**microVos** TECHNOLOGY

**LIGMAN LIGHTING USA**

**81w LED**
**9,960 Lumens**

*(For lower Wattages See Page 2)*

**IP66**
Suitable for wet locations

**IK08**
Impact Resistant [Vandal Resistant]

**EPA** - 0.069m² → 0.743ft²

**Weight - 23.1 lbs**

**POLE NOT INCLUDED**

20.3"
2.7"
2.3"

### Fixture Detail

19.6"

SC76
Ø2.99"x3.5"

### Tenon Detail

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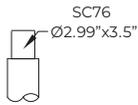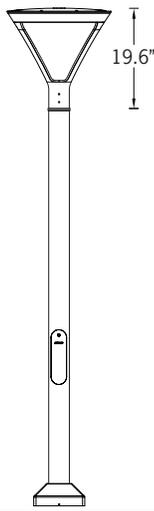
Ligman's micro Variable Optical System provides the ability to interchange, mix & rotate optics to provide specific light distributions for optimized spacing and uniformity.

Type I
Type II
Type III
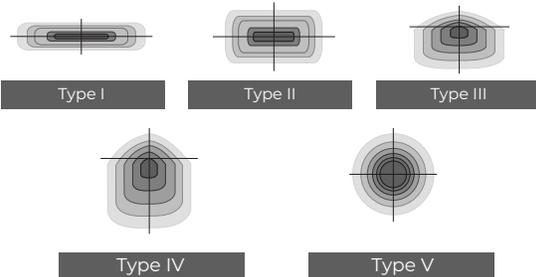
Type IV
Type V

The variable optic system allows for the designer to create hybrid distributions for precise lighting requirements.
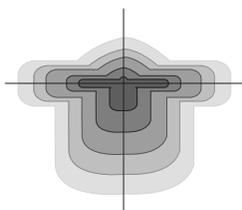
HYBRID
TYPE I & TYPE IV

## 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-U1-G2, B3-U1-G1, B3-U1-G2, B3-U1-G3

**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 tinge.

**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)

**Modern, contemporary post top**
**Beautiful modern urban post top in either single or V-arm configuration, offering powerful street lighting and asymmetric beam performance choices.**

A modern style die-cast aluminum post top decorative lantern with excellent downward light distribution that complies with dark sky requirements. Outstanding visual appeal and precision optical system gives very low glare rating, whilst reducing light pollution. This luminaire is available in two configurations, namely a single or v-arm option to suit aesthetic design requirements.

Color temperature 2700K, 3000K, 3500K and 4000K, LED CRI >80 and life time 50,000 Hours. Stainless steel screws. Durable silicone rubber gasket and clear tempered glass. Powder paint with high corrosion resistance with chemical chromatised protection. Integral control gear.

Customer specific wattages can be provided, please contact the factory for more information.

Available with a selection of dimmable integral electronic drivers, as well as a provision to install wireless lighting controls to integrate with building management systems. (WATT-ADJ) This luminaire is provided with a programmable driver so that specific wattage requirements can be achieved. These settings are done at the factory during assembly.

To meet International Dark Sky criteria, 3000k or warmer LEDs must be selected.

## Additional Options (Consult Factory For Pricing)

A90991
Zhaga Book 18

A90891
NEMA 7

RGBW
RGBW Macaron

SPLIT BEAM OPTIONS

T3 RIGHT
T4 LEFT

Endless Solutions

T4 & T4
T2 & T3
T1 & T4
T1 & T4

### LIGHCONNECT
### IoT Ready Macaron

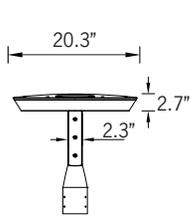**This luminaire is available with NEMA 7 or Zhaga Book 18 sockets for connection to intelligent lighting control systems.**

# UMC-20011
## Macaron 1 Post Top

**microVOS TECHNOLOGY**

**LiGMAN LIGHTING USA**

## ORDERING EXAMPLE || UMC - 20011 - 81w - T2 - W30 - 02 - 120/277v - Options

| UMC-20011 | | | | |
|---|---|---|---|---|
| **LAMP** | **BEAM** | **LED COLOR** | **FINISH COLOR** | **VOLTAGE** |

**LAMP**
- 81w LED 9,960 Lumens
- 60w LED 7,380 Lumens
- 50w LED 6,150 Lumens
- 30w LED 3,690 Lumens

**BEAM**
- T1 - Type I Distribution
- T2 - Type II Distribution
- T3 - Type III Distribution
- T4 - Type IV Distribution
- T5 - Type V Distribution
- ME - Type ME Distribution

**FOR SPLIT BEAM, SPECIFY BELOW**

**LED COLOR**
- W27 - 2700K
- W30 - 3000K
- W35 - 3500K
- W40 - 4000K
- AMB - TURTLE FRIENDLY
  - Amber LED

**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

| | |
|---|---|
| **SPLIT BEAM LEFT** | **SPLIT BEAM RIGHT** |

**SPLIT BEAM LEFT**
- T1 - Type I Distribution
- T2 - Type II Distribution
- T3 - Type III Distribution
- T4 - Type IV Distribution
- T5 - Type V Distribution
- ME - Type ME Distribution

**SPLIT BEAM RIGHT**
- T1 - Type I Distribution
- T2 - Type II Distribution
- T3 - Type III Distribution
- T4 - Type IV Distribution
- T5 - Type V Distribution
- ME - Type ME Distribution

A20176 Aluminum Arm Pole Clamp
A20276 Aluminum Single Arm
A20376 Aluminum Double Arm

| | | |
|---|---|---|
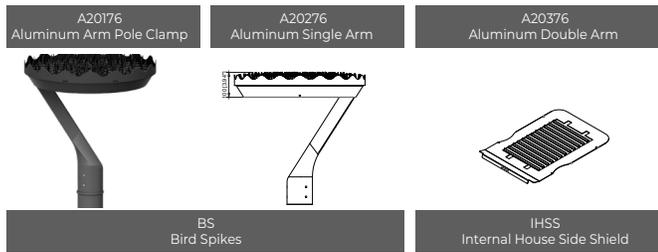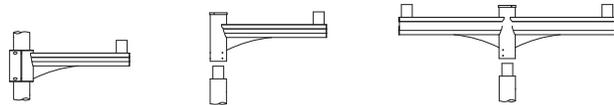
## ADDITIONAL OPTIONS

- DIM - 0-10v Dimming
- NAT - Natatorium Rated
- A90891 - NEMA 7
- BS - Bird Spikes
- RGBW - RGBW Macaron
- OS - FSP Occupancy Sensor [See last page]
- FSIR - Occupancy Sensor Remote Programmer [See last page]
- A90991-U - Zhaga Book 18 Mounted On Top of Fixture
- A90991-D - Zhaga Book 18 Mounted Below Fixture
- IHSS - Internal House Side Shield

BS Bird Spikes

IHSS Internal House Side Shield

## More Custom Finishes Available Upon Request
Consult factory for pricing and lead times

**10 YEAR WARRANTY** LIGMAN LIGHTING USA

**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

ETL Listed c US Intertek

# HIGH/LOW/OFF PIR OUTDOOR PHOTO/MOTION SENSOR
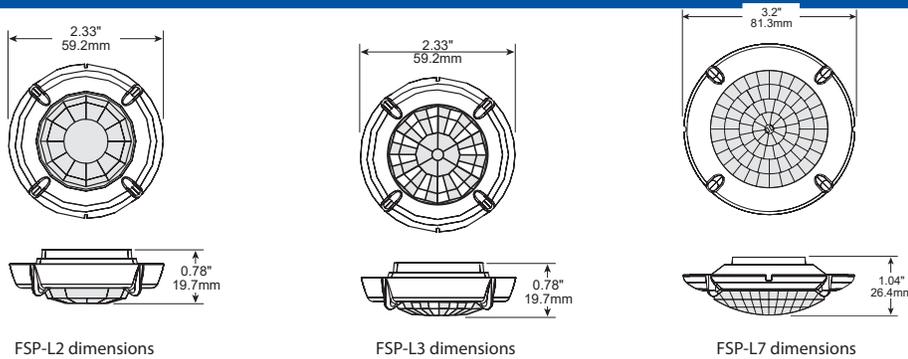## IP66 - **legrand**® Integrated photocell

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

## Models

FSP-211B, 120-277 VAC

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

## Dimensions of Lens Options

2.33"
59.2mm

0.78"
19.7mm

FSP-L2 dimensions

2.33"
59.2mm

0.78"
19.7mm

FSP-L3 dimensions

3.2"
81.3mm

1.04"
26.4mm

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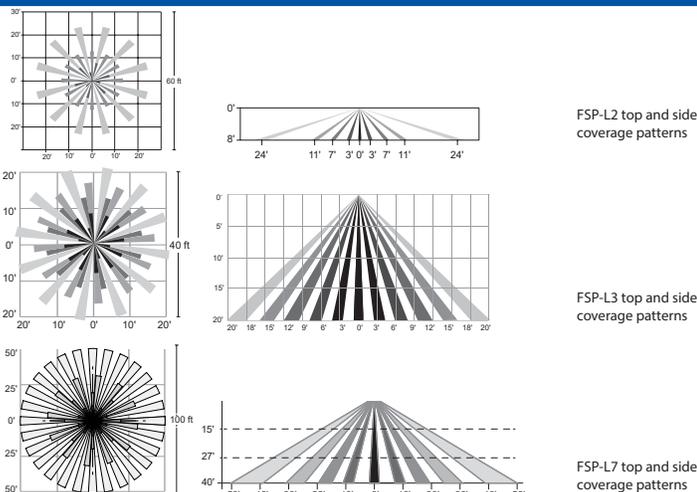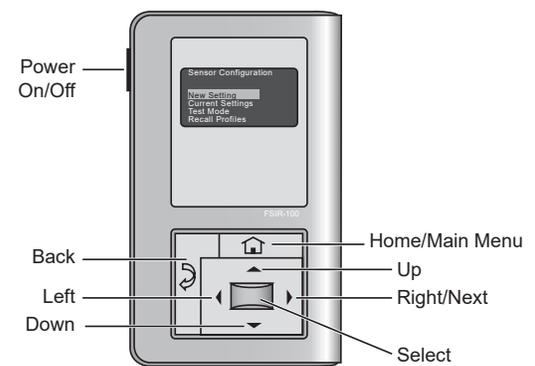
The sensors control 0-10VDC or nondimming LED drivers or ballasts.

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.

## 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 |

Power On/Off

Sensor Configuration

New Setting
Current Settings
Test Mode
Recall Profiles

FSIR-100

Back

Left

Down

Home/Main Menu

Up

Right/Next

Select

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

## Coverage

30'
20'
10'
0'
10'
20'
20' 10' 0' 10' 20'
60 ft

0'
8'
24'    11' 7' 3' 0' 3' 7' 11'    24'

FSP-L2 top and side coverage patterns

20'
10'
0'
10'
20'
20' 10' 0' 10' 20'
40 ft

0'
5'
10'
15'
20'
20' 18' 15' 12' 9' 6' 3' 0' 3' 6' 9' 12' 15' 18' 20'

FSP-L3 top and side coverage patterns

50'
25'
0'
25'
50'
50' 25' 0' 25' 50'
100 ft

15'
27'
40'
50' 40' 30' 20' 10' 0' 10' 20' 30' 40' 50'

FSP-L7 top and side coverage patterns

| 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 |