

Avista®

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



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.

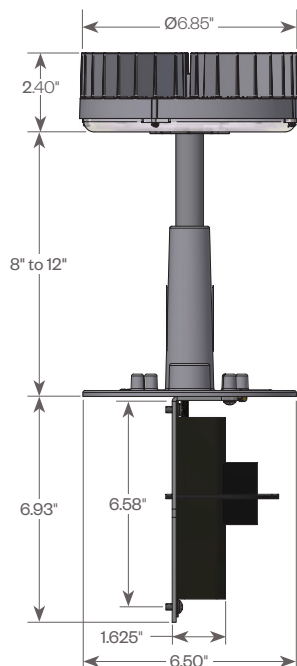
Product Overview

Wattage:	up to 86W
Lumen Output :	up to 10,943 lm; up to 143 lm/W
Color Temp:	2700K, 3000K, 4000K, 1900K (NS)
Dimming:	0-10V dimming Manual onboard dimming option available



PROJECT:

TYPE:



Application:

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:

-40C to +45C 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
- Acrylic Lens

Distribution:

- Symmetric (**SY**)
- Asymmetric (**AS**)
- Street Optic (**SO**)

CCT:

- 2700K (**27**)
- 3000K (**30**)
- 4000K (**40**)
- 1900K (**NS**)
(**NS**) - Nightscape, see pg 6

Power Level:

(see performance chart for output)

- **P1** (30W)
- **P2** (44W)
- **P3** (60W)
- **P4** (86W)

L70:

50,000+ hrs.

Accessories:

- Multi-fit plate (**MFP**)
- 7 Pin integrated receptacle (**7IR**)
- Controls capable harness (**CCH**)
- Wireless control options
- Optional onboard field selectable output switch for dimming (**FSO**)



Not all configurations are
DLC listed, see pg 4 for options.

PROJECT:

TYPE:

Ordering Information



Add additional accessories as needed

- 1** Model
- AVI-G3** - Standard model ┌───┐ For most Amerlux luminaires
 - AVI-G3-T** - Standard Tall model └───┘
 - AVI-G3-U** - Multi-fit model ┌───┐ For most other Mfg. luminaires
 - AVI-G3-U-T** - Multi-fit Tall model └───┘
 - 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

- 2** Light Distribution
- SY** - Symmetric
 - AS** - Asymmetric
 - SO** - Street Optic

- 3** CCT
- 27** - 2700K (80CRI)
 - 30** - 3000K (70CRI)
 - 40** - 4000K (70CRI)
 - NS** - 1900K (52CRI - Nightscape)

- 4** Power Level
- P1** - (30W)
 - P2** - (44W)
 - P3** - (60W)
 - P4** - (86W)

120V-277V auto-sensing driver is standard.
Consult factory for 347V/480V option.

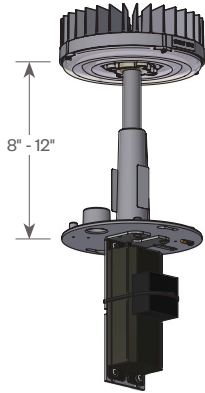
- 5** Options/Accessories
- MFP** - Multi-fit plate (for use with AVI-G3-U, AVI-G3-U-T or AVI-G3-P models only)
 - CCH** - Controls Capable Harness (not available for use with **7IR** or **FSO**)
 - 7IR** - Light engine integrated 7-pin NEMA Receptacle (to allow installation of a wireless control node for operation on the SmartSite or other control platform, limited to Power Levels **P1-P3**, not available for use with **CCH** or **FSO**)
 - FSO** - Field Selectable Output option (to allow manual dimming). **FSO** is NOT compatible with **7IR** or **CCH** options.

PROJECT:

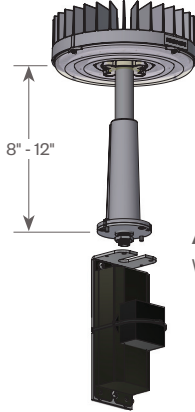
TYPE:

Standard Models

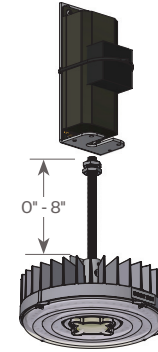
* Weight varies with Power output due to variances of the driver.



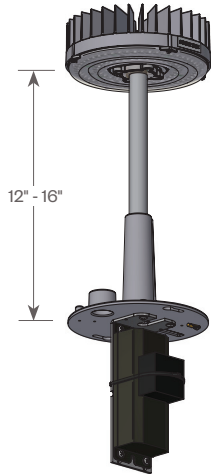
AVI-G3
Weight: 6.2 - 6.6 lbs*



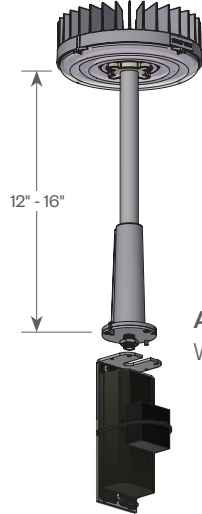
AVI-G3-U
Weight: 5.7 - 6.1 lbs*



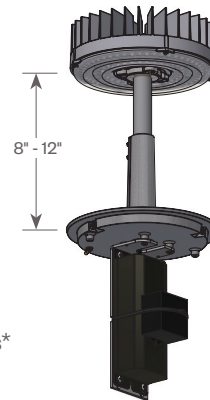
AVI-G3-P
Weight: 4.9 - 6.3 lbs*



AVI-G3-T
Weight: 6.3 - 6.7 lbs*



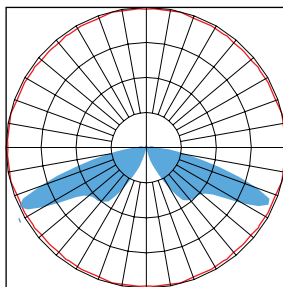
AVI-G3-U-T
Weight: 5.9 - 6.3 lbs*



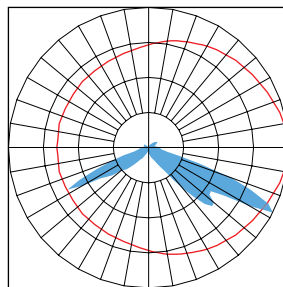
AVI-G3-K/V-T
Weight: 6.5 - 6.9 lbs*

AVI-G3-K/V
Weight: 6.3 - 6.7 lbs*

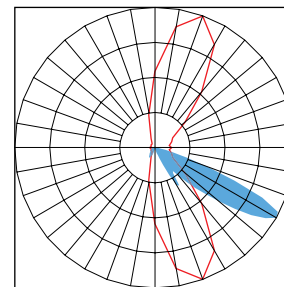
Light Distribution Types



SY
Type V



AS
Type IV



SO
Type III

PROJECT:

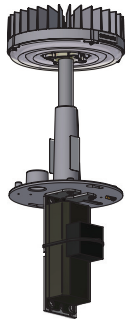
TYPE:

Performance

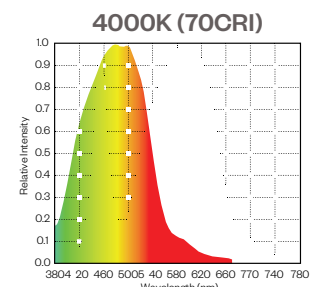
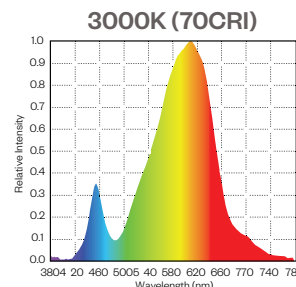
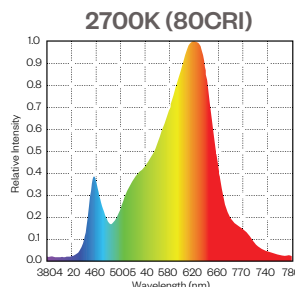
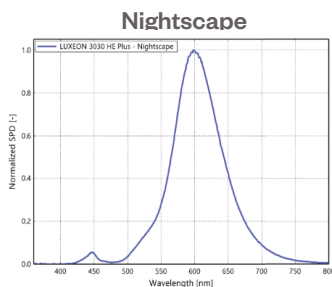
ALL IES files supplied are 3000K. For 2700K use a 0.905 multiplier; For 4000K use a 1.05 multiplier.

* Numbers in **BOLD** indicate that the configuration is DLC listed.

Model	Distribution	CCT	Power Level	System Watts	LED Engine Lumens	LED Engine LPW	Lumens w/DLC Acorn	LPW DLC* Acorn	BUG Rating	
AVI-G3	SY	27	P1	30	3651	122.9	3345	112.6	2-3-2	
		30			4034	135.8	3695	124.4	2-3-2	
		40			4246	143.0	3890	131.0	2-3-2	
		NS			3445	116	3156	106.3	2-3-2	
	AS	27			3505	118.0	3197	107.6	1-3-2	
		30			3872	130.4	3531	118.9	1-3-2	
		40			4076	137.2	3717	125.2	1-3-2	
		NS			2859	96	2607	88	1-3-2	
	SO	27			3296	111.0	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	
	SY	27	5245	P2	44	5245	119.2	4805	109.2	2-3-2
		30	5794			131.7	5308	120.6	2-3-2	
		40	6099			138.6	5587	127.0	2-3-2	
		NS	4948			113	4533	104	2-3-2	
	AS	27	5035			114.4	4592	104.4	2-3-2	
		30	5562			126.4	5073	115.3	2-3-2	
		40	5855			133.1	5340	121.4	2-3-2	
		NS	4107			94	3745	86	2-3-2	
	SO	27	4654			105.8	4203	95.5	1-3-2	
		30	5141			116.8	4642	105.5	1-3-2	
		40	5412			123.0	4887	111.1	1-3-2	
		NS	4390			100.5	3965	90.8	1-3-2	
	SY	27	7026	P3	60	7026	116.1	6437	106.4	2-3-3
		30	7762			128.3	7111	117.5	2-3-3	
		40	8170			135.0	7485	123.7	3-3-3	
		NS	6628			110	6072	100	3-3-3	
	AS	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	5017	83	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	
	SY	27	9411	P4	86	9411	109.4	8622	100.3	2-3-3
		30	10394			120.9	9524	110.7	2-3-3	
		40	10943			127.2	10025	116.6	3-3-3	
		NS	8878			104	8133	95	3-3-3	
	AS	27	9035			105.1	8240	95.8	2-3-2	
		30	9980			116.0	9102	105.8	2-3-2	
		40	10505			122.2	9581	111.4	2-3-2	
		NS	7369			86	6720	79	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	



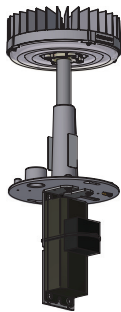
Spectral Power Distribution



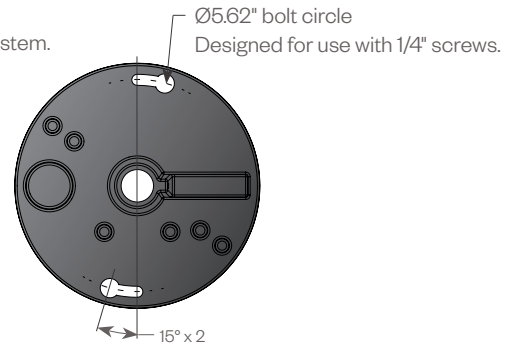
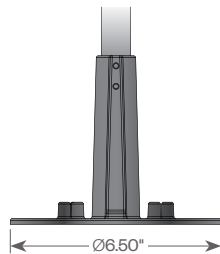
PROJECT:

TYPE:

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

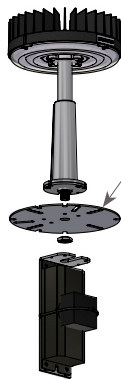


Includes one piece cast aluminum mounting plate with a height adjustable stem.

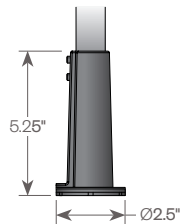


AVI-G3-U and AVI-G3-U-T Mounting Options

Mounting plate is not provided unless specified.

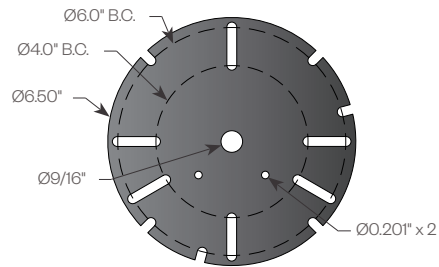


Optional Mounting Plate

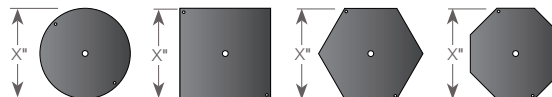


MFP (Optional plate)

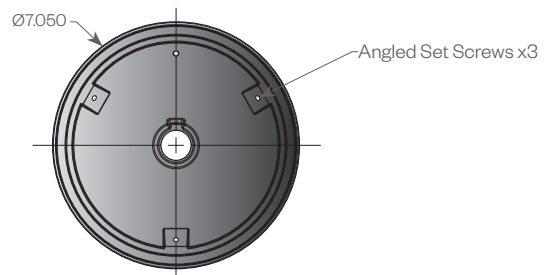
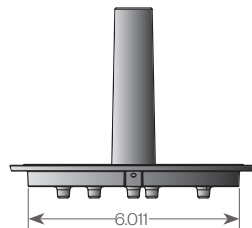
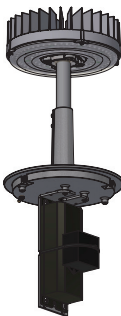
Allows for various screw patterns and configurations.



Custom Mounting Plates (consult factory)



AVI-G3-K/V Mounting Plate

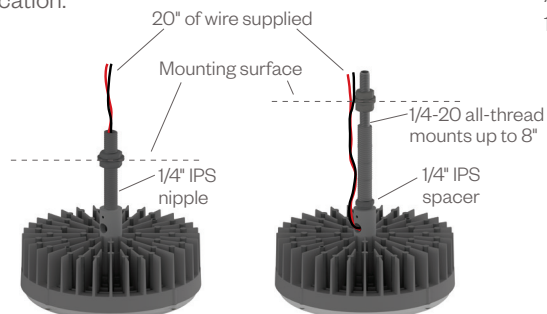
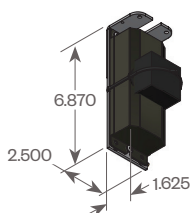


AVI-G3-P Assembly

Designed for pendant application.

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

Driver Assembly



Hardware Contents

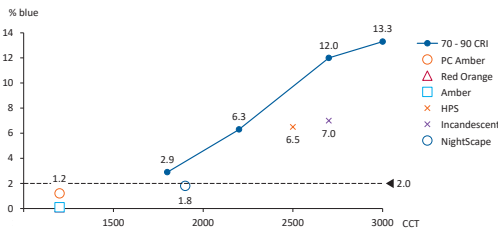
- (4) 1/4" IPS nipple 1", 2", 4", 6"
- (2) 1/4" IPS nuts
- (2) 1/4" Washer
- (1) 1/4-20x8 all-thread
- (2) 1/4-20 nuts
- (2) 1/4-20 washer
- (1) 1/4" IPS to 1/4-20 adapter

PROJECT:

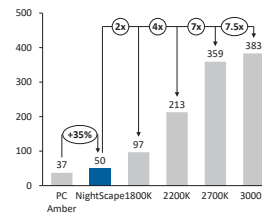
TYPE:

Nightscape (NS) Technology

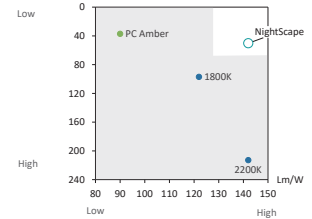
- Unique spectral distribution that delivers highest flux while emitting <2% light of blue.
- The Nightscape (low blue) Avista is powered by Luxeon 3030 HE Plus which delivers high efficacy and superior life span.



Blue radiation (microWatt, 400-500nm) per lumen



Blue radiation per lumen

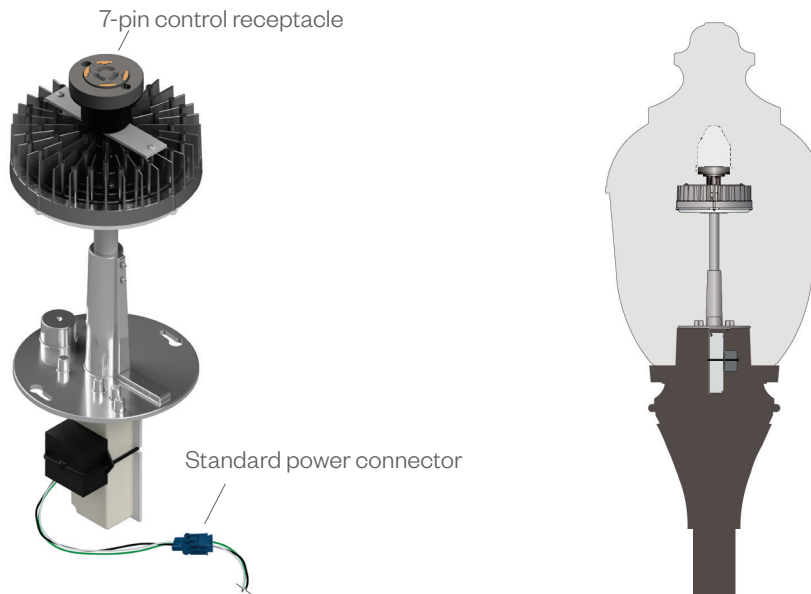


7-Pin Control-ready Option (7IR)

A 7-Pin Control ready option for Avista enables wireless control technology. An integral 7-Pin NEMA receptacle is combined with our patented LED post-top retrofit designed for operation in a wireless 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 $\geq 70^{\circ}\text{C}$.



PROJECT:

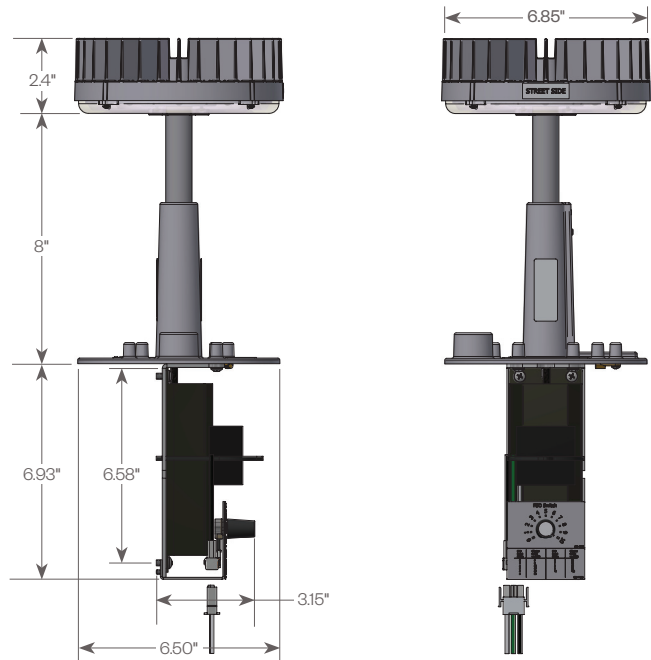
TYPE:

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.

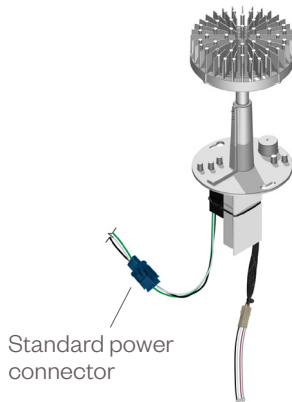
The FSO is NOT compatible with the SSINT-1, 7IR or CCH options.



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 Limits

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 -40C to +45C 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.

