

ULI-21231

Light Linear PT 7 Single Head Streetlight

microVos
TECHNOLOGY

LIGMAN
LIGHTING USA



28w LED
3,601 Lumens

Weight 51.8 lbs

IP65
Suitable for wet locations

IK08
Impact Resistant [Vandal Resistant]

EPA - 0.016m² → 0.172 ft²

POLE INCLUDED

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
B1 - U0 - G1

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

Paint
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.

MicroPRIM Finishes

MicroPRIM is Ligman's trade marked decorative powder coating technology that permanently infuses colors, patterns, or imagery directly into the surface of luminaires and poles while providing protections that standard powder coating does not offer.

MicroPRIM finishes include nature-inspired wood grains and stone aesthetics, material-inspired finishes such as brushed metal, concrete, and carbon fiber. Solid colors in Ligman standard colors, as well as any RAL or Pantone color, Decorative patterns, custom imagery and more.

Coating and Infusion Process

Metal components are pre-treated and powder coated with a proprietary polyurethane-based coating engineered for outdoor architectural use. Decorative patterns or imagery are then permanently infused into the cured powder coat through a heat-based process, creating a durable, integrated finish.

Performance and Validation

MicroPRIM finishes are suitable for indoor and outdoor applications and meet AAMA2605 architectural coating requirements. Performance is validated through laboratory and real-world testing to ASTM standards for UV exposure, adhesion, abrasion, impact, salt spray, chemical resistance, and graffiti resistance.

All MicroPRIM finishes are backed by Ligman's 10-year warranty.

Key Performance Attributes
•Anti-graffiti resistance
•UV and weather resistance
•Scratch and abrasion resistance
•Natatorium Rated for installation in corrosive environments)

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 tint.

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

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

Public realm contemporary column family. Stylish but technically precise area lighting solutions as part of a large flexible family.

Light Linear PT is a sophisticated, minimalist lighting column engineered to complement both modern and classic architectural environments. Designed for projects that demand visual guidance with exceptional visual comfort, this luminaire combines advanced technology with aesthetic appeal.

The dual-sealed optical chamber, integrated with high-efficiency heat sinks, ensures durability and thermal management. It houses a range of field-interchangeable, optically controlled LEDs that deliver precise light distribution options, including Type II, III, IV, and V patterns. For projects requiring tailored illumination, mixed configurations—such as combining Type II and Type IV optics within the same fixture—are available.

This product range offers multiple wattage options and is available in single- and double-head styles. Customer-specific wattages can also be accommodated; please contact the factory for details.

Dark Sky Compliance: Light Linear PT meets Dark Sky requirements when 3000K or warmer LEDs are selected and the luminaire is fixed-mounted (±15° adjustment allowed for leveling). This ensures reduced light pollution and environmentally responsible illumination.

Applications: Ideal for pedestrian precincts, building surrounds, shopping centers, squares, parks, and parking lots. Its sleek, minimalist form creates distinctive lighting effects at night while serving as a decorative urban element during the day.

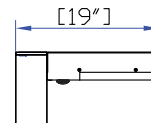
Design Continuity: Complementary bollard and wall-mounted luminaires are available to maintain consistent aesthetics across the project.

Pole Features: Poles can be supplied with GFCI boxes positioned at customer-specified heights. A flat, low-profile hand hole cover with vandal-resistant screws ensures secure and easy installation.

WATT-ADJ: Each luminaire includes a programmable driver, allowing factory-set wattage adjustments to meet specific project requirements (see options on page 2).

Approved for Canada: Add "-CSA" to the part number for Canadian compliance.

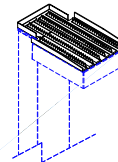
Additional Options (Consult Factory For Pricing)



OS
Occupancy Sensor

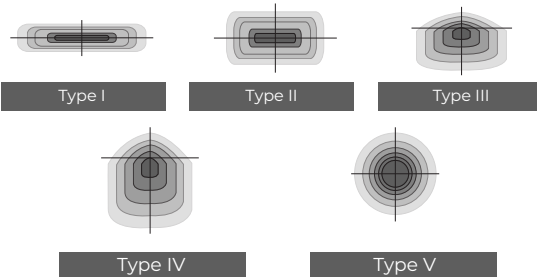
A90991
Zhaga Book 18

A90891
NEMA 7

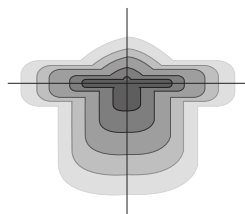


BSP
Bird Spikes

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 distributions for precise lighting requirements.



HYBRID
TYPE I & TYPE IV



PROJECT					DATE	
QUANTITY		TYPE		NOTE		

ORDERING EXAMPLE || ULI - 21231 - 28w - T2 - W30 - 02 - 18' - 120/277v - Options

ULI-21231						
LAMP	BEAM	LED COLOR	FINISH COLOR	POLE HEIGHT	VOLTAGE	
28w LED 3,601 Lumens WATT-ADJ Specify Watts (28w MAX)	T1 - Type I Distribution T2 - Type II Distribution T3 - Type III Distribution T4 - Type IV Distribution T5 - Type V Distribution	W27 - 2700K W30 - 3000K W35 - 3500K W40 - 4000K AMB - TURTLE FRIENDLY Amber LED	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	8' - 16' (Aluminum Pole 3.5" x 5.9") 17' - 20' (Steel Pole 3.99" x 5.9") [For Over 20', Contact Ligman]	120/277v Other - Specify	

Poles are rated for 100 mph wind load. For geographical areas with higher wind speeds, please contact Ligman.

ADDITIONAL OPTIONS

- DIM - 0-10v Dimming

NAT - Natatorium Rated

GFCI - GFCI Box c

F - Frosted Lens

BSP - Bird Spikes

A90891 - NEMA 7

CSA - CSA Approved for Canada

-Must Specify-
- A90991-U - Zhaga Book 18 Mounted On Top of Fixture

A90991-D - Zhaga Book 18 Mounted Below Fixture

IHSS - Integral House Side Shield

ERHSS - External Right House Side Shield

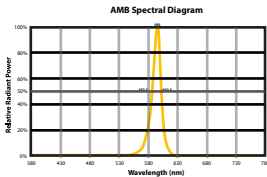
ELHSS - External Left House Side Shield

OS - FSP Occupancy Sensor

FSIR - Occupancy Sensor Remote Programmer

[For OS & FSIR - See last page]

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.

More Custom Finishes Available Upon Request

Consult factory for pricing and lead times

MicroPRIM FINISHES

- SW01 - OAK FINISH

SW02 - WALNUT FINISH

SW03 - PINE FINISH

DF - DOUGLAS FIR FINISH

CW - CHERRY WOOD FINISH

NW - NATIONAL WALNUT FINISH

SU01 - CONCRETE FINISH

SU02 - SOFTSCAPE FINISH

SU03 - STONE FINISH

SU04 - CORTEN FINISH

CSM - Custom Image/Pattern

MicroPRIM FINISHES

- MP - MAPLE FINISH

MHG - MAHOGANY FINISH

BH - BEECH FINISH

CN - CHESTNUT FINISH

WMBL - WHITE MARBLE FINISH

MBL - MARBLE FINISH

GRNT - GRANITE FINISH

BGD - BRUSHED GOLD FINISH

BBRZ - BRUSHED BRONZE FINISH

CAMO - CAMOUFLAGE FINISH

- MP01 - MicroPRIM RAL 9011 Black (Glossy)

MP02 - MicroPRIM RAL 7043 Dark Grey (Glossy)

MP03 - MicroPRIM RAL 9003 White (Glossy)

MP04 - MicroPRIM RAL 9006 Metallic Silver (Glossy)

MP05 - MicroPRIM RAL 9006 Matte Silver (Matte/Textured)

MP06 - MicroPRIM Ligman Bronze (Glossy)

MP07 - MicroPRIM Custom Color (Glossy)

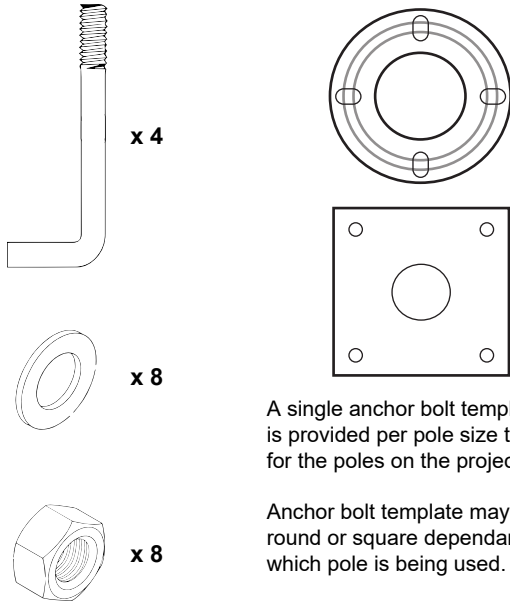


MicroPRIM Finish



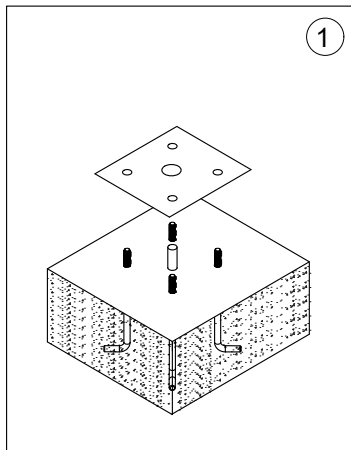
Anchor Bolt Installation for Poles

What's Included Per Pole



A single anchor bolt template is provided per pole size to be used for the poles on the project.

Anchor bolt template may be round or square dependant upon which pole is being used.



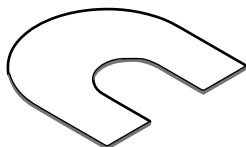
Use anchor bolt template to set anchor bolts into concrete as per civil engineering instructions.

Ligman does not provide foundation details. A local engineer that is familiar with the site soil conditions should provide this information.

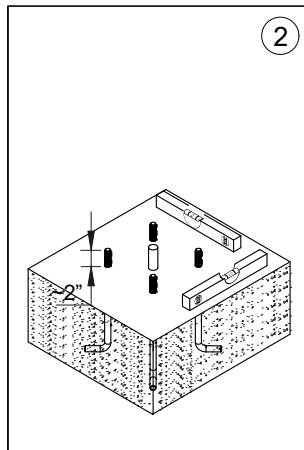
NOTE:

Ligman does not recommend using leveling Shims for pole installations.

Leveling shims can be provided, contact Ligman for more information.

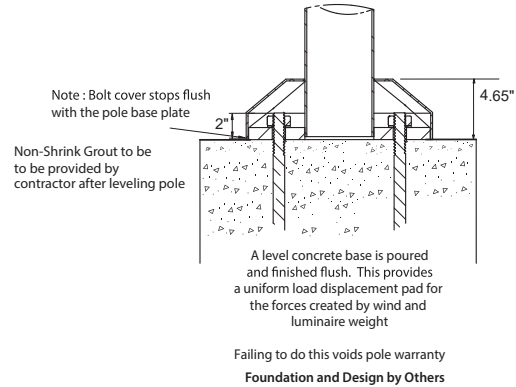


Leveling Shim Example



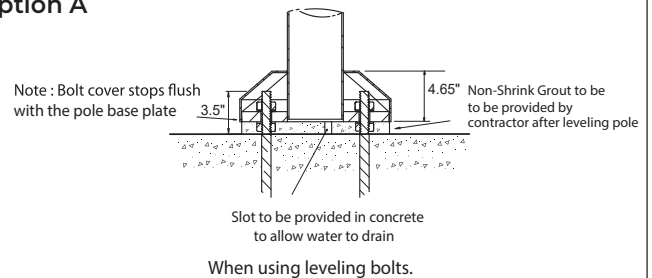
Ensure that the concrete is plumb using a level. Failing to do this will result in pole being uneven or tilted.

Preferred Pole Installation



In rare instances where leveling bolts have to be used, it is important that a flush concrete surface is created to mount the pole base plate.
NOTE: When using leveling bolts, bolt projection should be 3.5"

Using Leveling Bolts Option A

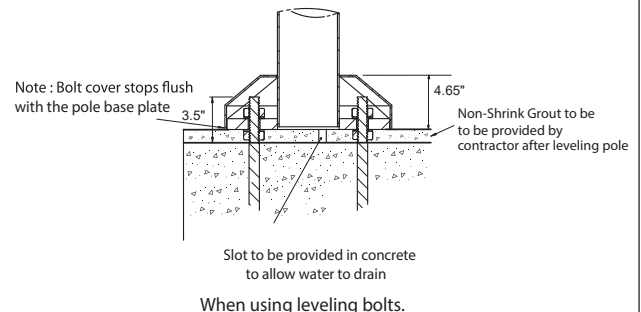


After establishing a level platform the space between the original concrete surface and the pole base should be filled with concrete and finished flush.

This provides a uniform load displacement pad for the forces created by wind and luminaire weight

Foundation and Design by Others

Using Leveling Bolts Option B



After establishing a level platform the space between the original concrete surface and the pole base should be filled with concrete and finished flush.

This provides a uniform load displacement pad for the forces created by wind and luminaire weight

HIGH/LOW/OFF PIR OUTDOOR PHOTO/MOTION SENSOR

IP66 - **legrand**® Integrated photocell

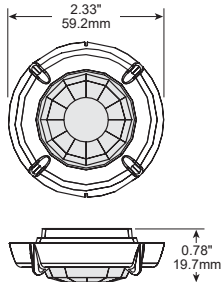
LIGMAN
LIGHTING USA

Ligman provides integrated photocell control using the wattstopper legrand FSP-221B. These units are installed inside the fixture housing with only the external lenses being visible

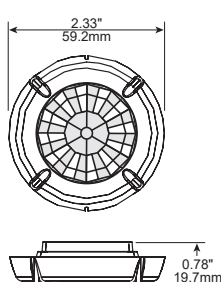


FSP-221B

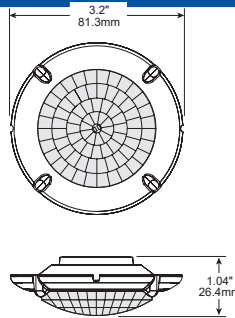
Dimensions of Lens Options



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.

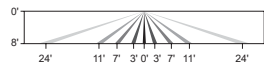
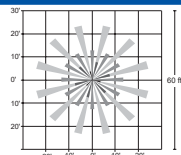
The sensors control 0-10VDC or nondimming LED drivers or ballasts.

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

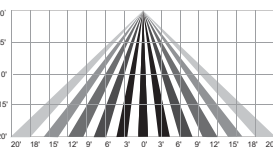
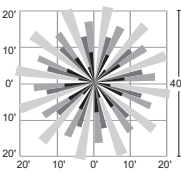
Initial setup and subsequent sensor adjustments are made using a Wireless Handheld Configuration Tool (FSIR-100). This tool enables adjustment of sensor parameters including high/low mode, sensitivity, time delay, cut off and more.

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

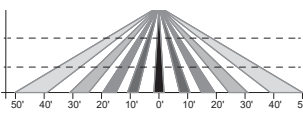
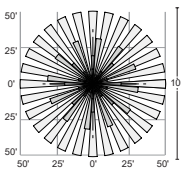
Coverage



FSP-L2 top and side coverage patterns



FSP-L3 top and side coverage patterns



FSP-L7 top and side coverage patterns

Models

FSP-221B, 100-347 VAC

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 30 minutes)

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 60 seconds)

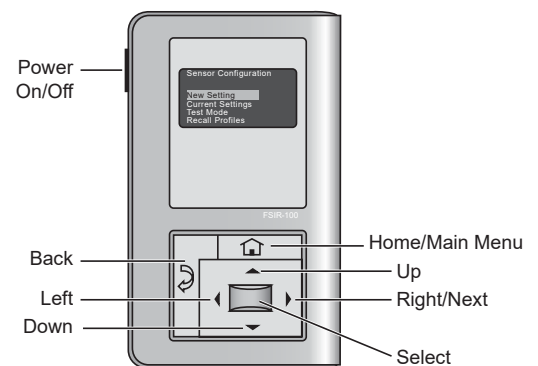
Operating temperature: -40°F to +167°F (-40°C to +75°C)

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.

Catalog #	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

Light Linear PT Product Family



Light Linear PT 1

- ULI-10021-28w-3169lm
- ULI-10022-54w-6240lm



Light Linear PT 2

- ULI-10031-2x28w-2x3169lm
- ULI-10032-2x54w-2x6240lm



Light Linear PT 3

- ULI-21171-54w-6193lm
- ULI-21173-82w-8448lm



Light Linear PT 4

- ULI-21172-105w-12518lm
- ULI-21291-155w-16891lm



Light Linear PT 5

- ULI-21181-2x54w-2x6193lm
- ULI-21183-2x82w-2x8448lm



Light Linear PT 6

- ULI-21182-2x105w-2x12518lm
- ULI-21321-2x155w-2x16891lm



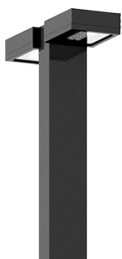
Light Linear PT 7

- ULI-21231-28w-3169lm



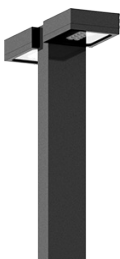
Light Linear PT 8

- ULI-21241-54w-6193lm



Light Linear PT 9

- ULI-21181-2x54w-2x6193lm
- ULI-21183-2x82w-2x8448lm



Light Linear PT 10

- ULI-21182-2x105w-2x12518lm
- ULI-21321-2x155w-2x16891lm



Light Linear PT 11

- ULI-30021-28w-3169lm
- ULI-30022-37w-4636lm



Light Linear PT 12

- ULI-30011-37w-4601lm
- ULI-30012-54w-6193lm