

# Avista®

## Post Top Light Engine/Retrofit 3<sup>rd</sup> Generation (AVI-G3)



### Features

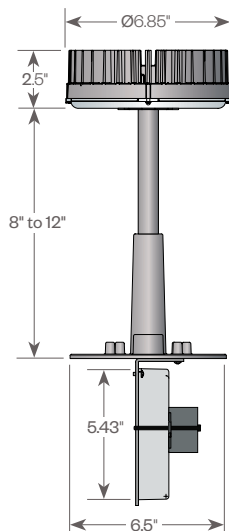
As LEDs change and improve, so does Avista with a new generation of LEDs, and drivers. The Avista is designed to integrate into almost any post top luminaire as a powerful, energy efficient, and long lasting LED system. Avista provides various options for intensity, distribution and color to make the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

- 2,700K (27)
- 3,000K (30)
- 4,000K (40)

#### 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 ☐ — For most Amerlux luminaires
- AVI-G3-U** - Multi-fit model ☐ — For most other Mfg. luminaires
- AVI-G3-U-T** - Multi-fit Tall model ☐ — For most other Mfg. luminaires
- 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)

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

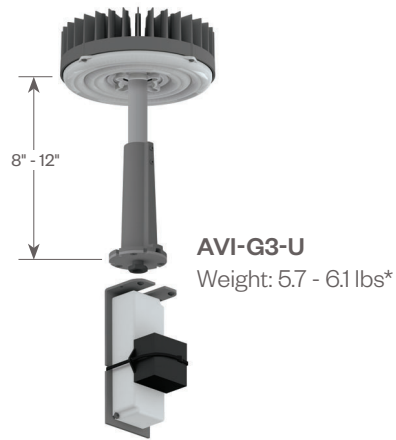
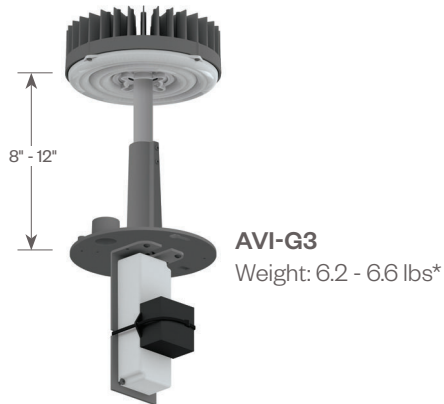
**120V-277V auto-sensing driver is standard.**  
**Consult factory for 347V/480V option.**

- 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:

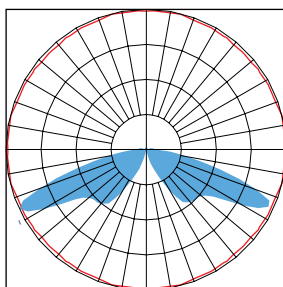
### Standard Models



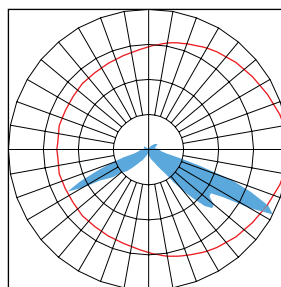
\* Weight varies with Power output due to variances of the driver.



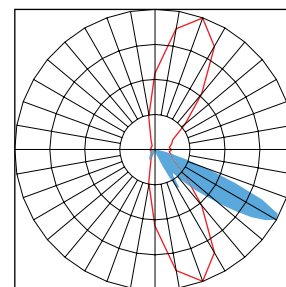
### Light Distribution Types



**SY**  
Type V



**AS**  
Type IV



**SO**  
Type III

## PROJECT:

## TYPE:

### Performance

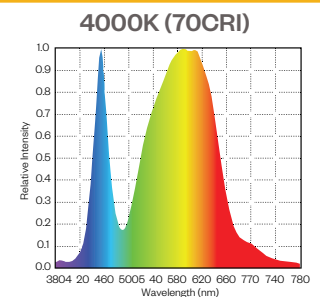
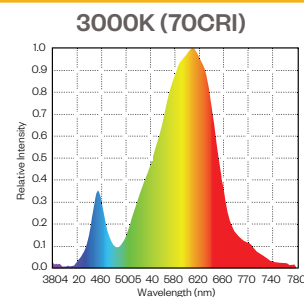
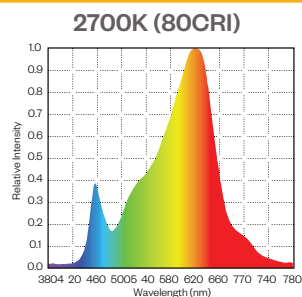
ALL IES files supplied are 3000K. For 2700K use a 0.905 multiplier; For 4000K use a 1.05 multiplier.



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	<b>112.6</b>	2-3-2
		30			4034	135.8	3695	<b>124.4</b>	2-3-2
		40			4246	143.0	3890	<b>131.0</b>	2-3-2
	AS	27			3505	118.0	3197	<b>107.6</b>	1-3-2
		30			3872	130.4	3531	<b>118.9</b>	1-3-2
		40			4076	137.2	3717	<b>125.2</b>	1-3-2
	SO	27			3296	111.0	2976	<b>100.2</b>	1-3-1
		30			3579	120.5	3232	<b>108.8</b>	1-3-1
		40			3883	130.7	3506	<b>118.0</b>	1-3-1
	SY	27	P2	44	5245	119.2	4805	<b>109.2</b>	2-3-2
		30			5794	131.7	5308	<b>120.6</b>	2-3-2
		40			6099	138.6	5587	<b>127.0</b>	2-3-2
	AS	27			5035	114.4	4592	<b>104.4</b>	2-3-2
		30			5562	126.4	5073	<b>115.3</b>	2-3-2
		40			5855	133.1	5340	<b>121.4</b>	2-3-2
	SO	27			4654	105.8	4203	95.5	1-3-2
		30			5141	116.8	4642	<b>105.5</b>	1-3-2
		40			5412	123.0	4887	<b>111.1</b>	1-3-2
	SY	27	P3	60	7026	116.1	6437	<b>106.4</b>	2-3-3
		30			7762	128.3	7111	<b>117.5</b>	2-3-3
		40			8170	135.0	7485	<b>123.7</b>	3-3-3
	AS	27			6745	111.5	6152	<b>101.7</b>	2-3-2
		30			7451	123.2	6795	<b>112.3</b>	2-3-2
		40			7843	129.6	7153	<b>118.2</b>	2-3-2
	SO	27			6235	103.1	5630	93.1	2-3-3
		30			6887	113.8	6219	<b>102.8</b>	2-3-3
		40			7249	119.8	6546	<b>108.2</b>	2-3-3
	SY	27	P4	86	9411	109.4	8622	<b>100.3</b>	2-3-3
		30			10394	120.9	9524	<b>110.7</b>	2-3-3
		40			10943	127.2	10025	<b>116.6</b>	3-3-3
	AS	27			9035	105.1	8240	95.8	2-3-2
		30			9980	116.0	9102	<b>105.8</b>	2-3-2
		40			10505	122.2	9581	<b>111.4</b>	2-3-2
	SO	27			8595	99.9	7761	90.2	2-3-3
		30			9494	110.4	8573	<b>99.7</b>	2-3-3
		40			9994	116.2	9024	<b>104.9</b>	2-3-3

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

### Spectral Power Distribution



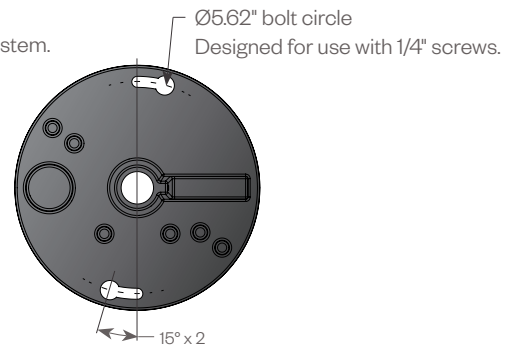
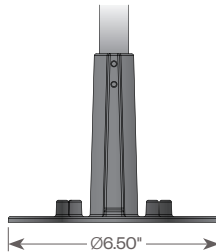
## PROJECT:

## TYPE:

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

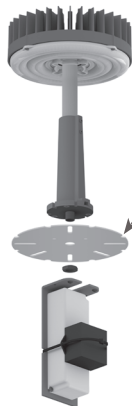


Includes one piece cast aluminum mounting plate with a height adjustable stem.

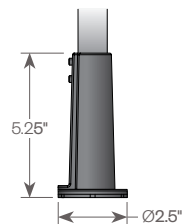


### AVI-G3-U and AVI-G3-U-T Mounting Options

Mounting plate is not provided unless specified.

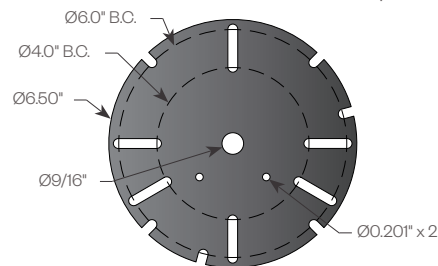


Optional  
Mounting Plate

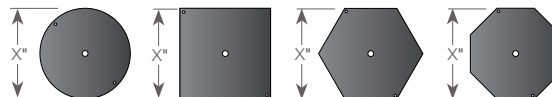


#### MFP (Optional plate)

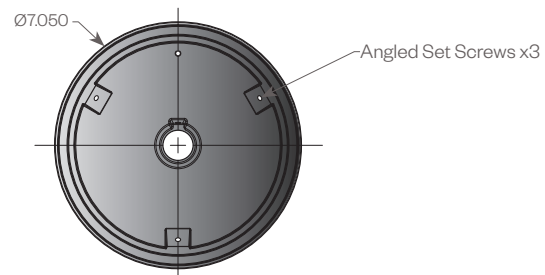
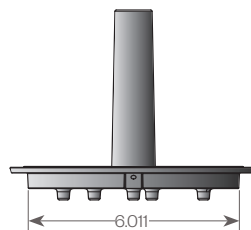
Allows for various screw patterns and configurations.



#### Custom Mounting Plates (consult factory)



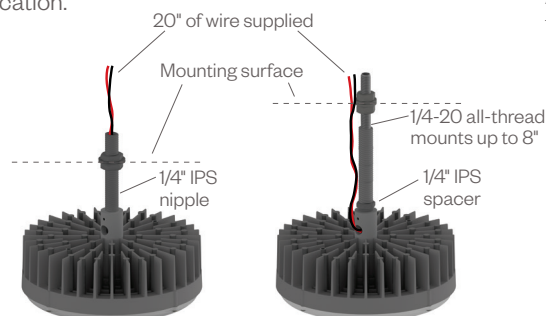
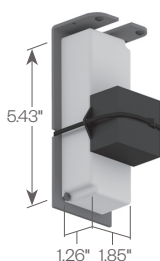
### AVI-G3-K/V Mounting Plate



### AVI-G3-P Assembly

Designed for pendant application.

#### Driver Assembly



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

## PROJECT:

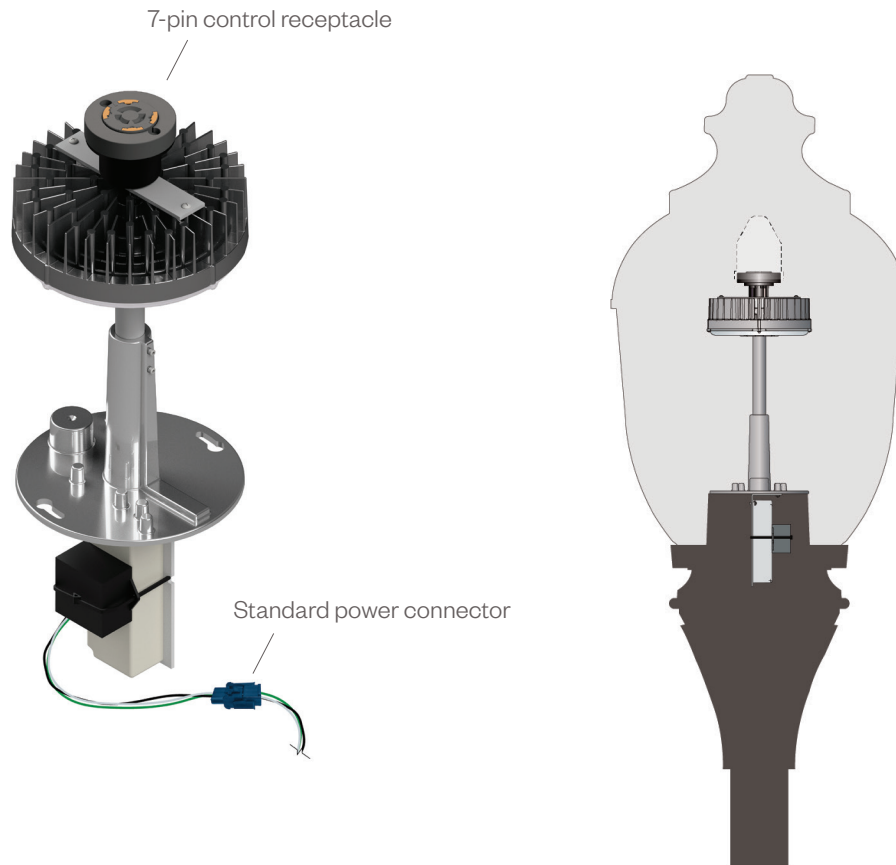
## TYPE:

### 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:

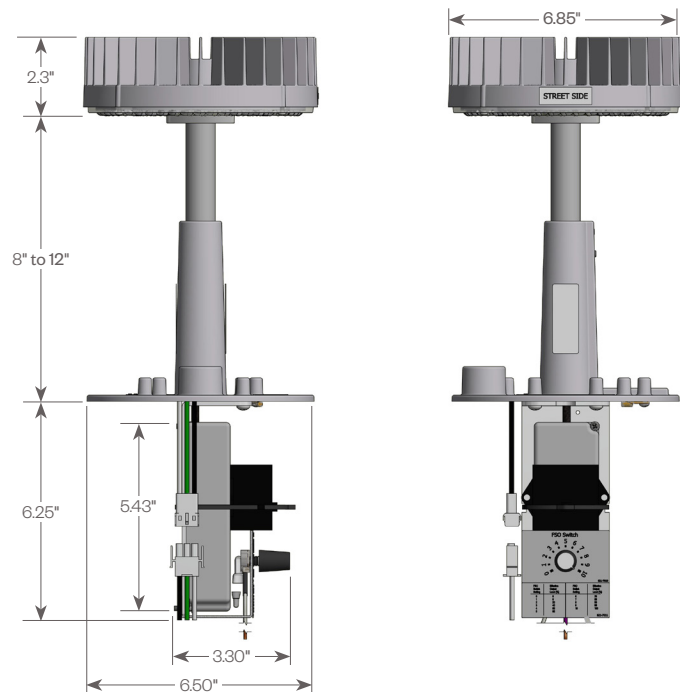
## TYPE:

### 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.

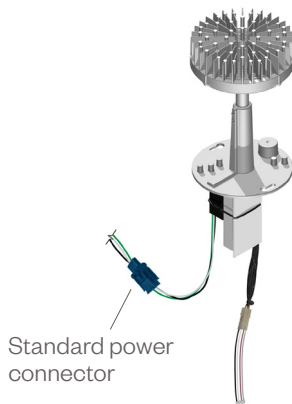
The **FSO** is NOT compatible with the **SSINT-1**, **7IR** or **CCH** options.



### 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.

