

M20A.S

Modular Floodlight



- 500W -

Ongoing



CB



**UK
CA**

CE

RoHS



5
YEARS
WARRANTY

SPECIFICATION

Product: M20A.S Modular Floodlight

Part No.: M20A500S

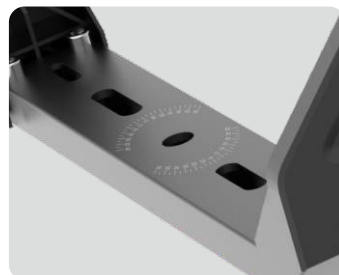
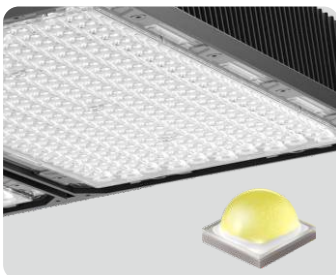


500W

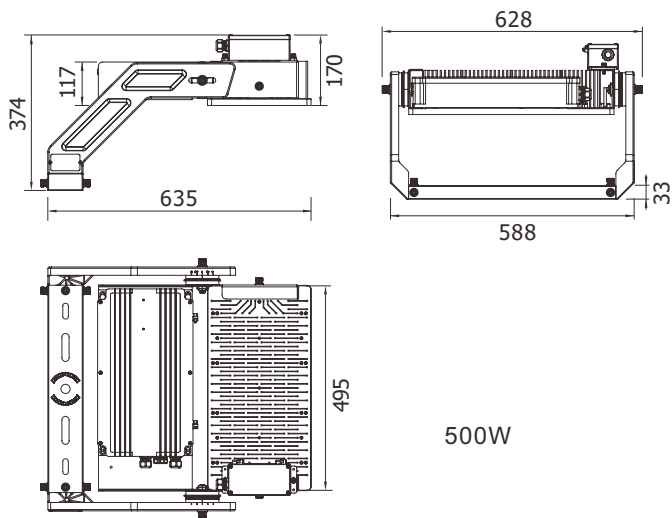
1. Main features

- Cold forging pure aluminum with high thermal conductivity.
- Die-casting aluminum bracket for less weight.
- 3535 ceramic LED with low thermal resistance to enable very high reliability and long lifetime.
- 140-150lm/W based on sharp spill light control.
- Professional optical design, lens can be interchanged.
- Beam angle: 12°/30°/60° symmetric; 40°x15°/60°x15°/100°x17°/100°x60°/130°x25° asymmetric.
- 20KV surge protection.
- Driver box flexible for remote (only one 3-core cable).
- Inrush current limiter integrated.
- Thermal control unit integrated to protect LED module.
- G2.0 driver control board, minimize driver failure rate.
- Dali-2, 0/10V, DMX dimmable available.
- Angle fine tuning attainable precision 0.5°.

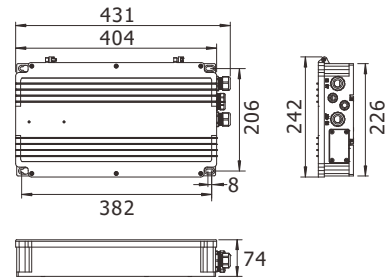
2. Product details



3. Dimensions (Unit: mm)



Control Gear (Driver Box)



Matrix-340-500W

Mono-340-500W-S/H

4. Technical data

Model No.	M20A500S	Model No.	M20A500S	
Light Source	SMD 3535	Beam Angle	12°/30°/60° symmetric; 40°x15°/60°x15° /100°x17°/100°x60°/130°x25° asymmetric	
Control Gear	Matrix/Mono-S/Mono-H	THD (230VAC)	<20%	
Input Voltage Range *	100-305Vac; 249-528Vac	50/60Hz	Surge Protection	20KV
LED Power (W)	450-483	Dimmable	0/10V; Dali-2; DMX	
System Power(W)	479-512	Housing Color	Black / Gray	
Luminous Flux(lm)	69,800-76,500	IP Class	IP66	
Power Factor	>0.95	Working Temperature (°C)	-20 to +50	
CCT (K)	3000/4000/5700	Working Humidity(RH%)	10-90	
CRI	>70 / >80	Power Cable	1m H07RN-F 3x1.5	
		Outer Carton(cm)	80.5*71*29.5(1pcs/CTN)	

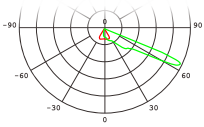
* Certified voltage range: Matrix/ Mono-S(100-240Vac); Mono-H(277-480VacC)

5. Net Weight

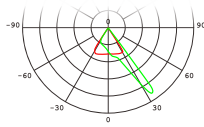
Model No.	Luminaire	Control Gear (0/10V)			Control Gear (Dali)		
		Matrix	Mono-S	Mono-H	Matrix	Mono-S	Mono-H
M20A500S	10.2 Kg	4.6 Kg	5.7 Kg	5.7 Kg	5.1 Kg	4.9 Kg	5.2 Kg

6. Luminous intensity distribution diagram

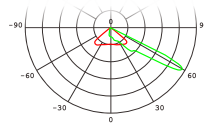
For the IES file, please contact us by E-mail.



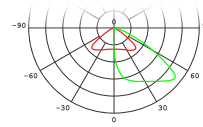
40°x15° Asy



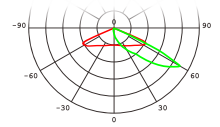
60°x15° Asy



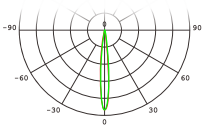
100°x17° Asy



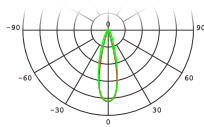
100°x60° Asy



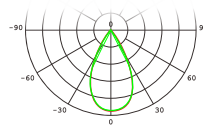
130°x25° Asy



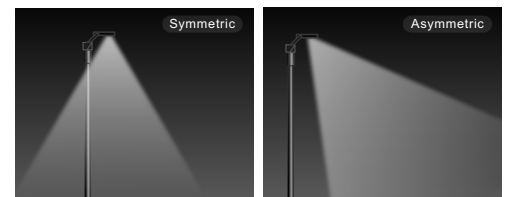
12°



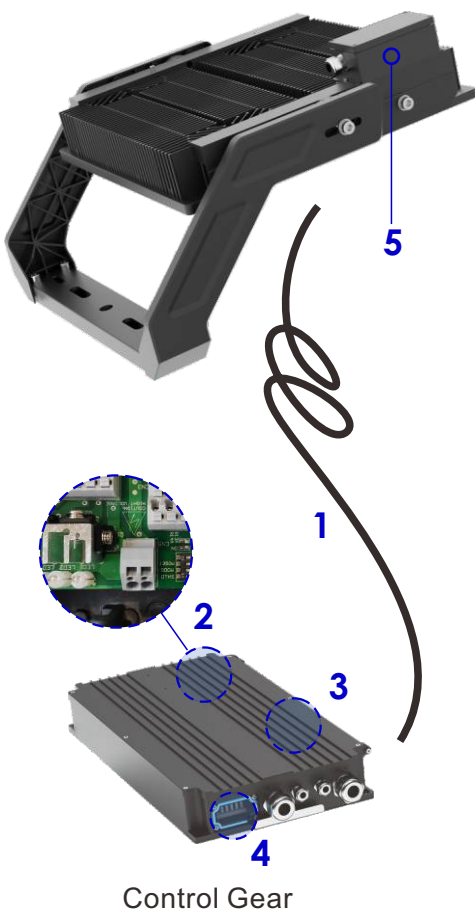
30°



60°



7. Innovations



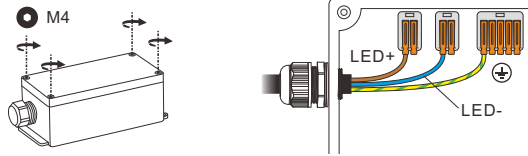
Control Gear

- 1 **Only one 3-core cable go up to the luminaire**
Cost-saving, easy connect
- 2 **Super high reliability:**
Multiple isolated drivers inside with the second generation driver control board.
- 3 **20KV surge protection**
- 4 **Transparent PC window for monitors/Bluetooth signals**
- 5 **Thermal Control Unit**
To protect LEDs from extreme condition

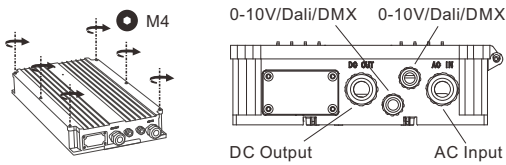
8. Wiring of separated control gear solution



(1) Connection of luminaire

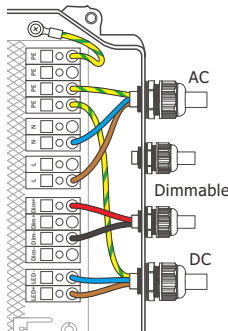


Cable gland of Matrix & Mono

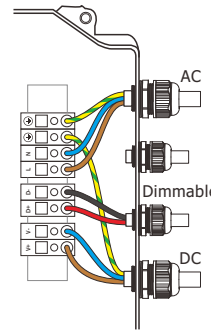


Connection	Cable Gland	Toque (N*m)	Cable Diameter (mm)	Cable Section (mm ²)
AC Input	M20	5.5	8-10/10-12	1.5/2.5
DC Output	M20	5.5	8-10/10-12	1.5/2.5
Dimmable	M16	2.5	7-10	1.0-1.5

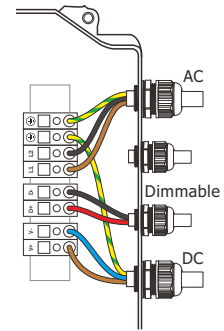
(2) Matrix (0-10V / Dali)



(3) Mono-S (0-10V / Dali)



(4) Mono-H (0-10V / Dali)



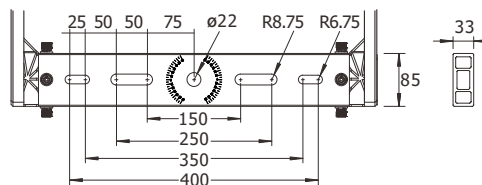
Note: According to the actual needs, the number of connectors will increase or decrease.
Different dimming function cannot be used at the same time.

9. Installation

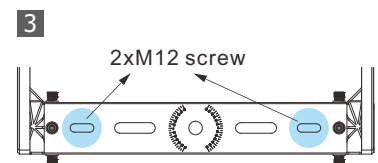
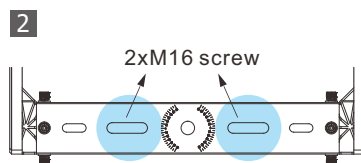
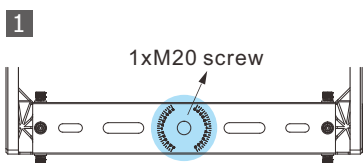


- For details, please refer to Installation Instruction.
- Installation must be performed by qualified person.
- Disconnect before installation.
- Installation tools are not provided.

Mounting bracket

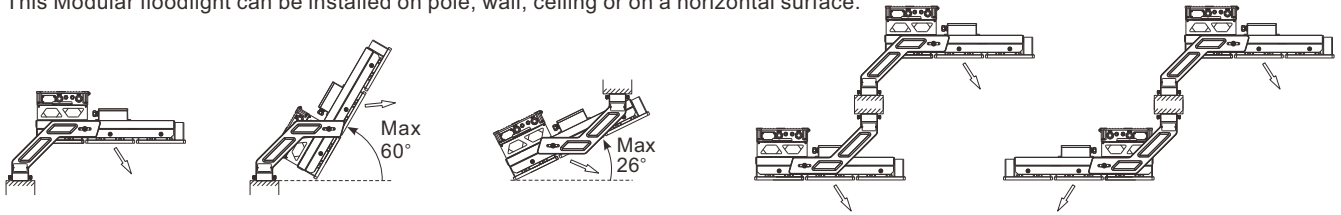


Selection of mounting holes



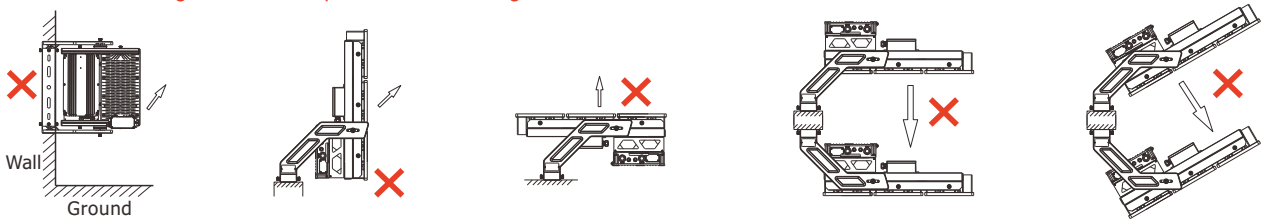
Position allowed

This Modular floodlight can be installed on pole, wall, ceiling or on a horizontal surface.



Position not allowed

Note: Considering the heat dissipation, load bearing and dust accumulation, some installation methods are not allowed.



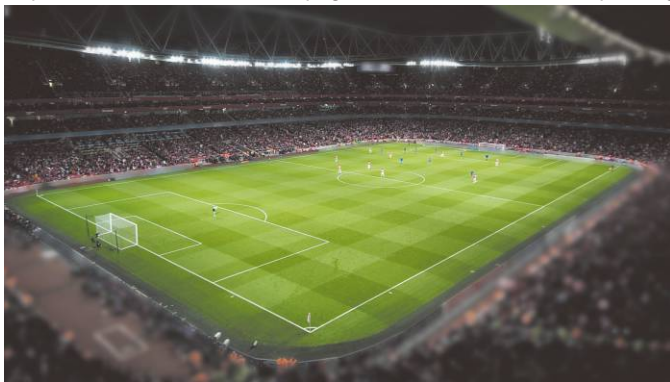
10. Effective Projected Area (EPA=SCx)

Unit: m²

Model \ Tilt angle	0°	10°	20°	30°	45°	60°
M20A500S	0.06	0.08	0.09	0.09	0.10	0.11

11. Application

Suitable for football stadiums, tennis courts, stadiums and other large sports venues, high mast, harbor, airport, warehouse, workshop, gas stations, toll stations, parking area, etc.



Revision History

Version	Change Date	Description of change
1.2	14-Aug-23	The installation drawing has been modified.
1.3	23-Aug-23	According to the IES test data, the power and luminous flux are modified.
1.4	4-Sept-23	According to the IES test data, the power and luminous flux are modified; The dimension of Matrix was modified; Added driver separation solution and EPA information.
2.0	13-Sept-23	The information of separated control gear solution was modified.
2.1	19-Sept-23	Added the text: 3535 ceramic LED, and added the picture of the LED
3.0	1-Nov-23	Updated the dimension of products; Deleted the beam angle: 90°x15°; Added the beam angle: 130°x25°
3.1	14-Nov-23	The FCC certification icon was removed, and the light distribution diagram of 130°x25° was modified.
3.2	20-Nov-23	The wiring diagram of Mono has been modified