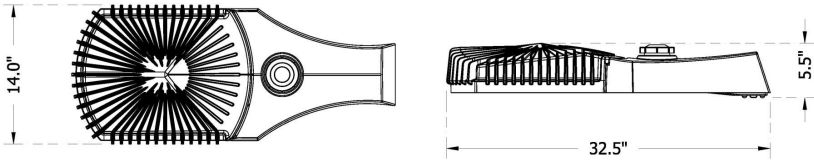


Project Name

Qty

Type

Catalog / Part Number



7 Year Warranty

Mounting Configuration

1 Arm Mount

2 Arm Mount @ 180°

2 Arm Mount @ 90°

3 Arms @ 120°

3 Arms @ 90°

4 Arms @ 90°

1 Arm Mid-Mount

2 Arm Mid-Mount @ 180°

Finish

Black Textured

Urban Gun Metal Textured

Urban Gun Metal Matte

Urban Bronze Textured

Urban Bronze Matte

Urban Silver Textured

Urban Silver Matte

Urban White Textured

Urban White Matte

Custom Match

Description

The AP650 Aspire™ is a versatile luminaire suitable for roadway, site & area, and general lighting applications. With excellent vertical light distribution, high uniformity, and enduring performance, the Aspire™ is ideal for municipal, commercial, and institutional markets.

EPA: 1.13 (#2) | WEIGHT: 34 LBS

Features

Mounting Configuration

1A: 1 Arm Mount
2A: 2 Arm Mount @ 180°
2A90: 2 Arm Mount @ 90°
3A: 3 Arms @ 120°
3A90: 3 Arms @ 90°
4A: 4 Arms @ 90°

Control Receptacle

R7: 7-Pin control receptacle only

Control

SC: Shorting Cap
PE: Twist-Lock Photocontrol (120V-277V)
PE4: Twist-Lock Photocontrol (347V-480V)

Optional Fuse

FHD: Double Fuse and Holder

Optional House Side Shield

BLOC: Back Light Optical Control
HSS: 90° House Side Shield

Optional Fixed Dimming Resistor Board

FDRB: Fixed Dimming Resistor Board

Physical

Fixture

AP650: Aspire

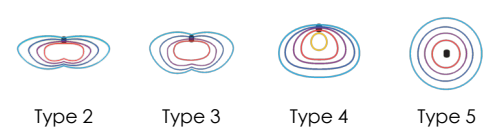
Lens

CA: Clear Acrylic

CCT - Color Temp (K)



Distribution Type



IP Rating



Certifications



Optional Pole Adapter

- BA4:** Bolt on arm, for 4" round pole
- BA5:** Bolt on arm, for 5" round pole
- BA6:** Bolt on arm, for 6" round pole
- BAS:** Bolt on arm, for square pole
- SMS:** Square Mount, for square pole

Finish

- BKT:** Black Textured
- UB:** Urban Bronze Matte
- UBT:** Urban Bronze Textured
- USL:** Urban Silver Matte
- USLT:** Urban Silver Textured
- UWH:** Urban White Matte
- UWHT:** Urban White Textured
- CM:** Custom Match

Light Source

LED	20L: 20 LEDs
CCT - Color Temp (K)	30: 3,000K
	35: 3,500K
	40: 4,000K
	45: 4,500K

Distribution Type	T2: Type 2
	T3: Type 3
	T4: Type 4
	T5: Type 5

Electrical and control

Driver	MDL07: 120V-277V, 700mA
	MDH07: 347V-480V, 700mA
	MDL14: 120V-277V, 1400mA
	MDH14: 347V-480V, 1400mA
	MDL21: 120V-277V, 2100mA
	MDH21: 347V-480V, 2100mA

Terminal Block	TB: Terminal Block
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Optional Motion Sensor	MOT1: 360° lens, maximum coverage 40' diameter from 20' height
	MOT2: 360° lens, maximum coverage 70' diameter from 20' height

How to Order

Mounting Configuration	Fixture	LED	CCT - Color Temp (K)	Distribution Type	Driver	Lens	Control Receptacle (2) (3)	Control
1A 1 Arm Mount 2A 2 Arm Mount @ 180° 2A90 2 Arm Mount @ 90° 3A 3 Arms @ 120° (1) 3A90 3 Arms @ 90° 4A 4 Arms @ 90°	AP650 Aspire	20L 20 LEDs	30 3,000K 35 3,500K 40 4,000K 45 4,500K	T2 Type 2 T3 Type 3 T4 Type 4 T5 Type 5	MDL07 120V-277V, 700mA MDH07 347V-480V, 700mA MDL14 120V-277V, 1400mA MDH14 347V-480V, 1400mA MDL21 120V-277V, 2100mA MDH21 347V-480V, 2100mA	CA Clear Acrylic	R7 7-Pin control receptacle only	SC Shorting Cap (2) PE Twist-Lock Photocontrol (120V-277V) PE4 Twist-Lock Photocontrol (347V-480V)

Notes:

1. Only available with a round profile pole.

2. Included with standard luminaire

3. Not for use with FDRB.

How to Order

Terminal Block ⁽²⁾	Optional Motion Sensor ⁽³⁾ ⁽⁴⁾ ⁽⁵⁾	Optional Fuse ⁽⁶⁾	Optional House Side Shield ⁽⁷⁾	Optional Pole Adapter	Optional Fixed Dimming Resistor Board ⁽⁵⁾ ⁽⁸⁾	Finish
TB Terminal Block	MOT1 360° lens, maximum coverage 40' diameter from 20' height MOT2 360° lens, maximum coverage 70' diameter from 20' height	FHD Double Fuse and Holder	BLOC Back Light Optical Control HSS 90° House Side Shield	BA4 Bolt on arm, for 4" round pole BA5 Bolt on arm, for 5" round pole BA6 Bolt on arm, for 6" round pole BAS Bolt on arm, for square pole SMS Square Mount, for square pole	FDRB Fixed Dimming Resistor Board	BKT Black Textured UB Urban Bronze Matte UBT Urban Bronze Textured USL Urban Silver Matte USLT Urban Silver Textured UWH Urban White Matte UWHT Urban White Textured CM Custom Match ⁽⁹⁾

Notes:

2. Included with standard luminaire

3. Not for use with FDRB.

4. For use with MDLxx driver only.

5. Not for use with PE or PE4

6. Ships loose for installation in base.

7. Not for use with T5 optic.

8. Not for use with Motion Sensor.

9. Custom colors require upcharge.

Specifications

Housing	The heavy wall die-cast housing is constructed of low-copper 360 aluminum alloy for enhanced corrosion resistance and high tensile strength.
Fitter	Integral ANSI C136.3 compliant slip-fitter with +/-5° adjustment for 1-1/4" to 2" IP (1.66" to 2.38" OD) x 4" long horizontal tenon with stainless steel hardware.
Direct Mounting	Alternate direct mounting options available: (BA) style is offered with an extended arm giving a total luminaire extension of 42" from the pole (SM) style flush mounts the luminaire giving a total luminaire extension of 34" from the pole FOR SQUARE POLES ONLY
Vibration Rating	Meets the ANSI C136.31 for Roadway Luminaire Vibration specifications for Bridge/Overpass applications. Tested for 3G by independent lab.
Hardware	Includes Stainless steel hardware. Most finishes will include hardware with a Black Oxide conversion coating. Light finishes will get non-color coated hardware (Whites and Silvers)
Standard Parts	Luminaire comes standard with a 4 position terminal block in line with arm for ease of installation, a 7-pin NEMA receptacle with adjustability for North orientation and shorting cap.
Serviceability	Tool-less access to the driver compartment for ease of installation and maintenance.
UL Listing	UL listed per UL1598 and CSA 22.2 No. 250.0 for the United States and Canada. Suitable for Wet Locations.
Electronic Driver	The LED driver is UL recognized and will be securely mounted inside the fixture, for optimized performance and longevity. It will be supplied with a quick-disconnect electrical connector on the power supply, providing easy power connections for fixture installation and maintenance. It will have DC voltage output and be a constant current design. It runs at 50/60HZ and will have overload, overheat, and short circuit protection. It will be supplied with a supplemental line-ground, line-neutral and neutral-ground electrical surge protection in accordance with IEEE/ANSI C62.41.2 guidelines. It will be a high efficiency driver with a THD less than 20% and a high-power factor greater than .9. It will be dimming capable using a 0-10V signal, consult factory for more information.
NightSky® Friendly	Dark sky compliant optics with a U0 BUG rating for specific configurations.
IP Rating	IP66 rated luminaire for enhanced protection against dust and water intrusion.
Finish	Our 6 Stage Polyester Powder coat paint system offers a beautiful high-end finish that holds up to even the most extreme environments. Each part is inspected for quality and consistency before being released for shipment. Our system exceeds AAMA 2604, AAMA 2605, ASTM D523 and ASTM D4214 requirements.
Urban Finish	The Urban finish palette was created to highlight a modern, elegant aesthetic. All finishes are a 1 part powder coat with metallic flakes for a superior appearance. Finishes are available in textured or matte. Available finishes include: Black Textured, Urban Gun Metal, Urban Bronze, Urban Silver and Urban White
Custom Finish	Custom finishes are offered to adapt to any application. Custom Match option is available to blend sternberg product with the site, consult factory for more information.
Warranty	7-year limited warranty. See Website for Terms and Conditions.
LEDs	The LEDs in this system will be fully shielded in a direct downward position to maximize efficiency. The LEDs are mounted to maximize thermal transfer to the heat sink surface. The LEDs shall be 100% recyclable; not contain lead, mercury or any other hazardous substances and shall be RoHS compliant. Lumen maintenance shall be determined in accordance with IESNA TM-21, based on LED manufacturer LM-80 test data of no less than 6,000 hours and in-situ testing of the luminaire by an NVLAP accredited Energy Efficient Lighting Products lab. The high-performance white LED's will have a predicted lumen depreciation of approximately 100,000 hours with greater than 70% of initial output at 25°C. The high-brightness, high-output white LEDs shall be 4500K nominal (3000K, 3500K or 4000K optional) correlated color temperature (CCT) with a 70 (minimum) color rendering index (CRI). Consult factory for custom CCT or CRI. The luminaire shall have a minimum _____ (see table) delivered initial lumens when operated at steady state with an average ambient temperature of 25°C (77°F). CCT Lumen Derate Values from 4,500K 3,000K (70+ CRI)=.86 3,500K (70+ CRI)=.93 4,000K (70+ CRI)=.96

Optics	The luminaire shall be provided with individual, refractor type optics applied to each LED. The luminaire shall provide Type ____ (2, 3, 4 or 5) light distribution per the IESNA classifications. Testing shall be done in accordance with IESNA LM-79.
Backlight Optical Control	BLOC Optic (BLOC): An optional "Back Light Optical Control" shield can be provided at the factory. This is an internal optic level "House Side Shield" offering significantly reduced backlight and glare while maintaining the original design aesthetics of the luminaire. External House Side Shield (HSS): An optional external 90° House Side Shield helps control backlight. Flat aluminum panel painted to match fixture.
Fixed Dimming Resistor Board (FDRB)	Optional numbered 10-step selector switch allows for fine adjustment of the light levels in the field, repeatable from location to location. Offers dimming from 25% to 100% of the original output. Enclosure is composite material, sealed to protect components for the life of the product.
Motion Sensor	The programmable passive infrared motion sensor is installed integral to the fixture. 2 coverage area lenses available; assuming a 20' mounting height a lens with 40' coverage (MOT1) and 70' coverage (MOT2) is available. Sensor includes Dusk/Dawn light sensor for ambient light levels. Custom pre-set programming options can be set at the factory. Optional wireless programming controller available for field reprogramming (FSIR-100).
Photocontrols	Twist-Lock Style (Roof Mount): The photocontrol shall be mounted on the roof and prewired to driver. The twist lock type photocontrol is instant on with a 3-6 second turn off, and shall turn on at 1.5 footcandles with a turnoff at 2-3 footcandles. Photocontrol is 120-277 volt.
Terminal Block	4-wire dual row terminal block supplied with luminaire. Includes #8-32 pan head screws. For use wire sizes 14-6 AWG. Component is UL recognized for 65A.

Lumen Chart(s)

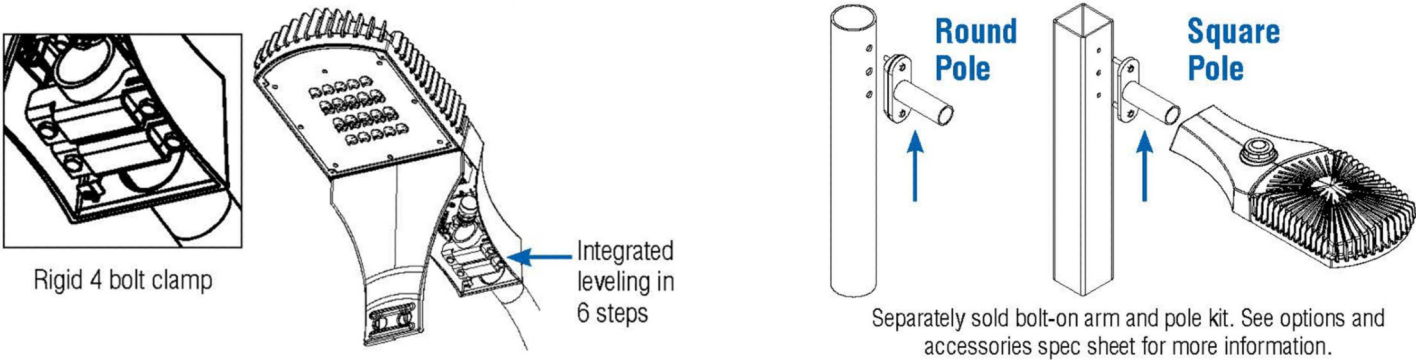
Model #	T2 DELIVERED LUMENS	BUG	EFFICACY (LPW)	T3 DELIVERED LUMENS	BUG	EFFICACY (LPW)	T4 DELIVERED LUMENS	BUG	EFFICACY (LPW)	T5 DELIVERED LUMENS	BUG	EFFICACY (LPW)	WATTAGE
20L45T_-MDL21	10345	B3U0G3	72.3	10030	B2U0G2	70.1	10065	B2U0G2	70.4	10900	B4U0G2	76.2	143
20L35T_-MDL21	9715	B3U0G3	67.9	9420	B2U0G2	65.9	9455	B2U0G2	66.1	10235	B4U0G2	71.6	143
20L27T_-MDL21	8530	B3U0G3	59.7	8270	B2U0G2	57.8	8295	B2U0G2	58.0	8985	B4U0G2	62.8	143
20L45T_-MDL14	8300	B3U0G3	83.0	8090	B2U0G2	80.9	8230	B2U0G2	82.3	8680	B3U0G2	86.8	100
20L35T_-MDL14	7795	B3U0G3	78.0	7600	B2U0G2	76.0	7730	B2U0G2	77.3	8150	B3U0G2	81.5	100
20L27T_-MDL14	6840	B3U0G3	68.4	6670	B2U0G2	66.7	6785	B2U0G2	67.9	7155	B3U0G2	71.6	100
20L45T_-MDL07	4510	B2U0G2	92.0	4465	B1U0G1	91.1	4505	B1U0G2	91.9	4740	B3U0G1	96.7	49
20L35T_-MDL07	4235	B2U0G2	86.4	4195	B1U0G1	85.6	4230	B1U0G2	86.3	4450	B3U0G1	90.8	49
20L27T_-MDL07	3720	B2U0G2	75.9	3680	B1U0G1	75.1	3715	B1U0G2	75.8	3905	B3U0G1	79.7	49

Standard Optics

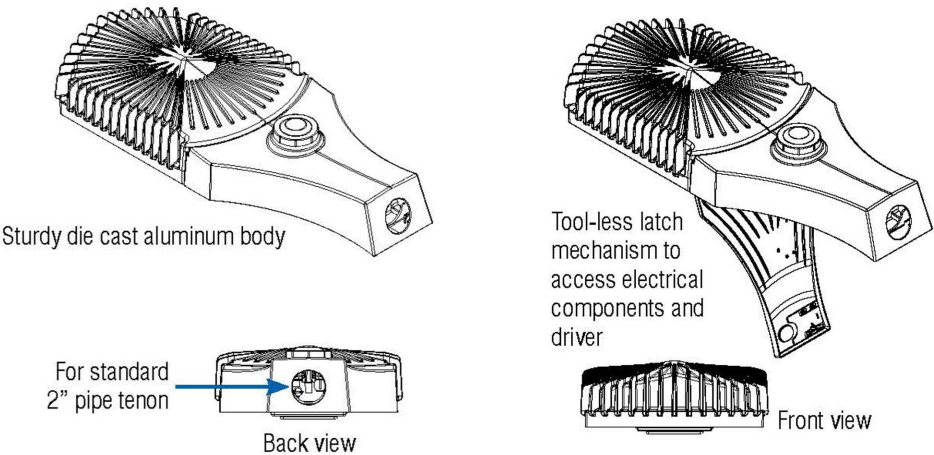
Model #	T2 DELIVERED LUMENS	BUG	EFFICACY (LPW)	T3 DELIVERED LUMENS	BUG	EFFICACY (LPW)	T4 DELIVERED LUMENS	BUG	EFFICACY (LPW)	WATTAGE
20L45T_BL-MDL21	8005	B1U0G2	56.0	8180	B1U0G2	57.2	7685	B1U0G2	53.7	143
20L35T_BL-MDL21	7520	B1U0G2	52.6	7685	B1U0G2	53.7	7220	B1U0G2	50.5	143
20L27T_BL-MDL21	6600	B1U0G2	46.2	6745	B1U0G2	47.2	6335	B1U0G2	44.3	143
20L45T_BL-MDL14	5645	B1U0G1	56.5	6305	B1U0G2	63.1	6255	B1U0G2	62.6	100
20L35T_BL-MDL14	5300	B1U0G1	53.0	5920	B1U0G2	59.2	5875	B1U0G2	58.8	100
20L27T_BL-MDL14	4655	B1U0G1	46.6	5195	B1U0G2	52.0	5155	B1U0G2	51.6	100
20L45T_BL-MDL07	3300	B0U0G1	67.3	3540	B0U0G1	72.2	3600	B0U0G1	73.5	49
20L35T_BL-MDL07	3100	B0U0G1	63.3	3325	B0U0G1	67.9	3380	B0U0G1	69.0	49
20L27T_BL-MDL07	2720	B0U0G1	55.5	2920	B0U0G1	59.6	2970	B0U0G1	60.6	49

BLOC Optics

Mounting Details



Other Features



BLOC Optic Detail

