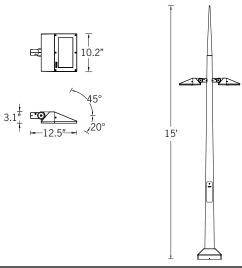
UVK-20011

Vekter 13 Medium Double Head Spike



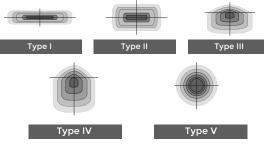




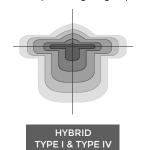




Ligman's micro Variable Optical System provides the ability to interchange, mix & rotate optics to provide specific light distributions for optimized spacing and uniformity.



The variable optic system allows for the designer to create hybrid distrubtions for precise lighting requirements.



Construction

Aluminum

Less than 0.1% copper content – Marine Grade 6060 extruded & LM6 Aluminum High Pressure die casting provides excellent mechanical strength , clean detailed product lines and excellent heat dissipation.

Pre paint

8 step degrease and phosphate process that includes deoxidizing and etching as well as a zinc and nickel phosphate process before product painting.

Memory Retentive -Silicon Gasket Provided with special injection molded "fit for purpose" long life high temperature memory retentive silicon gaskets. Maintains the gaskets exact profile and seal over years of use and compression.

Thermal management

LM6 Aluminum is used for its excellent mechanical strength and thermal dissipation properties in low and high ambient temperatures. The superior thermal heat sink design by Ligman used in conjunction with the driver, controls thermals below critical temperature range to ensure maximum luminous flux output, as well as providing long LED service life and ensuring less than 10% lumen depreciation at 50,000 hours.

Surge Suppression

Standard 10kv surge suppressor provided with all fixtures.

BUG Rating

B2 - U0 - G0

Finishina

All Ligman products go through an extensive finishing process that includes fettling to improve paint adherence.

<u>Paint</u>

UV Stabilized 4.9Mil thick powder coat paint and baked at 200 Deg C.

This process ensures that Ligman products can withstand harsh environments. Rated for use in natatoriums.

Hardware

Provided Hardware is Marine grade 316 Stainless steel.

Anti Seize Screw Holes

Tapped holes are infused with a special anti seize compound designed to prevent seizure of threaded connections, due to electrolysis from heat, corrosive atmospheres and moisture.

Crystal Clear Low Iron Glass Lens

Provided with tempered, impact resistant crystal clear low iron glass ensuring no green glass tinge.

Optics & LEI

Precise optic design provides exceptional light control and precise distribution of light. LED CRI > 80

<u>Lumen - Maintenance Life</u>

L80 /B10 at 50,000 hours (This means that at least 90% of the LED still achieve 80% of their original flux)

Flexible tapered column-mounted floodlighting and area luminaires. Sleek, angular, technical and powerful professional lighting solutions with a graceful twist.

A slim wedge shaped pole mount area light with a variety of different distributions to suit lighting designer's requirements. This luminaire has been designed to provide excellent light distribution patterns using a low wattage LED package. The result is excellent spacing to mounting height ratios, with a uniform lighting layout that meets code requirements using less energy.

The Vekter can be utilized to suit specific light patterns using the asymmetrical type I, II, III, IV as well as symmetrical lens optics. Variations of these for precise light distribution requirements can be provided. An example of this is using a combination of Type II & Type IV distribution optics inside the same fixture. Type V distributions in medium, wide, very wide & extra wide are available.

These fixtures are adjustable, and can also be aimed as floodlights to provide focus lighting in specific areas, as well as facade lighting.

This luminaire is suitable for most applications and complies to dark sky requirements when mounted in the horizontal position. Designed for lighting private roadways, car parks, exhibition areas, service stations and truck stops. Internal house side shields are available as an option.

To meet International Dark Sky criteria, 3000k or warmer LEDs must be selected and luminaire fix mounted (+/- 15° allowable to permit leveling).



UVK-20011

Vekter 13 Medium Double Head Spike

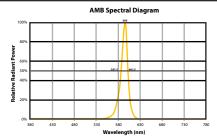




PROJECT				DATE	
QUANTITY	T	YPE N	IOTE		
ORDERING EXA	AMPLE UVK -	20011 - 2x20w - 1	Γ2 - W30 - 02 - 120/	277v - Options	
	LAMP BEAM 11 - Type I Di 12 - Type III 13 - Type III 14 - Type IV M - Medium W - Wide 52 VW - Very W	stribution W27 - 2700K Distribution W30 - 3000K Distribution W35 - 3500K Distribution W40 - 4000K 32°	OR FINISH COLOR 01 - BLACK RAL 9011 02 - DARK GREY RAL 7043 03 - WHITE RAL 9003 04 - METALLIC SILVER RAL 9006 05 - MATTE SILVER RAL 9006 06 - LIGMAN BRONZE 07 - CUSTOM RAL	VOLTAGE 120/277v Other - Specify	
	EW - Extra W	/ide 117°			
			V		
ADDITIONAL OPTIONS					
•	HSS - House Side Shield F - Frosted Lens		BL - Blue Spike Light RD - Red Spike Light		
	HGT - Custom Height (Specify) OS - FSP Occupancy Sensor [See last page]				

A21381-W30 - W30 White Spike Light A21381-W40 - W40 White Spike Light A21481 - RGBW Spike Light

CITY OF FLAGSTAFF & TURTLE FRIENDLY COMPLIANT



Narrow-Spectrum Amber LEDs

Peak wavelength between 585 & 595 nanometers and a full width of 50% power no greater than 15 nanometers.



Vekter Product Family



Vekter 16

- UVK-90032-4x54w-4x6954lm
- UVK-90031-4x37w-4x5143lm
 - UVK-20022-28w-3330lm
- Vekter 17 19.6' • UVK-20021-20w-2473lm

• UVK-20023-37w-5143lm

• UVK-20024-54w-6954lm

Vekter 18 - 19.6' Vekter 19 - 19.6'

- UVK-20032-2x28w-2x3330lm
- UVK-20031-2x20w-2x2473lm
- UVK-20033-2x37w-2x5143lm • UVK-20034-2x54w-2x6954lm
- Vekter 20 19.6'



- UVK-90041-20w-2473lm UVK-90042-28w-3330lm



- Vekter 26
- UVK-90051-2x20w-2x2473lm UVK-90052-2x28w-2x3330lm



Vekter 27

- UVK-90061-37w-5143lm
- UVK-90062-54w-6954lm



Vekter 28

- UVK-90071-2x37w-2x5143lm UVK-90072-2x54w-2x6954lm

HIGH/LOW/OFF PIR OUTDOOR PHOTO/MOTION SENSOR LEGALA IP66 - **Diegrand** Integrated photocell

Ligman provides integrated photocell control using the wattstopper legrand FSP-211B. These units are installed inside the fixture housing with only the external lenses being visible



FSP-211B

Dimensions of Lens Options FSP-L2 dimensions FSP-L3 dimensions FSP-L7 dimensions

Product Overview

The FSP-221B is a family of passive infrared (PIR) outdoor sensors that raise or lower the electric lighting level to high, low or off based on motion and/or daylight contribution. Typically, once the sensor stops detecting movement and the time delay elapses, lights will first fade to low mode, and eventually switch off. When motion is detected, the sensor ramps the light level to high mode unless the daylight contribution is sufficient.

The integral photocell can also switch the lights on and off for dusk to dawn control, so that lighting remains on overnight even without motion detection.

The sensors control 0-10VDC or nondimming LED drivers or ballasts.

The low voltage FSP-201B may be used with dim-to-off drivers or ballasts.

Initial setup and subsequent sensor adjustments are made using a Wireless Handheld Configuration Tool (FSIR-100). This tool enables adjustment of sensor parameters including high/low mode, sensitivity, time delay, cut off and more.

The FSIR-100 can read current parameter settings, and stores up to six sensor parameter profiles to speed commissioning of multiple sensors.

Models

FSP-211B, 120-277 VAC FSP-221B, 100-347 VAC

LIGHTING

Specifications and Features

Three interchangeable lenses for mounting between 8' and 40'

Remote setup and adjustment with handheld wireless configuration tool

Adjustable high and low modes (high: 0 to 10V, low: off, 0 to 9.8V)

Adjustable time delay (30 seconds, 1 to

Adjustable cut off delay (none, 1 to 59 minutes, 1 to 5 hours)

Adjustable sensitivity/service mode (low, med, max; on-fix, off-fix)

Adjustable setpoints: hold off setpoint (none, 1 to 250 fc, auto); photocell on/ off setpoint (1 to 250 fc)

Adjustable ramp and fade times (1 to

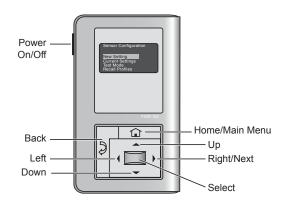
Operating temperature: -40°F to +167°F (-40°C to +75°C)

IP66 rated

Five year warranty

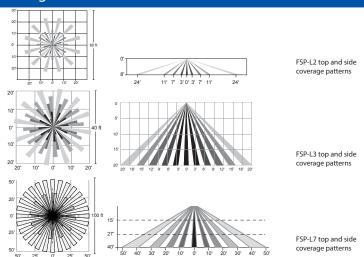
Factory Defaults

High mode: 10V Low mode: 1V Time delay: 5 minutes Cut off: 1 hour Setpoint: Disabled Sensitivity: Max Ramp up time: Disabled Fade down time: Disabled Photocell On/Off: Disabled



The FSIR-100 is a convenient handheld remote tool for sensor setting. Adjustable settings can be changed as needed for specific applications.

Coverage



Cat	talog #	Color	Description
	FSP-L2	White/Grey/Black/Brown The Trim color option will be selected to closest match fixture color. e.g [Matte silver fixture - grey trim]	360° lens, maximum coverage 48′ diameter from 8′ height
	FSP-L3	White/Grey/Black/Brown The Trim color option will be selected to closest match fixture color, e.g [Matte silver fixture - grey trim]	360° lens, maximum coverage 40′ diameter from 20′ height
	FSP-L7	White/Grey/Black/Brown The Trim color option will be selected to closest match fixture color. e.g [Matte silver fixture - grey trim]	360° lens, maximum coverage 100′ diameter from 40′ height
	FSIR-100	Black	Remote Handheld Configuration Tool