

Post Top Light Engine/Retrofit 3rd Generation (AVI-G3)



PROJECT: TYPE:

Features

As LEDs change and improve, so does Avista with a new generation of LEDs, and drivers. The Avista is designed to integrate into almost any post top luminaire as a powerful, energy efficient, and long lasting LED system. Avista provides various options for intensity, distribution and color to make the transition seamless and fit the application perfectly.



Wattage: up to 86W

Lumen Output: up to 10,943 lm; up to 143 lm/W **Color Temp:** 2700K, 3000K, 4000K

1900K (*Nightscape*) 0-10V dimming

Manual onboard dimming option available



Certifications











Fixture Summary

Application:

Dimming:

LED light engine for use in post top mount area and pedestrian environments. Designed for new fixtures or existing as a retrofit. Operating position is base up (standard) or base down (pendant).

Installation:

Height adjustable light engine can be field set for optimal performance. LED retrofit kit mounts to many existing luminaires.

Operating Limits:

-40°C to +45°C Ambient

Electrical:

- Over voltage and short circuit protected driver
- Series connected 10kV/20kA surge protector
- Universal input voltage 120-277VAC (50/60Hz)
- 347V/480V option consult factory
- 0-10V dimming

Construction:

- · Anodized aluminum heat sink
- Fully sealed LED optical chamber
- Polycarbonate lens

Distribution:

- Symmetric
- Asymmetric
- Street Optic

CCT, CRI:

- 2700K, 80CRI
- 3000K, 70CRI
- 4000K, 70CRI
- 1900K, 52CRI (Nightscape, see pg 6)

Power Level:

(see performance chart for output)

- 30W
- 44W
- 60W
- •86W

<u>L70:</u>

72,000+ hrs.

Accessories:

- Multi-fit plate
- 7 Pin integrated receptacle
- Controls Capable Harness
- Optional onboard field selectable output switch for dimming
- Wireless control option







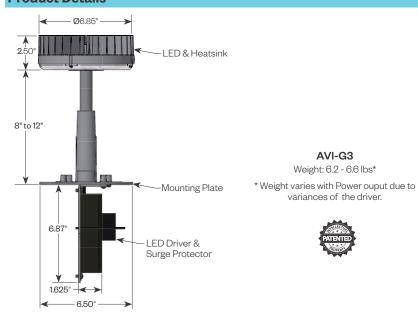
Ordering Information

1 2 3 4 5

1	Model	2	Light Distribution	3	CCT
	AVI-G3 [†] standard model		SY symmetrical		27 2700K (80CRI)
	AVI-G3-T [†] standard tall model		AS asymmetrical		30 3000K (700RI)
	AVI-G3-U ⁺⁺ multi-fit model		SO street optic		40 4000K (70CRI)
	AVI-G3-U-T ⁺⁺ multi-fit tall model				NS 1900K (52CRI - Nightscape)
	AVI-G3-P pendant mount model				
	AVI-G3-K/V for (nominal) 6" cylindrical openings				
	AVI-G3-K/V-T tall model for (nominal) 6" cylindrical openings				
	† For most Amerlux luminaires				
	†† For most other mfg. luminaires				

4	Power Level	5	Options/Accessories
	P1 30W		MFP multi-fit plate (for use with AVI-G3-U/AVI-G3-U-T/AVI-G3-P models only)
	P2 44W		7IR light engine integrated 7-pin NEMA receptacle (to allow installation of
	P3 60W		a wireless control node for operation on the SmartSite or other control platform, limited to power levels P1-P3, not available for use with CCH or FSO)
	P4 86W		CCH controls capable harness (not available for use with 7IR or FSO)
	120V-277V auto-sensing driver is standard. Consult factory for 347V/480V option.		FSO field selectable output option to allow manual dimming (not available for use with 7IR or CCH)

Product Details



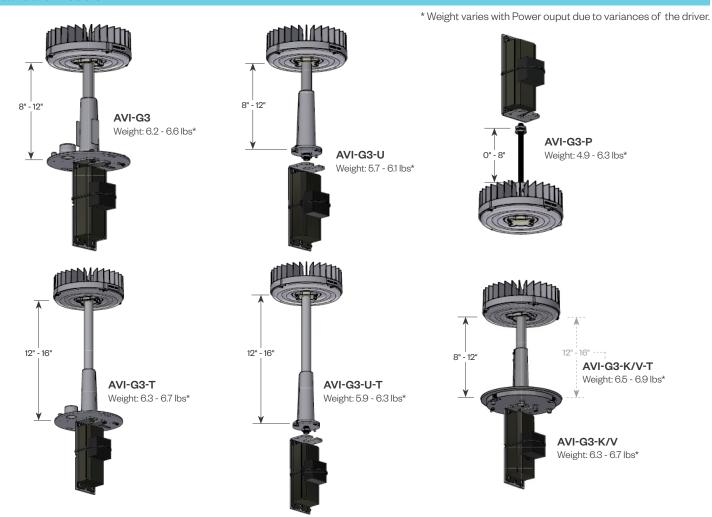


Post Top Light Engine/Retrofit 3rd Generation (AVI-G3)

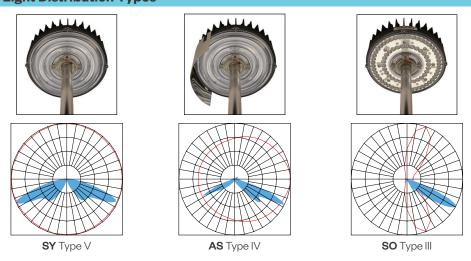


PROJECT: TYPE:

Standard Models



Light Distribution Types



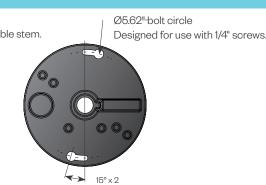




AVI-G3 and AVI-G3-T Standard Mounting Plate

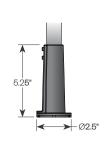


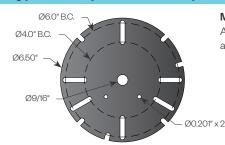




AVI-G3-U and AVI-G3-U-T Mounting Plate (Mounting plate is not provided unless specified)







MFP (Optional plate)
Allows for various screw patterns and configurations.





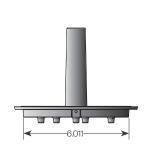


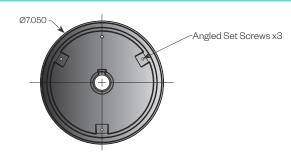




AVI-G3-K/V Mounting Plate

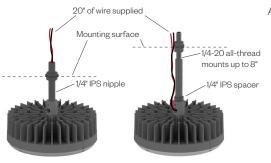






AVI-G3-P Assembly (Designed for pendant application)





Allows mounting with 1/4" IPS nipple and 1/4-20 all-thread.

Hardware Contents

(4) 1/4" IPS nipple 1", 2", 4", 6"

(2) 1/4" IPS nuts

(2) 1/4" Washer

(1) 1/4-20x8 all-thread

(2) 1/4-20 nuts

(2) 1/4-20 washer

(1) 1/4" IPS to 1/4-20 adapter



Post Top Light Engine/Retrofit 3rd Generation (AVI-G3)



PROJECT: TYPE:

Performance Data

Multiplying Factors: (Multiplying Factor is based on 3000K IES file on website)

CCT:	1900K (NS)	2700K	3000K	4000K	
Factor:	0.85	0.91	1.0	1.05	

Model	Distribution	сст	Power Level	System Watts	LED Engine Lumens	LED Envgine LPW	Lumens w/DLC Acorn	LPW DLC*	BUG Rating
		27			3651	122.9	3345	112.6	2-3-2
		30			4034	135.8	3695	124.4	2-3-2
	SY	40			4246	143.0	3890	131.0	2-3-2
		NS		30	3445	116.0	3156	106.3	2-3-2
		27			3505	118.0	3197	107.6	1-3-2
		30	P1		3872	130.4	3531	118.9	1-3-2
	AS	40			4076	137.2	3717	125.2	1-3-2
		NS			2859	96.0	2607	88.0	1-3-2
	SO	27			3296	111.O	2976	100.2	1-3-1
		30			3579	120.5	3232	108.8	1-3-1
		40			3883	130.7	3506	118.0	1-3-1
		NS			3056	102.9	2760	92.9	1-3-1
		27			5245	119.2	4805	109.2	2-3-2
		30			5794	131.7	5308	120.6	2-3-2
	SY	40			6099	138.6	5587	127.0	2-3-2
		NS NS			4948	113.0	4533	104.0	2-3-2
		27 30			5035	114.4	4592	104.4	2-3-2
	AS		P2	44	5562	126.4	5073	115.3	2-3-2
		40			5855	133.1	5340	121.4	2-3-2
		NS			4107	94.0	3745	86.0	2-3-2
		27			4654	105.8	4203	95.5	1-3-2
	so	30			5141	116.8	4642	105.5	1-3-2
		40			5412	123.0	4887	111.1	1-3-2
AVI-G3		NS			4390	100.5	3965	90.8	1-3-2
		27	P3		7026	116.1	6437	106.4	2-3-3
	SY	30			7762	128.3	7111	117.5	2-3-3
		40			8170	135.0	7485	123.7	3-3-3
	AS	NS		60	6628	110.0	6072	100.0	3-3-3
		27			6745	111.5	6152	101.7	2-3-2
		30			7451	123.2	6795	112.3	2-3-2
		40			7843	129.6	7153	118.2	2-3-2
		NS			5502	91.0	5017	83.0	2-3-2
	so	27			6235	103.1	5630	93.1	2-3-3
		30			6887	113.8	6219	102.8	2-3-3
		40			7249	119.8	6546	108.2	2-3-3
		NS			5881	97.2	5311	87.8	2-3-3
		27			9411	109.4	8622	100.3	2-3-3
	SY	30	P4		10394	120.9	9524	110.7	2-3-3
		40			10943	127.2	10025	116.6	3-3-3
		NS			8878	104.0	8133	95.0	3-3-3
		27			9035	105.1	8240	95.8	2-3-2
	AS -	30		86	9980	116.0	9102	105.8	2-3-2
		40			10505	122.2	9581	111.4	2-3-2
		NS			7369	86.0	6720	79.0	2-3-2
	so	27			8595	99.9	7761	90.2	2-3-3
		30			9494	110.4	8573	99.7	2-3-3
		40			9994	116.2	9024	104.9	2-3-3
		NS			8108	94.8	7108	83.1	2-3-3

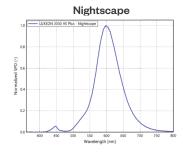
 *BOLD numbers indicate that the configuration meets DLC standards.

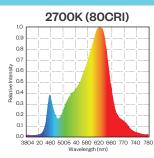


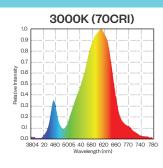


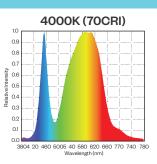


Spectral Power Distribution



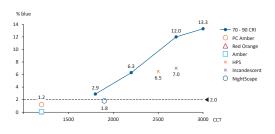


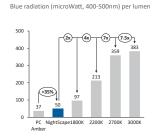


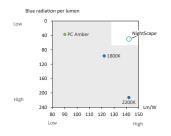


Nightscape (NS) Technology

- Unique spectral distribution that delivers highest flux while emitting <2% light of blue.
- The Nightscape (low blue) Avista is powered by Luxeon 3030 HE Plus which delivers high efficacy and superior life span.





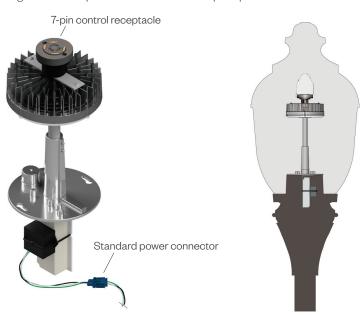


7-Pin Control-Ready Option (7IR)

A 7-Pin Control ready option for Avista enables wirelss control technology. An integral 7-Pin NEMA receptacle is combined with our patented LED post-top retrofit designed for operation in a wirelss mesh network. The Avista, using a wireless control system, could be suitable for a broad range of outdoor applications allowing for optimization energy savings, enhanced lighting asset management and improved maintenance and repair operations.

Requirements:

- Limited to Power Levels **P1-P3**.
- Shorting cap required prior to control system installation.
- Check luminaire clearances for AVI and control system prior to installation.
- If the control system includes a photocell, attention should be paid to the type of luminaire. Internal reflections could cause the luminaire to cycle on and off.
- Designed for use with wireless node rated ≥ 70°C.





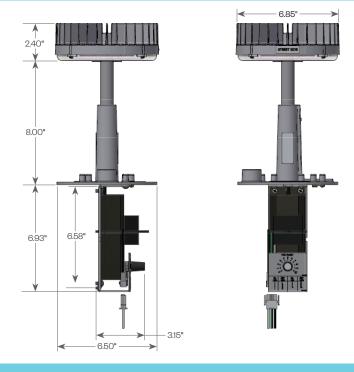


Field Selectable Output Switch (FSO)

The Field Selectable Output (**FSO**) switch is an onboard dimming option that utilizes the 0-10V dimming leads to manually control the output of the fixture. There are 10 detents in the switch and a label indicating the position and relative output setting so that all units on the same project can be adjusted to the same output when necessary. The **FSO** switch also allows maximum flexibility in retrofit applications and is useful when certain fixtures on a project may need reduced output due to citizen's input.

Output can be set between 20% and 100% in approximately 10% increments.

The FSO is NOT compatible with the SSINT-1, 7IR or CCH options.

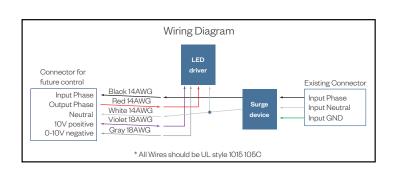


Controls-Capable Wiring Harness(CCH)

A Controls-Capable wiring Harness option allows for easy connectivity of future wireless control technology.

- For use with 3rd party wireless control systems mounted within or in close proximity of the luminaire.
- Not required with control system supplied by Amerlux.





Operation Notes and Limitations

The AVI-G3 is designed to operate effectively in many different luminaires with very few limitations.

Although the optical chamber is fully sealed, the driver and surge protector are not designed to get wet, therefore the luminaire in which it is used must be "wet location listed".

The AVI-G3 is suitable for use in ambient conditions of -40°C to +45°C provided the enclosure has a volume greater than or equal to 2430 cubic inches for the P4 power level.

Smaller enclosures may be suitable for power levels P1-P3.

