaches.

With our innovative App control you can add, group and modify parameters of the lighting levels and schedules of all the installed products via iOS and Android app.

This simple and effective system allows the end user to use preset modes for Training Light Levels, competition Light levels and switch between them using the dedicated app and remote control (up to 4 Presets).

The end user can also monitor the hours of usage of different courts, minimizing energy usage and maximising profit.



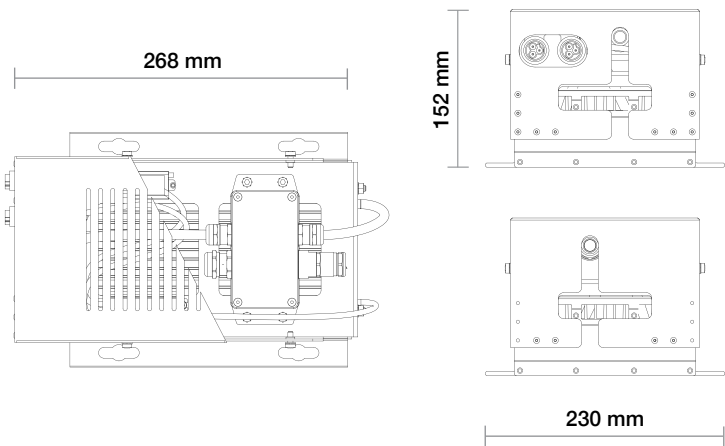
## Modus R800



## Modus R1200



## Remote Driver





# Midstream Hydra Series

The most flexible and cost effective solution for sport lighting applications.

Remote mounted power unit with 3 independently adjustable heads

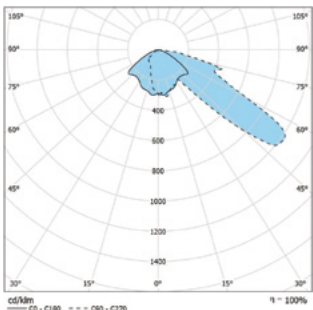
Wide optics selection to fullfull the requirements of every sport facility.

Quick installation with prewired distribution box allows easy retrofit on existing structures.

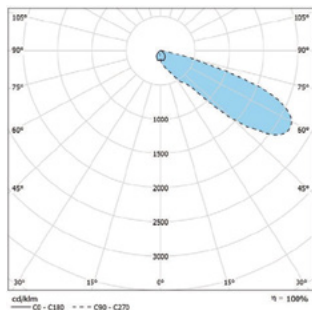


### Photometrics

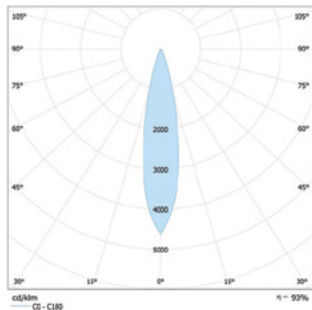
FV (Asymmetrical Wide)



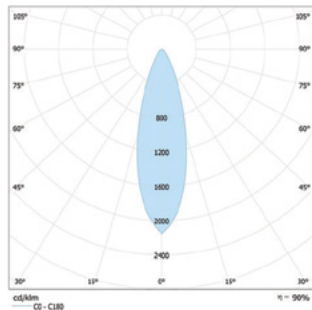
S1 (Asymmetrical Narrow)



S2 (20° Symmetrical)



S3 (30° Symmetrical)



### Technical Data

#### Performance

Net Lumen Output (Flux)	135,000 lm
Power Absorption	1200 W
Color Temperature	3,000 / 4,000 / 5,000 / 5,700 K
Lumen Maintenance L70	>100,000 h
Colour Rendering Index	CRI 70 / 80 / 90

#### Luminaire Body

Structure	3CR12 Stainless Steel
Metal Coating	Powder Painted
Heatsinks	Extruded Aluminum
Weight	25 Kg
IP Rating	IP67

#### Electronics

Voltage Input	200-528 VAC 50-60 Hz
Power Factor	0,96
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 - 99%
Operating Temp	-40°C up to +75°C

### Ordering codes

Product	Power	Optic-1	Optic-2	Optic-3	CCT	CRI	Voltage	Control System	Body Type	Bracket
Family	12	S1	S1	S1	A (5000K)	70	EU (200/528	00 (No Control)	T (3CR12SS)	A (Type A)
H (Hydra)		S2	S2	S2	B (4000K)	80	AC)	DX (DMX)		
		S3	S3	S3	C (3000K)	90		DA (Dali)		
		FV	FV	FV	D (5700K)			WF (Wi-fi)		
		FH	FH	FH						

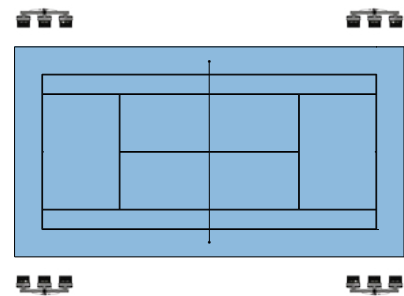
Example: H - 12 - S1 - FV - S1 - A - 70 - EU - DA - T - A

CE LED  IP67



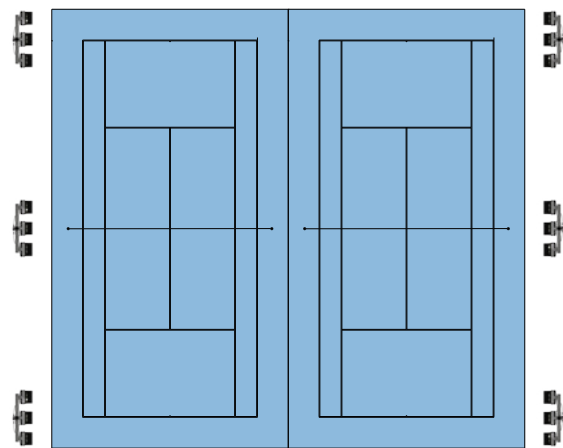
# Tennis Court

Typical Layout



## Single Court

EN 12193	Class I
Floodlights :	4 x Hydra
Poles Height :	10m
Illuminance Level	500 Lux
Min/Av Uniformity :	0,9
Min/Max Uniformity :	0,8
Glare Rating :	GR <35

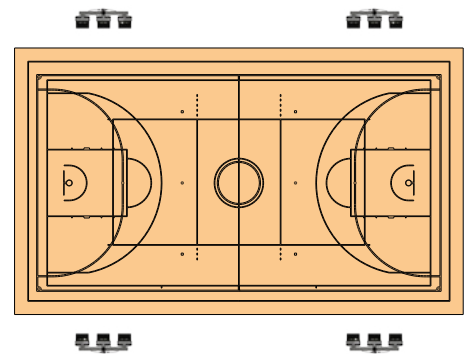


## Double Court

EN 12193	Class II
Floodlights :	6 x Hydra
Poles Height :	10m
Illuminance Level	400 Lux
Min/Av Uniformity :	0,8
Min/Max Uniformity :	0,7
Glare Rating :	GR <38

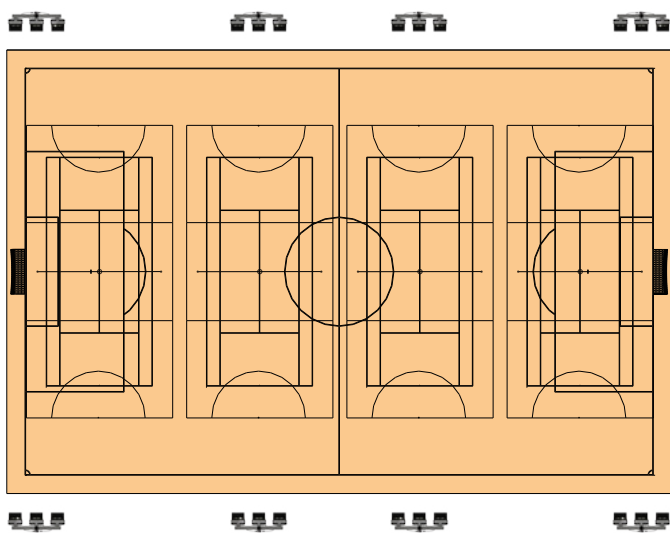
# MUGA Pitch

Typical Layout



## 5v5 Football Multi Field

EN 12193	Class II
Floodlights :	4 x Hydra
Poles Height :	10m
Illuminance Level	370 Lux
Min/Av Uniformity :	0,75
Min/Max Uniformity :	0,65
Glare Rating :	GR <35



## Football Multi Field

EN 12193	Class II
Floodlights :	8 x Hydra
Poles Height :	12m
Illuminance Level	205 Lux
Min/Av Uniformity :	0,75
Min/Max Uniformity :	0,65
Glare Rating :	GR <40

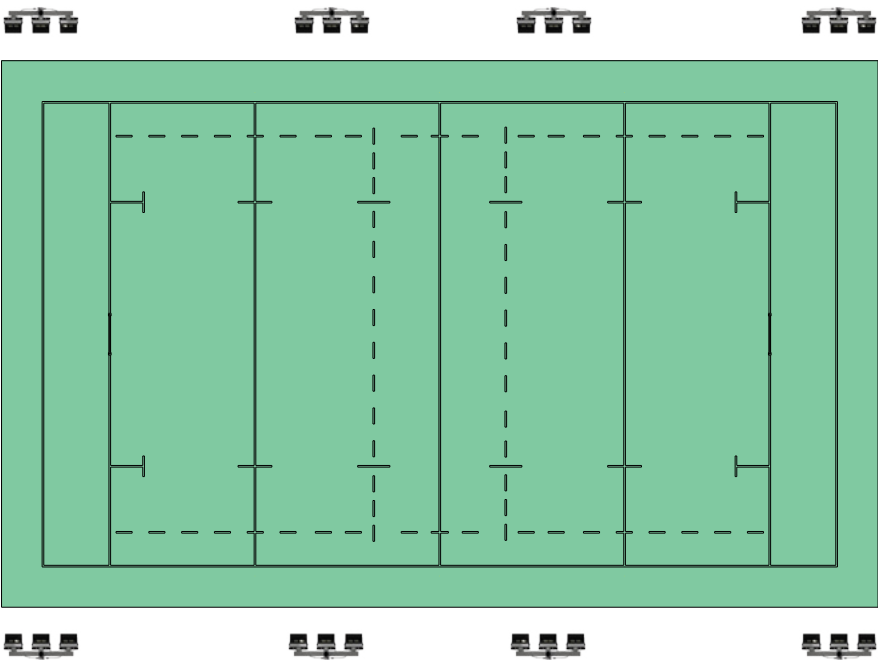
# Rugby Field

Typical Layout



## Rugby Field 8 Masts

EN 12193	Class II
Floodlights :	16 x Hydra (2 x Mast)
Poles Height :	15m
Illuminance Level	200 Lux
Min/Av Uniformity :	0,6
Min/Max Uniformity :	0,5
Glare Rating :	GR <40



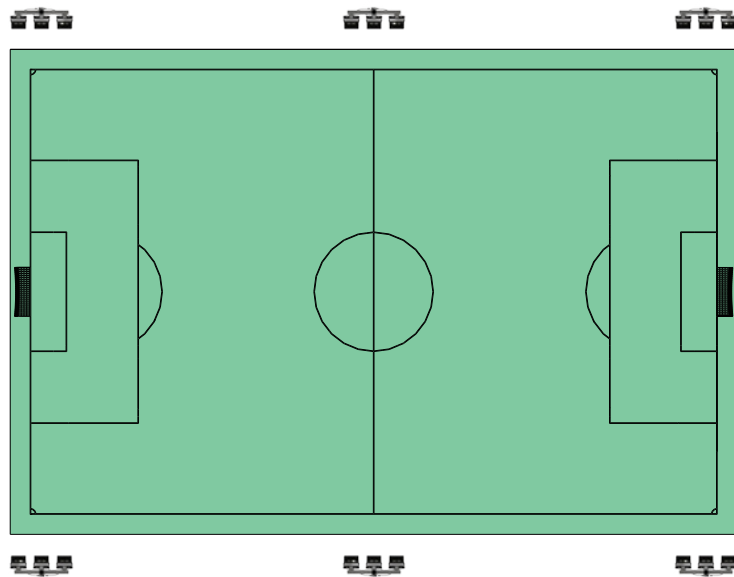
# Football Field

Typical Layout



## Football Field 6 Masts

EN 12193	Class III
Floodlights :	6 x Hydra
Poles Height :	15m
Illuminance Level	100 Lux
Min/Av Uniformity :	0,6
Min/Max Uniformity :	0,6
Glare Rating :	GR <40





# Connect, Manage, Control

Hydra Lighting System comes with a fully integrated control system that allows you to keep all your courts under control at your finger tips.

No wiring, No special training, No headaches.

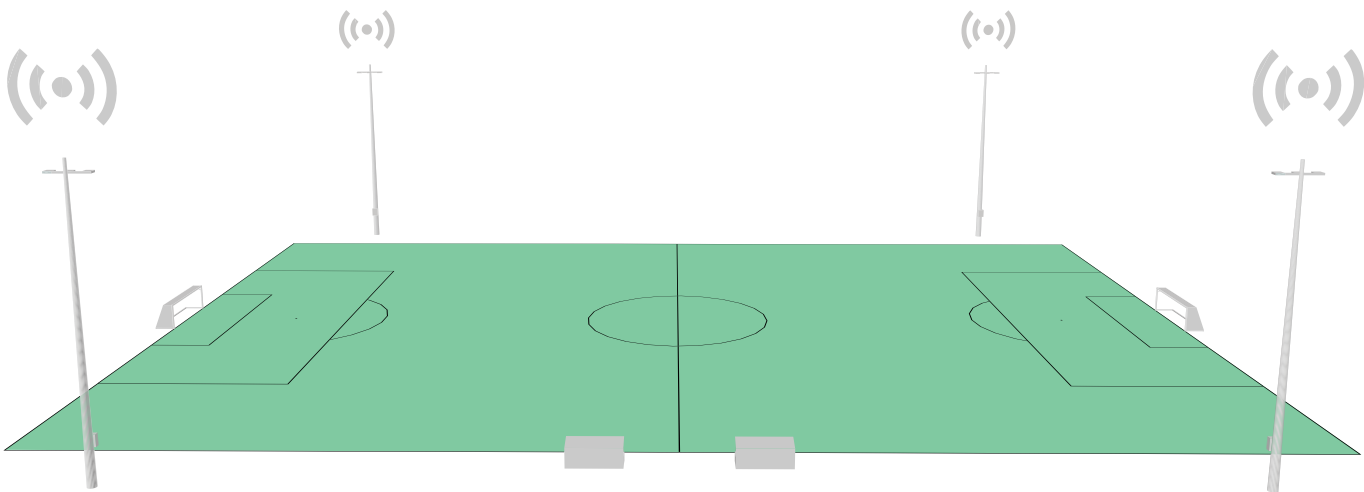
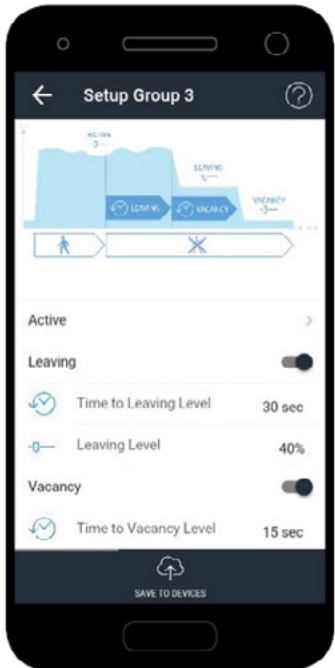
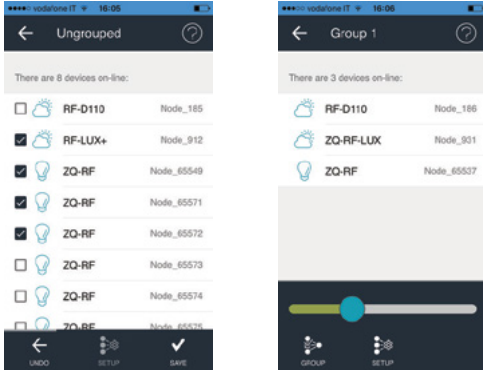
With our innovative App control you can add, group and modify parameters of the lighting levels and schedules of all the installed products via iOS and Android app.

This simple and effective system allows the end user to use preset modes for Training Light Levels, competition Light levels and switch between them using the dedicated app and remote control (up to 4 Presets).

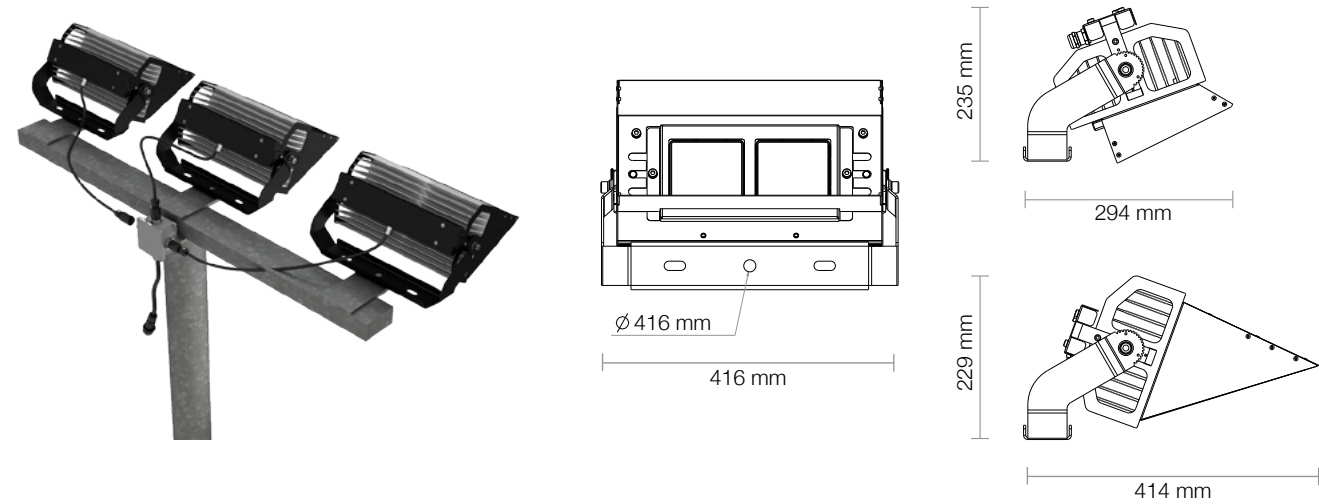
The end user can also monitor the hours of usage of different courts, minimizing energy usage and maximising profit.



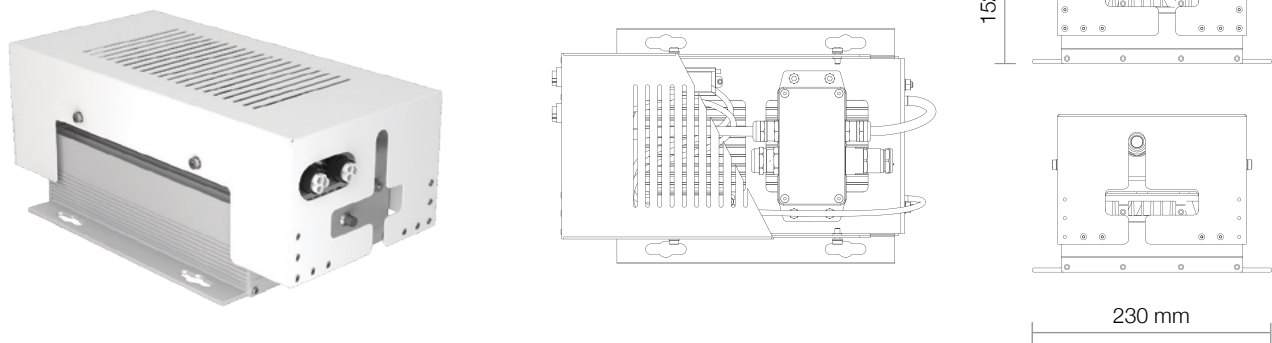
Mobile Lighting Management



## Hydra



## Remote Driver





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

**For more information:**

Midstream Ltd. Wessex House, 1 Chesham Street,  
London SW1X 8ND, United Kingdom

Telephone +44 207 5848310  
Email info@midstreamlighting.com

**midstreamlighting.com**

