

# LED Light MSL-ATHENA-S- Specifications





# About Us,

MSL USA's LED streetlights are trusted by electrical contractors, government agencies, and project managers across the United States. Our selection of streetlights include fixtures with dusk to dawn photocell technology as well as weather resistant coating to ensure smooth operation through harsh weather conditions. We also offer solar powered streetlights for environmentally friendly projects. We advanced production technology, we deliver smart lighting solutions for streets, gardens, residential areas, and many more...



## **MSL-ATHENA-S**





MSL-ATHENA-S is cutting-edge lighting solution is meticulously designed to withstand the test of time, minimizing maintenance and replacement costs while delivering consistent, high-quality illumination year after year. Built with premium-grade materials, this LED streetlight is engineered to handle a wide range of environmental conditions, from extreme heat to heavy rain and strong winds. Its weatherproof and corrosion-resistant design ensures unwavering performance even in the most challenging outdoor settings, making it ideal for streets, highways, parking lots, and public places.



# **SPECIFICATIONS AND DIMENSIONS**

Model	Power Consumption (W)	Luminaire Output Flux (Im)	Luminaire Efficacy(lm/W)	ЕРА	Product Dimensions (LxWxH)	Net Weight
ATN-S-40	40	5863	143	O.49ft <sup>2</sup> O.O5m <sup>2</sup>	23.98" x 16.06" x 3.23" (609 x 408 x 82mm)	17.68lbs (8.O2kg)
ATN-S-60	6O	899O	145	O.49ft <sup>2</sup> O.05m <sup>2</sup>	23.98" x 16.06" x 3.23" (609 x 408 x 82mm)	17.68lbs (8.02kg)
ATN-S-85	85	12823	147	O.49ft <sup>2</sup> O.O5m <sup>2</sup>	23.98" x 16.06" x 3.23" (609 x 408 x 82mm)	17.68lbs (8.O2kg)
ATN-S-100	100	15492	151	O.49ft <sup>2</sup> O.O5m <sup>2</sup>	23.98" x 16.06" x 3.23" (609 x 408 x 82mm)	17.68lbs (8.O2kg)
ATN-S-120	120	17241	150	0.49ft <sup>2</sup> 0.05m <sup>2</sup>	23.98" x 16.06" x 3.23" (609 x 408 x 82mm)	17.88lbs (8.11kg)
ATN-S-160	160	24427	160	O.54ft <sup>2</sup> O.O5m <sup>2</sup>	27.20" x 16.06" x 3.23" (691 x 408 x 82mm)	20.66lbs (9.37kg)
ATN-S-200	200	29433	151	0.54ft <sup>2</sup> 0.05m <sup>2</sup>	27.20" x 16.06" x 3.23" (691 x 408 x 82mm)	20.79lbs (9.43kg)
ATN-S-23O	230	32625	147	O.54ft <sup>2</sup> O.O5m <sup>2</sup>	27.20" x 16.06" x 3.23" (691 x 408 x 82mm)	21.14lbs (9.59kg)
ATN-S-300	300	45069	150	0.59ft <sup>2</sup> 0.05m <sup>2</sup>	30.43" x 16.06" x 3.23" (773 x 408 x 82mm)	25.2Olbs (11.43kg)
ATN-S-38O	38O	57235	155	O.64ft <sup>2</sup> O.06m <sup>2</sup>	33.66" x 16.06" x 3.23" (855 x 408 x 82mm)	28.66lbs (13.00kg)
ATN-S-45O	450	67777	156	0.84ft <sup>2</sup> 0.08m <sup>2</sup>	45.73" x 16.06" x 3.23" (1161 x 408 x 82mm)	39.31lbs (17.83kg)
ATN-S-540	540	80986	157	0.90ft <sup>2</sup> 0.08m <sup>2</sup>	48.94" x 16.06" x 3.23" (1243 x 408 x 82mm)	42.9Olbs (19.46kg)
ATN-S-63O	630	94805	156	O.96ft <sup>2</sup> O.09m <sup>2</sup>	52.17" x 16.06" x 3.23" (1325 x 408 x 82mm)	47.47lbs (21.53kg)
ATN-S-72O	720	107133	155	1.O2ft <sup>2</sup> O.O9m <sup>2</sup>	55.39" x 16.06" x 3.23" (1407 x 408 x 82mm)	53.51lbs (24.27kg)



### Housing and Finish

ATHENA-5 housing use premium die-cast AD12 aluminum structure resists high shock and 3G vibration per ANSI C136.31-2O10. Polyester powder coat finish provide corrosion resistant polyester powder coat finish that meets ASTM B117/ISO 9227:2O12.

Standard colors are Gray, Black, Dark Bronze and White



### **Thermal Management**

Chimney cooling concept to light engine with positive thermal management.

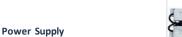
Using high thermal conductivity PCB and extrusion 6063 aluminum heat sink with wavy stripes inside and outside enlarging the contacting area of air to optimize heat dissipation for LED engine. Including driver compartment(s) separating driver(s) from light engine(s) to lower the thermal radiation and reaching the best thermal management.



### **Optic Lens**

Universal modular optic lens flexible to family

products and free of glass cover protection. High transmittance and UV stabilized polycarbonate with precisiondesigned for multiple distributions to optimal efficiency and yellow color aging.



High quality INVENTRONICS, MEANWELL or SOSEN driver with FCC compliant that are rated over 50,000hrs of life with 1-10V or DALI dimming function. High power factor over 0.95 and low total harmonic distortion less than 10% of driver to optimize largest energy saving. Its IP67 rating thanks to driver design and IP67 quick connector.



High quality international top brand LED chips Lumileds/ CREE/ OSRAM to optimize precise light distribution and high lumen efficiency.

### Lifetime of the LEDs @ Tq 25°C

>50,000h - L90 >150,000h - L70



### **Driver Comp6rtment**

High-strength die-cast aluminum gear box separating driver(s) and light engine(s) to lower thermal radiation. Fixing driver(s) holder with high thermal conductivity on a close to gear box to lower its temperature and extending its life-span. And tool-less entry maintenance available.



### **LED Bar**

LED engine with modular design allows power from 40W to 72OW easily with unit increasing. Quick IP67 connectors to easy hassle-free maintenance and replacement. A design gap between LED bars optimize thermal management and minimizes wind load.

### Mounting

High-strength die-cast slip fitter with UV stabilized polyester powder coat finish for whole family product against vibration fracture. Adjustable for 1 5/8-2 3/8"(42mm-60mm) 0.D. tenon mount. Precise +/-90 dgrees level adjusting on-site offers exacting illumination performance. Multiple brackets changeable easily for various installation.



### Glare Shield / House Side Shield

The optional light shield mounts towards the front or rear of the LED bar to provide glare or house side shielding functionality, respectively. The shield consists of 1.5mm thickness steel, UV stabilized polyester powder coated to match the color of the housing and reduce corrosion. Illustration here depicts the shield in a house side shield orientation.



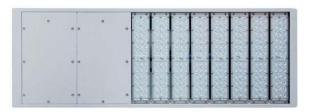


### **Key Advantages**

- High efficiency with low operating costs.
- Multiple light distributions to replace discharge lamps from 250W to 2000W.
- The slim and low profile body design minimizes wind load.
- High energy savings compared to systems with traditional HID luminaires.
- Dimmable for even more energy savings.
- Modular design for easy hassle-free maintenance and component hardware replacement.
- Unique and precise light distributions with direct or indirect lighting to ensure the right light and glare control.
- Long life-span thanks to robust design.



Modular LED engine with multiple light distribution optic lens for all field application and easy for maintenance.



Wide range of power level solutions from 40W to 72OW offer the best solution for all retrofit&new construction applications.

Durable high-strength body with slim & low profile body minimizes wind load.

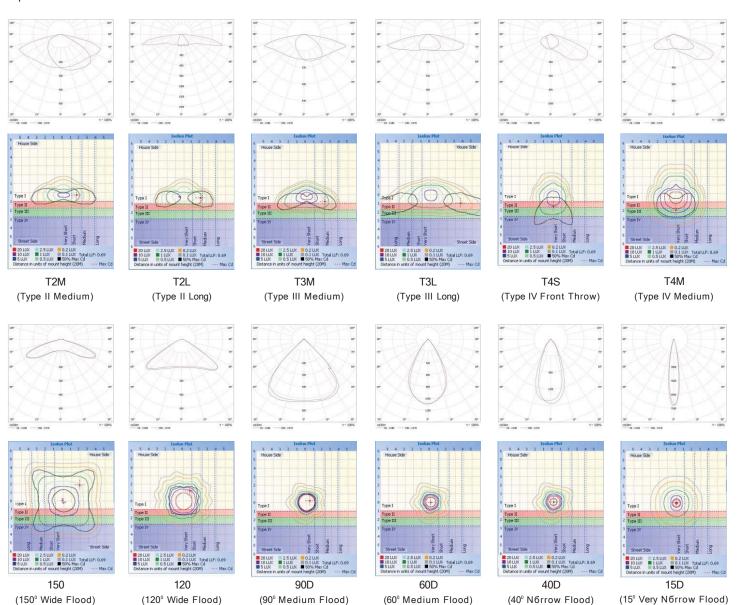




High-strength slipfitter with +/-90 dgrees of level adjusting and complys 3G vibration per ANSI C136.31-2010.



- Patented modular optic lens with high transmittance and UV stabilized polycarbonate providing highest efficacy to LED engine.
- Light distribution design with spill light control technology to avoid light pollution and wasting.
- Wide-range of optic lenses and flux options can send light exactly in the right direction and illuminate only the area of interest with highest light efficacy.
- IESNA light distributions of symmetrical and asymmetrical of TYPE I(Short and Medium), TYPE II(Short, Medium and Long), TYPE III(Medium and Long), TYPE IV(Short and Medium) and TYPE V(10°/15°/25°/40°/60°/90°/120°/150°) available.
- Variety of NEMA distributions: N (3x3), M (4x4), M (5x5), W (6x6), W (7x6) 6nd W (6x7).
- Entire optical aperture illuminates to create a larger luminous surface area resulting in a low glare appearance without sacrificing optical performance.
- Aluminaire available to multiple optic lens to delivering exactly high-efficacy lighting and glare control to different lighting standards thanks to the flexible and universal modular optic lens of different distributions.













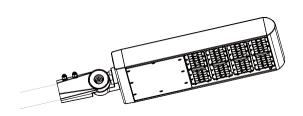




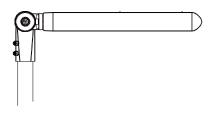




### **INSTALLATION INSTRUCTION**



1 Horizontal Tenon Mounting



2 Post-top Mounting



# **Uses and Applications Guide**

### **USES AND APPLICATIONS GUIDE**

Stadiums	
Logistics Center	
Industrial Halls	
Warehouses	
Shopping Malls	

# **Ordering Guide**

Model	Wattage	Voltage	Optics	Color Temp.	Mounting	Body Color	Lighting control	Options
ATN-S	40W 60W 85W 100W 120W 160W 200W 230W 300W 380W 450W 540W 630W 720W	UL 90-305V UH 249-528V*	T1S-Type I Short T1M-Type I Medium T2M-Type II Medium T2L-Type II Long T3M-Type III Medium T3L-Type III Medium T3L-Type III Long T4S-Type IV Front Throw T4M-Type IV Front Throw T4M-Type IV Medium 10D-10' Very Narrow Flood 15D-15' Very Narrow Flood 40D-40' Narrow Flood 40D-40' Medium Flood 90D-90' Medium Flood 90D-90' Medium Flood 120-120' Wide Flood	27K 30K 35K 40K* 50K* 57K 65K	<b>S</b> Knuckle Slip Fitter	GR-Grey* BZ-Bronze BLK-Black WH-White CU-Customized	10 1-10V Dimming DA DALI BL Blank	GS Glare Shield 7P NEMA 7-Pin Receptacle PC Photocell MS Motion sensor BC Bird Spike SC Safety cable *10KV Surge Protective Device *20KV Surge Protective Device *Customize up on request

DALI unavailable

<sup>\*</sup> Regular stocked item