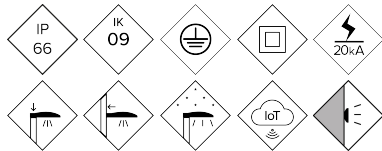


APAM

Floodlight

APOLO M



Flat-profile Floodlight specifically designed for sports stadium lighting. This family offers three different sizes and a wide power range, from 250W to 1500W. It is available with multiple light distributions to suit each project. Its bracket-mounted design allows for adjustment at any angle. It is designed for any dimming control system. It also includes an optional telescopic laser sight for precise aiming of the Floodlights .

MAIN FEATURES:

- High efficiency. Up to 173.8 lm/W actual.
- 3 different sizes. From 250W to 1500W
- Ultralight IP compact driver
- Independent module regulation
- High heat dissipation capacity
- DALI & DMX control
- High resistance to 5G vibrations
- Aluminum and magnesium body to reduce weight and improve heat transfer
- Centralized junction box with watertight connectors for easy installation

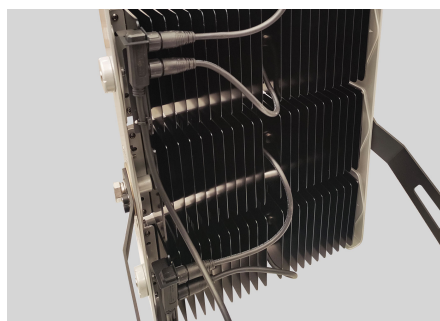
APPLICATIONS:

- Large Area Sports Facilities; Football, Rugby, Athletics
- Major Infrastructure Projects; Airports and Ports

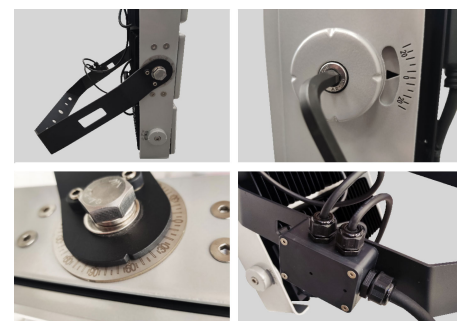
DETAILS:



High-efficiency LED modules.



Lightweight and high thermal transmission.



Easy installation.

[Project sheet](#) | [CAD](#) | [Mounting instructions](#) | [HD image](#)

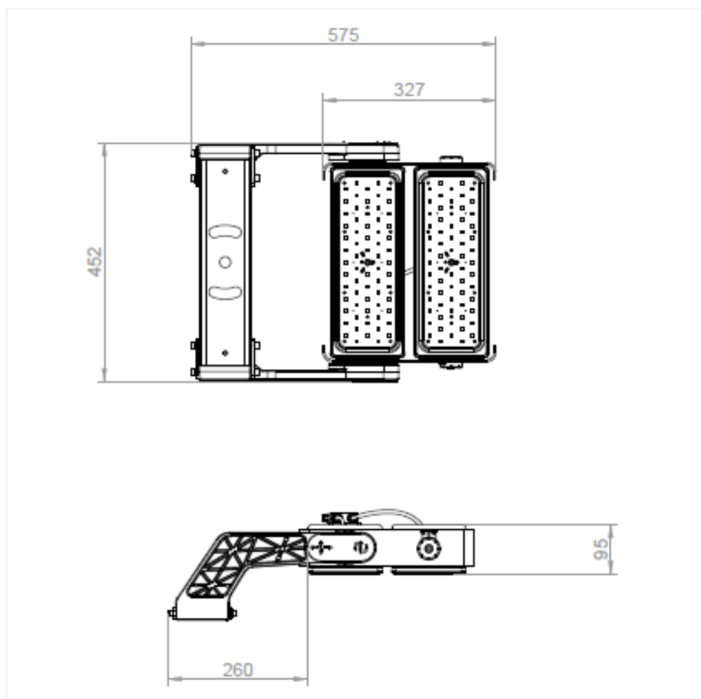
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SPECIFICATIONS :

Housing material:	Die-cast aluminum and magnesium alloy of type EN AC-43000, EN AC-43100, EN AC-43400, EN AC-44100, EN AC-47100 according to standard UNE EN 1706. Aluminum extrusion modules
Diffuser (optic system enclosure):	Polycarbonate
Fixing elements:	18/8 Stainless Steel - AISI 304
Housing:	Dual Cavity: LED Driver / Module
Sealing gaskets:	Silicone Foam
IP rating (luminaire):	IP66
IP rating (optic system):	IP66
IK rating (impact resistance):	IK09
LEDs thermal dissipation:	Heat dissipation through LED modules. Passive dissipation by convection and ensuring thermal contact of the LED modules through high conductivity heat transfer material.
Anti-condensation valve:	Pressure compensation valve that ensures the evacuation of moisture, preventing condensation, maintaining the IP rating of the luminaire.
Paint and finishes:	Polyester powder coating, electrostatically sprayed and oven-sublimated. Corrosion resistant.
Colour:	RAL 9022 color and other colors available upon request
Mounting:	Reinforced steel lyre with U-profile
Tilt range:	Adjustable Floodlight from -180° to 180° inclination.
Maintenance:	Replaceable modules: LEDs, Drivers, SPD. Driver module easily disconnectable via IP67 waterproof connectors.
Recommended mounting height:	18 - 40 m.
Driver:	Adjustable and programmable constant current driver.
Flow Reduction:	Adjustable Driver 0-10V, DALI, DMX
Ready4IOT - Connectivity:	<ul style="list-style-type: none"> - Autonomous multiple-level dimming or virtual midnight - Ready4IoT - Dimming by main voltage - Line switch
Surge protection device (SPD):	Optional 10-20kV and 20kA Type 2 Transient Surge Protector (SPD). Series connection with thermal disconnection fuse for more effective protection at the end of the SPD's life. Optional FULL PROTECTOR
DarkSky Approved	

DRAWING:



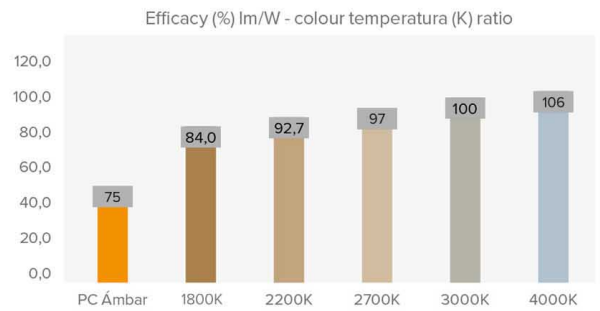
INSTALLATION:





TECHNICAL DATA:

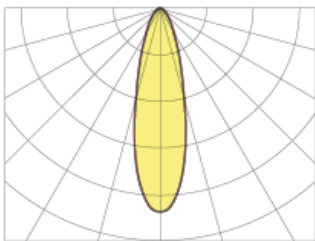
	REF.	N° LEDs	Power W	I Driver mA	Real luminous flux (T) =85°C		Initial luminous flux (T) =25°C	
					Flux lm	Efficacy lm/W	Flux lm	Efficacy lm/W
APOLO M	APAM	132	500	800	83650	167	91000	182



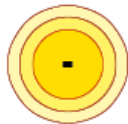
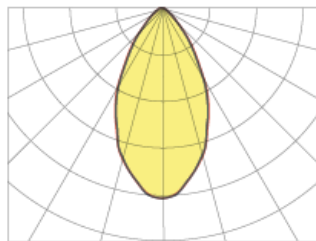
Luminous flux and efficiency at 4000K and CRI>70 – Tolerance ± 3%

PHOTOMETRY:

Circular 25° (C3)



Circular 50° (C5)



*Show 4 recommended lighting distributions. Refer to the 18 typologies.

LEDs MODULE:

LEDs module:	BENITO Zhaga format with 8, 12 and 16 LEDs. Consult for Color Temperatures, CRI and Light Distributions.	
Replaceable module:	YEAH	
LED:	7070	
Number of LEDs:	84	
PCBs format:		
LED nominal efficacy:	182	
Colour temperature:	PC Amber, 2K2, 2K7, 3K, 4K, 5K, 5K7	
Colour rendering index CRI:	>70 (optional >80)	
Average LED useful time L90B10:	L90B10 >100,000 hours	

OPTIC SPECIFICATIONS:

Optic system:	PMMA lenses	
Light distributions:	7 light distribution curves	
Upward light output ratio ULOR:	0%	
Downward light output ratio DLOR:	100%	
Glare index:	Between D5 and D6 (depending on the light distribution)	
Luminous intensity category:	Between G*4 and G*6 (depending on the light distribution)	
Luminous flux CIE n°3:	>95%	
Photobiological safety:	RG0 (risk-free)	
Initial luminous flux Tj=25°C (up to):	lm	109200
Initial luminaire efficacy Tj=25°C (up to):	lm/W	182
Real luminous flux Tj=85°C (UNE EN 13032-4) (up to):	lm	100380
Real luminaire efficacy Tj=85°C (UNE EN 13032-4) (up to):	lm/W	167

ELECTRIC SPECIFICATIONS:

Nominal maximum power (LEDs):	W	540
Maximum power consumed (luminaire):	W	600
Power range:	W	250 - 600W
Maximum current of LED:	mA	<400 (<50% I _{max})
Power supply protection classes IEC:	Class I and II	
Surge protection device (SPD):	Optional 10-20kV and 20kA Type 2 Transient Surge Protector (SPD). Series connection with thermal disconnection fuse for more effective protection at the end of the SPD's life. Optional FULL PROTECTOR	
Common and differential mode protection (SPD) Udc:	kV	10
Max current (8/20) (SPD):	kA	20
Thermal phase disconnection (SPD):	Yes	
Input voltage:	V _{ac}	220-240
Input voltage (max rate):	V _{ac}	198-264
Input frequency:	Hz	47-63
Starting current:	A	<65
Duration of the starting voltage peak:	ms	<0,3
Driver efficacy:	>95%	
Power factor 100% consumption:	>0,98	
Power factor 50% consumption:	>0,95	
Total harmonic distortion (THD):	<10	
Power consumption on standby mode:	W	<0.4
Energy class:	C (According to EU Regulation 2019/2015 EPREL) - A++ IPEA>1.15.	

OPERATING CONDITIONS:

Average LED useful time L90B10:	hours	100.000
Average driver useful life to T _p <70°C:	hours	100.000
Average luminaire useful life L90B10 (TM-21):	hours	72.167
Ambient temperature (T _a):	°C	de -35°C a +50°C
Aerodynamic resistance (C _x S):	m ²	0,214
Vibration test (15Hz 3 axis):		
Guarantee:	Years	5 (extensible up to 10 years)

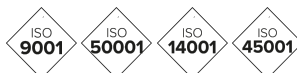
PACKAGING DIMENSIONS:

Net weight	kg	12 (driver 3)
Gross weight	kg	13 (driver 3,5)
Luminaire dimensions (LxWxH)	mm	575x452x95
Packaging dimensions (LxWxH)	mm	630x750x130
Pieces per box	1	
Quantity per container 20ft		
Quantity per container 40ft		

CERTIFICATES:

Security certificates:	EN 60598-1 / EN 60598-2-5 / EN 62493 / IEC 62473
EMC certificates:	EN 55015 / EN 61547 / EN 61000-3-2 / EN 61000-3-3 / EN 61347-2-13 / EN 61347-1 / EN 62384
Other certifications:	IEC 62262 / EN 13032-4 / EN 62717 / EN 6272-1 / EN 6272-2-1 / EN 61643-11

Company Certifications



BENITO

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