

# M900A compact LED weatherproof batten

This compact LED batten is designed in accordance with Edition 7 of IEC 60595-1:2008-04 and SS563-2010 Spring standard. This series of luminaire is suitable for indoor and outdoor public utility lighting applications. The luminaire is providing with optional power saving feature by installing the built-in microwave motion sensor.

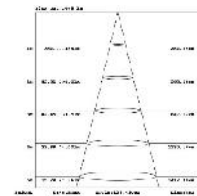
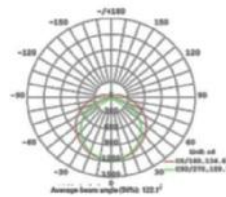


## Physical Characteristic

Construction of housing	The housing of luminaire is fabricated by SABIC® PC0703R resin. It is a low flow, heat and UV stabilized, polycarbonate material that provides excellent impact strength and excellent heat dissipation efficiency. Thus, it is adaptable to rugged environmental with temperature resistant capability from -40 ~ +75°C.
Installation	Fitting and accessories are available for either surface-mount or drop-down installation.
Ingress protection level	IP65 rating compliant
Mechanical impact level	IK10 rating compliant
Operation temperature	-20°C ~ +50°C
Operation humidity	Rh ≤95% @ -20°C to +50°C
Rated life span	>50000 hours (L70 @ IED LM80)
Harmonic distortion THD	15%
Industrial standard	En55015   IEC62347-1   IEC61347-2-13   EN60598-1 are compliant

## Light Characteristic

Light source	High intensity SMD2835
Luminous efficacy	≥130 lumen per watt
Beam angle	120 degrees (could be customized)
Color rendering index	Ra≥80
Correlated color temp	3000K (K3); 4000K (K4); 5000K (K5)
Glaring index	UGR ≤25



## Electrical Characteristic

Input power	220~240VAC, 47/63Hz
Stroboscope	Wave depth ≤0.5% ( IEEE 1789)
Current accuracy	±5%
Total harmonic	≤20%@230Vac
Surge current	≤30A@200uS@230Vac
Power factor	≥0.95
Power efficiency	≥88% of operating voltage 34~40VDC
Short-circuit	Self-recovery in hiccup mode
Operating temperature	-30 - +50
Working humidity	20-90%RH (without condensation)
Safety standards	ENEC: EN61347-1:2015 · EN 61347-2-3:2014/A1:2017 EN 62384 : 2016/A1:2009; CE-LVD: EN 61347-2-13:2014/A1:2017; EN 61347-1:2015 · EN 62493:2015 CB:IEC 61347-1:2015; IEC61347-2-3:2014; IEC 61347-2-13:2014/AMD1:2016; CCC:GB19510.1-2009 · GB19510.14-2009
Electromagnetic anti-interference	CE-EMC/RCM: EN61000-4-2,3,4,5,6,11(L-N:1KV, L/N-PG:2KV) CCC:GB/T17626.2,3,4,5,6,11(L-N:1KV, L/N-PG:2KV)
Ingress protection rating	IP20
Cable grand type	PTM16 for 300/500V neoprene wire
Protection types	OCO, OVP, SCO

## Microwave Motion Sensor (built-in)

Frequency	5.8GHz/±75MHz
Microwave power	<0.3mW
Input power	24W (max)
Standby power	0.5W (230Vac)
Input current	0.12A(max)
Output LED voltage	28~42VDC
Output LED power	8~19W
Detection area	50%~100%
Holding time (default)	5s/3min/10min
Daylight threshold	15lux or disable
Standby period (default)	0s/30s/1min/+∞
Standby dimming level	10%/30%
Mounting height	2.5~6.0m ceiling height
Detection range	4~7m radius from ceiling
Operation temperature	Ta: 20°C~50°C, Tc: 80°C

Holding time, standby period and dimming level could be reset by remote controller after installation.



Ceiling mounted



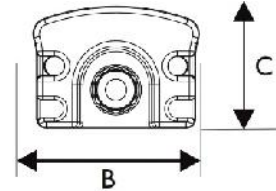
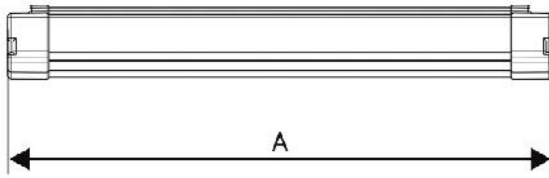
Wall mounted

## Product Specification (standard features)

Model #	Wattage		Luminous Efficacy (lumen)	Overall Size (mm)		
	Rated	System		A	B	C
M9060A-080W10KX	10.0W	10.5W	1300~1400	600	60.0	70.0
M9060A-120W15KX	15.0W	15.8W	1950~2100	600	60.0	70.0
M9120A-160W20KX	20.0W	21.1W	2600~2800	1200	60.0	70.0
M9120A-288W36KX	36.0W	37.9W	4690~5040	1200	60.0	70.0
M9120A-320W42KX	42.0W	42.1W	5460~5880	1200	60.0	70.0
M9150A-400W50KX	50.0W	52.6W	6500~7000	1500	60.0	70.0
aM9150A-480W60KX	60.0W	63.2W	7800~8400	1500	60.0	70.0
M9150A-560W70KX	70.0W	73.7W	9100~9800	1500	60.0	70.0



End-cap connector



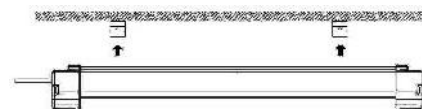
## Installation

The luminaire is designed for either ceiling mounted or suspended installation. Two pieces of stainless-steel convex spring brackets could be simply clipped to the glove provided by the fitting and further secured by PM4 x 40mm tightening screws after clip-on (see picture below).

Two ellipse holes on top of the spring convex bracket are provided for concrete ceiling mounting purposes. Whereas, the round hole at the center would be used for mounting the wire or steel rod for suspended installation.

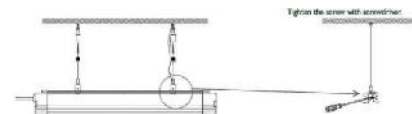
### Surface-mounted installation

- Step 1: Mounting two convex brackets to the concrete ceiling by M6 self-taped screw with wall plug at an adequate distant as shown in picture on right.
- Step 2: The groove as provided by the fitting could be easily seized the luminaire with the spring convex bracket.
- Step 3: Tightening the PM4 x 40mm security screw to the spring convex bracket as shown in picture above.
- Step 4: Connect the grid power supply with the luminaire to complete the installation.



### Suspended installation

- Step 1: Secure the mounting bracket of the suspended steel rods or pipes to the concrete ceiling.
- Step 2: Fastening the top end of the steel rods or pipes of specific drop-down length with the mounting brackets.
- Step 3: Connect the bottom end of the steel rods or pipes with the centre round hole of the convex bracket.
- Step 4: Seizing the luminaire to the groove as provided by the fitting and tightening the PM4 x 40mm security screws to the spring convex bracket.
- Step 5: Connect the grid power supply with the luminaire to complete the installation.



## Applications



Precinct walkway lighting



Pedestrian overhead bridge



Multi-storey carpark lightings



Dormitory barracks security