



LED Light

MSL-ATHENA-U- 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-U



MSL-ATHENA-U 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 (lm)	Luminaire Efficacy(lm/W)	EPA	Product Dimensions (LxWxH)	Net Weight
ATN-U-40	40	5863	143	0.49ft² 0.05m²	20.55" x 17.83" x 2.95" (522 x 453 x 75mm)	21.30lbs (9.66kg)
ATN-U-60	60	8990	145	0.49ft² 0.05m²	20.55" x 17.83" x 2.95" (522 x 453 x 75mm)	21.30lbs (9.66kg)
ATN-U-85	85	12823	147	0.49ft² 0.05m²	20.55" x 17.83" x 2.95" (522 x 453 x 75mm)	21.30lbs (9.66kg)
ATN-U-100	100	15492	151	0.49ft² 0.05m²	20.55" x 17.83" x 2.95" (522 x 453 x 75mm)	21.30lbs (9.66kg)
ATN-U-120	120	17241	150	0.49ft² 0.05m²	20.55" x 17.83" x 2.95" (522 x 453 x 75mm)	21.50lbs (9.75kg)
ATN-U-160	160	24427	160	0.54ft² 0.05m²	23.78" x 17.83" x 2.95" (604 x 453 x 75mm)	24.41lbs (11.07kg)
ATN-U-200	200	29433	151	0.54ft² 0.05m²	23.78" x 17.83" x 2.95" (604 x 453 x 75mm)	24.54lbs (11.13kg)
ATN-U-230	230	32625	147	0.54ft² 0.05m²	23.78" x 17.83" x 2.95" (604 x 453 x 75mm)	24.89lbs (11.29kg)
ATN-U-300	300	45069	150	0.59ft² 0.05m²	27.01" x 17.83" x 2.95" (686 x 453 x 75mm)	28.66lbs (13.00kg)
ATN-U-380	380	57235	155	0.64ft² 0.06m²	30.24" x 17.83" x 2.95" (768 x 453 x 75mm)	32.28lbs (14.64kg)
ATN-U-450	450	67777	156	0.84ft² 0.08m²	41.10" x 17.83" x 2.95" (1044 x 453 x 75mm)	43.10lbs (19.55kg)
ATN-U-540	540	80986	157	0.90ft² 0.08m²	44.33" x 17.83" x 2.95" (1126 x 453 x 75mm)	46.25lbs (20.98kg)
ATN-U-630	630	94805	156	0.96ft² 0.09m²	47.56" x 17.83" x 2.95" (1208 x 453 x 75mm)	50.84lbs (23.06kg)
ATN-U-720	720	107133	155	1.02ft² 0.09m²	50.79" x 17.83" x 2.95" (1290 x 453 x 75mm)	57.08lbs (25.89kg)

Housing and Finish

ATHENA-U housing use premium die-cast ADC12 aluminum structure resists high shock and 3G vibration per ANSI C136.31-2010. Polyester powder coat finish provide corrosion resistant polyester powder coat finish that meets ASTM B117/ISO 9227:2012.

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 precision-designed for multiple distributions to optimal efficiency and yellow color aging.

High-Performance LED

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

Lifetime of the LEDs @ Tq 25°C

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



Power Supply

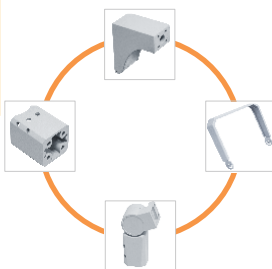
High quality INVENTRONICS, MEANWELL or SOSEN driver with FCC compliant that are rated over 50,000hrs of life with 1-10V or DALI dimming function. High power factor over 0.95 and low total harmonic distortion less than 10% of driver to optimize largest energy saving. Its IP67 rating thanks to driver design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

Driver Compartment

High-strength die-cast aluminum gear box separating driver(s) and light engine(s) to lower thermal radiation. Fixing driver(s) on a holder with high thermal conductivity close to gear box to lower its temperature and extending its life-span. Remoted Assembly Gear is available for easy replacement and maintenance (installation at a distance of up to 20m from the flood light).

Mounting

UV stabilized polyester powder coat finish steel yoke mounting bracket for all family product. Stiffeners and triangular fixed design to reinforce the bracket against vibration fracture. Precise on-site setting thanks to an incorporated inclination system of horizontal and vertical for the complete bracket. Multiple brackets changeable easily for various installation.



LED Bar

LED engine with modular design allows power from 40W to 720W 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.



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 glare shield in a front side 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.



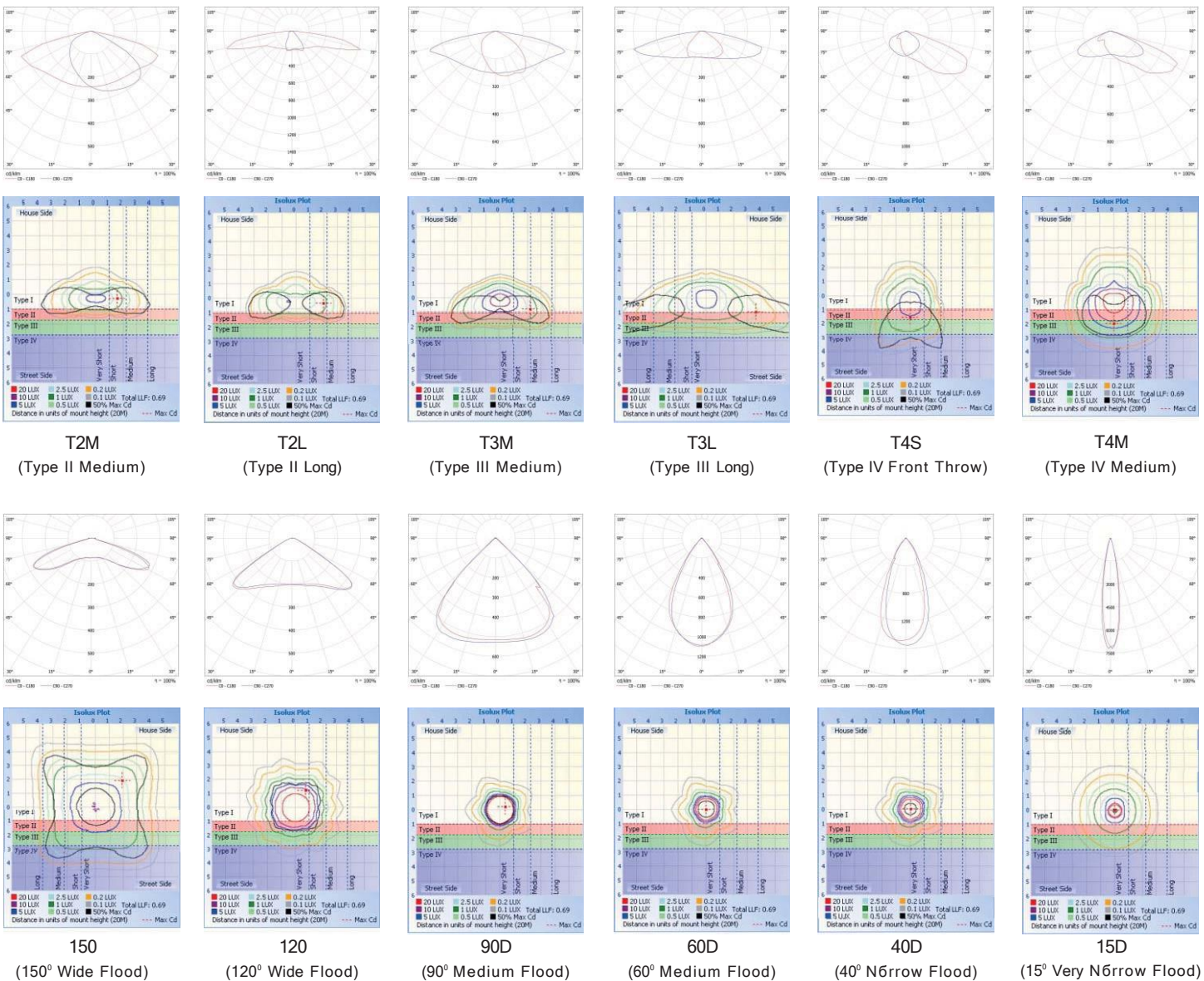
Wide range of power level solutions from 40W to 720W offer the best solution for all retrofit & new construction applications.

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



The universal U-bracket includes a graduation system for precise on-site settings. Each two M14&M8 bolts strengthen the light free of loosen opportunity

- 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) and 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.





ATN-U-040-UL-U, ATN-U-060-UL-U,
ATN-U-085-UL-U, ATN-U-100-UL-U,
ATN-U-120-UL-U,
ATN-U-040-UH-U, ATN-U-060-UH-U,
ATN-U-085-UH-U, ATN-U-100-UH-U,
ATN-U-120-UH-U



ATN-U-160-UL-U, ATN-U-200-UL-U, ATN-U-230-
UL-U, ATN-U-160-UH-U, ATN-U-200-UH-U, ATN-
U-230-UH-U



ATN-U-300-UL-U, ATN-U-300-UH-U



ATN-U-380-UL-U, ATN-U-380-UH-U



ATN-U-450-UL-U, ATN-U-450-UH-U



ATN-U-540-UL-U, ATN-U-540-UH-U

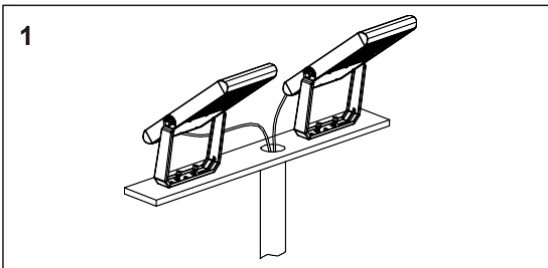


ATN-U-630-UL-U, ATN-U-630-UH-U

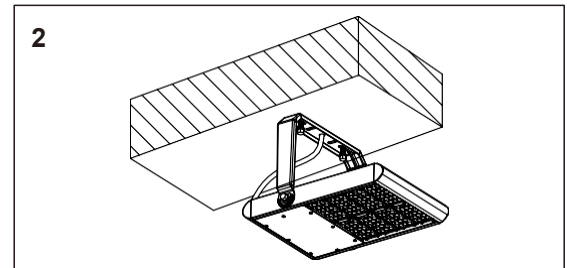


ATN-U-720-UL-U, ATN-U-720-UH-U

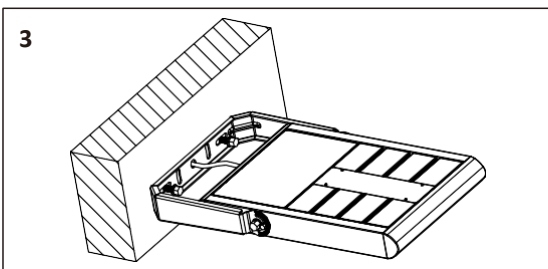
INSTALLATION INSTRUCTION



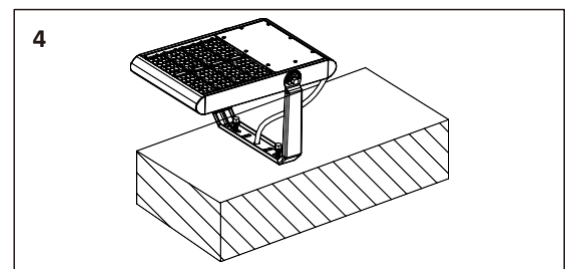
Pole/Tower Mounting



Ceiling Mounting



Wall Mounting



Ground 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-U	40W	UL	T1S-Type I Short	27K	U	GR-Grey*	10	GS
	60W	90-305V	T1M-Type I Medium	30K	Yoke Bracket	BZ-Bronze	1-10V Dimming	Glare Shield
	85W	UH	T2M-Type II Medium	35K		BLK-Black	DA	7P
	100W	249-528V*	T2L-Type II Long	40K*		WH-White	DALI	NEMA 7-Pin
	120W		T3M-Type III Medium	50K*		CU-Customized	BL	Receptacle
	160W		T3L-Type III Long	57K			Blank	BS
	200W		T4S-Type IV Front Throw	65K				Bird Spike
	240W		T4M-Type IV Medium					SC
	300W		10D-10° Very Narrow Flood					Safety cable
	380W		15D-15° Very Narrow Flood					*10KV
	450W		25D-25° Narrow Flood					Surge Protective Device
	540W		40D-40° Narrow Flood					*20KV
	630W		60D-60° Medium Flood					Surge Protective Device
	720W		90D-90° Medium Flood					*Customize up on request
			120-120° Wide Flood					
			150-150° Wide Flood					

▼ DALI unavailable
* Regular stocked item