

Date:	
Project Name:	
SKU #:	

**RWL™ G2**

Roadway & Cobrahead



**APPLICATIONS**

Roadway, Parking Lots, Walkways and General Outdoor Spaces

**FEATURES**

**Construction**

- Rugged Die-cast Aluminum Housing with Universal Four Bolt Slipfitter
- 3G Vibration Meets Per ANSI C136.31-2010
- Tool-less Entry For Easy Internal Components

**Electrical & Technical**

- Input Voltage: 120-277V or 200-480V [Option]
- Input Frequency: 50/60Hz
- Projected Life: L70 > 100,000 hrs
- PF: >0.9
- CRI: >70
- THD: <20%
- CCT: 3000K, 4000K, or 5000K
- Operating Temp.: -40°F ~ 122°F
- IP Rating: IP65 Fixture and IP66 Light Engine
- IK Rating: IK10
- Driver: IP66 built-in short circuit, voltage overload, and current overload protection with automatic recovery after correction.
- EPA Rating: See Page 2
- Surge Protection 10kV/5KA Compliant With:
  - ANSI C136.2-2015 Extreme 3-Part Test.
  - IEEE C62.41.2 Location Category C High]
- Standard terminal block accommodates 6 to 14 gauge wire.

**Controls**

- 0-10V Dimming [Standard]
- Bi-level Occupancy/Daylight Harvesting Sensor
- Network Motion Sensor
- On/Off Photocell or Dimulator Dimming Photocontrol
- Wireless Control System Powered By SYNAPSE

**Lumen Output/BUG Rating**

- See Page 3

**Finish**

- Gray - Custom Color\*
  - Black\*
  - Dark Bronze\*
- [Durable & Corrosion-Resistant Polyester Powder Coat Finish: Tested With Stand 1,000 Hours In Salt Spray Exposure Per ASTM B117. Finish Meets Scribe Creepage Rating Per ASTM D1654.]

**Optical**

- Plastic Injection Molded Optic
- Distribution Type:
  - Type II
  - Type III
  - Type IV
  - Type V

**Installation/Mounting**

- Mounts to 1 1/4" to 2" (1-5/8" ~ 2-3/8" O.D) Diameter Mast Arm

**Warranty**

- 10 Year Warranty
- See warranty documentation for more information.

Not all products are qualified on the DLC® QPL. To view our DLC® qualified products, please consult the DLC® Qualified Products List at [www.designlights.org/qpl](http://www.designlights.org/qpl).

POWERED BY

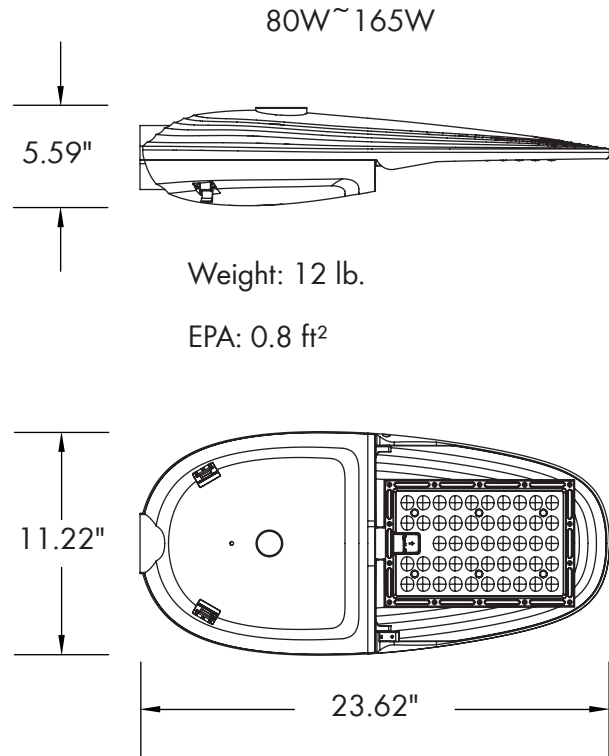
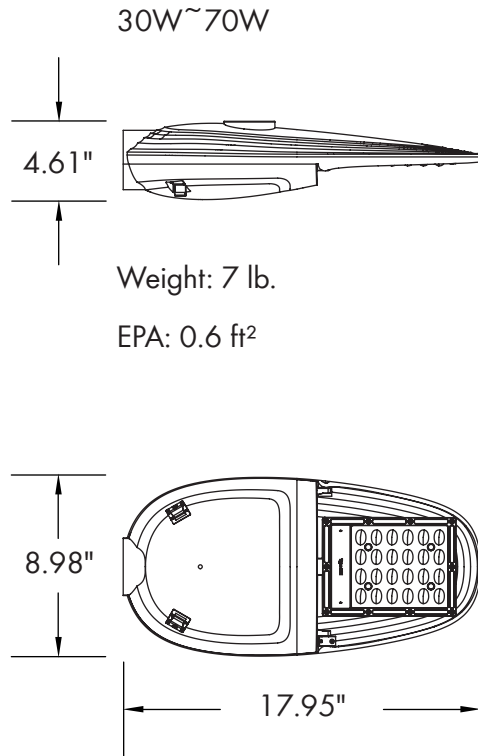


**ORDERING INFORMATION**

**EXAMPLE: RWL2-M-100-40-U-D-3-G**

Series	Size	Wattage	CCT	Input Voltage	Controls Option	Distribution	Finish
RWL2	S - Small	30 - 30W 40 - 40W 50 - 50W 60 - 60W 70 - 70W	30 - 3000K 40 - 4000K 50 - 5000K	U - 120-277V H - 200-480V	D - 0-10V Dimming [Standard] D1 - Wireless Control System Powered by SYNAPSE P3P - 3 pin Receptacle with On/Off Photocell P3S - 3 pin Receptacle with Short Cap P7P - 7 pin Receptacle with On/Off Photocell P7S - 7 pin Receptacle with Short Cap DIM4-U - Dimulator 120-277 VAC with 7 pin DIM4-H - Dimulator 480VAC with 7 pin D4 - Bi-level Occupancy/Daylight Harvesting Sensor	2 - Type II 3 - Type III 4 - Type IV 5 - Type V	G - Gray B - Black* DB - Dark Bronze* CC - Custom Color*
	M - Medium	80 - 80W 100 - 100W 120 - 120W 135 - 135W 150 - 150W 165 - 165W					
					<b>Accessories</b>	<b>Motion Sensor</b>	
					RWL2-SP10-FF (Surge Protection 10kV/5kA Fail to off) RWL2-SP20-FO (Surge Protection 20kV/10kA Fail to on) RWL2-SP20-FF (Surge Protection 20kV/10kA Fail to off) RWL2-FS (Field Adjustable Lumen Switch) RWL2-BLS (Back Light Shield) TGS-WP-ARM-X (Wood Pole Bracket)	FDP-301-L2-G (Network Motion Sensor) FDP-301-L2-W (Network Motion Sensor) FDP-301-L7-G (Network Motion Sensor) FDP-301-L7-W (Network Motion Sensor)	

DIMENSIONS



PERFORMANCE TABLE

SKU	Size	Wattage (W)	Delivered Lumens (lm)	Efficacy (lm/W)
RWL2-S-30-30-U-D-X	S	30	3900	130
RWL2-S-40-30-U-D-X	S	40	5200	130
RWL2-S-50-30-U-D-X	S	50	6500	130
RWL2-S-60-30-U-D-X	S	60	7800	130
RWL2-S-70-30-U-D-X	S	70	9100	130
RWL2-S-80-30-U-D-X	M	80	10400	130
RWL2-M-100-30-U-D-X	M	100	13000	130
RWL2-M-120-30-U-D-X	M	120	15600	130
RWL2-M-135-30-U-D-X	M	135	17100	130
RWL2-M-150-30-U-D-X	M	150	19500	130
RWL2-M-165-30-U-D-X	M	165	21450	130

**LUMEN OUTPUT/BUG RATING**

Wattage (W)	Dist. Type	Lumens (lm)	B	U	G
30	2	4278	1	0	1
	3	4186	1	0	1
40	2	5946	2	0	2
	3	5900	2	0	2
50	2	7161	2	0	2
	3	6919	2	0	2
60	2	7869	2	0	2
	3	7987	2	0	2
70	2	7987	2	0	2
	3	7987	2	0	2
80	2	10662	3	0	3
	3	11017	3	0	3
100	2	13205	3	0	3
	3	13198	3	0	3
120	2	14965	3	0	3
	3	15195	3	0	3
135	2	16901	3	0	3
	3	16901	3	0	3
150	2	18744	3	0	3
	3	18494	3	0	1
165	2	20793	3	0	3
	3	21356	3	0	3

**DLC® LISTED**

SKU	Wattage (W)	CCT (K)	Type
RWL2-X-60-30-U-D-3-F	60	3000	3
RWL2-X-60-40-U-D-3-F	60	4000	3
RWL2-X-60-50-U-D-3-F	60	5000	3
RWL2-X-100-30-U-D-3-F	100	3000	3
RWL2-X-100-40-U-D-3-F	100	4000	3
RWL2-X-100-50-U-D-3-F	100	5000	3
RWL2-M-135-30-U-D-3-F	135	3000	3
RWL2-M-135-40-U-D-3-F	135	4000	3
RWL2-M-135-50-U-D-3-F	135	5000	3
RWL2-M-165-30-U-D-3-F	165	3000	3
RWL2-M-165-40-U-D-3-F	165	4000	3
RWL2-M-165-50-U-D-3-F	165	5000	3

To view our DLC® qualified products, please consult the DLC® Qualified Products List at [www.designlights.org/qpl](http://www.designlights.org/qpl).

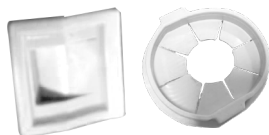
**ELECTRICAL LOAD**

Wattage (W)	Current (A)					
	120V	208V	240V	277V	347V	480V
Input Voltage						
30	0.26	0.15	0.13	0.11	0.09	0.07
40	0.35	0.20	0.19	0.15	0.12	0.09
50	0.42	0.25	0.22	0.19	0.15	0.11
60	0.53	0.30	0.26	0.23	0.18	0.13
70	0.61	0.35	0.31	0.27	0.21	0.15
80	0.70	0.40	0.35	0.30	0.24	0.18
100	0.88	0.50	0.44	0.38	0.30	0.22
120	1.05	0.61	0.53	0.45	0.36	0.26
135	1.18	0.68	0.59	0.51	0.41	0.30
150	1.31	0.76	0.66	0.57	0.45	0.33
165	1.44	0.83	0.72	0.63	0.50	0.36

ACCESSORIES



Bubble Level  
[Included]



Ingress  
Wildlife Guard  
[Included]



Field Adjustable Lumen  
Switch  
[RWL2-FS]



3 Pin, 5 Pin, or 7 Pin  
Receptacle & On/Off  
Photocell  
[P3, P5 or P7]



7 Pin Receptacle &  
Dimulator  
[DIM4-U or DIM4-H]



Bi-Level- Occupancy Sensor/  
Daylight Harvesting Sensor  
[D4]



Network Motion Sensor  
[FDP-301-L2-G, FDP-301-L2-W,  
FDP-301-L7-G, FDP-301-L7-W]



Wood Pole Bracket  
[TGS-WP-ARM-X]



Back Light Shield  
[RWL2-BLS]



7 Pin Receptacle &  
T7-HLV  
[D1]

DIMULATOR: STAND-ALONE LED DIMMING PHOTOCONTROL



Features

- Factory preset dimming - no selector switch
- 10 Year Warranty
- Compliant with ANSI C136.41 receptacle
- Optional constant all night dimming
- Adaptive lighting control with progressive intensities
- 40kV Surge Protection
- High voltage version available
- Advance time/date algorithm auto-adjusts for daylight savings
- Automatically synchronize to local time

Bat Eye Technology

- Advanced light sensor, only reacts to sunlight
- Immune to LED and other artificial light
- No false activation (no cycling)
- May be oriented in any direction



Patent #9210746

ELL PHOTOCELL: EXTRA LONG LIFE PHOTOCONTROL



Features

- Designed to meet or exceed the life expectancy of LED fixtures.
- 10 Year Warranty
- 40kV Surge Protection
- High voltage version available

Bat Eye Technology

- Advanced light sensor, only reacts to sunlight
- Immune to LED and other artificial light
- No false activation (no cycling)
- May be oriented in any direction



## CONTROL PRE-COMMISSIONING

Default setting are indicated by\*

High-End Trim/ Tuning	Sensitivity Range	Time Delay	Daylight Harvesting	Stand-by Light Level Setting	Stand-by Time Setting
70%	70%	10s	<b>Light Sensor Disabled*</b>	0%	∞
80%	50%	1min	1FC (10lux)	<b>10%*</b>	1min
90%	70%	<b>10min*</b>	3FC (30lux)	30%	30min
<b>100%*</b>	<b>100%*</b>	15min	5FC (50lux)	50%	<b>60min*</b>

**High-End Trim/Tuning:**

Setting that determines the maximum lumen output through high-end trim tuning, can be reduced by up to 30 percent.

**Sensitivity Range:**

Setting that determines the sensitivity range of the motion sensor when the daylight sensor is disabled.

**Time Delay:**

The light can be set to stay ON for any period of time between approx. 10 sec. to a maximum of 60 min. Any movement detected before this time elapse will re-start the timer.

**Daylight Harvesting:**

The chosen light response threshold can be disabled or respond when photocell detects foot candle levels 1-5 FC

**Stand-by Light Level:**

Setting determines how much lumen output is dimmed down to when no motion is detected.

**Stand-by Time:**

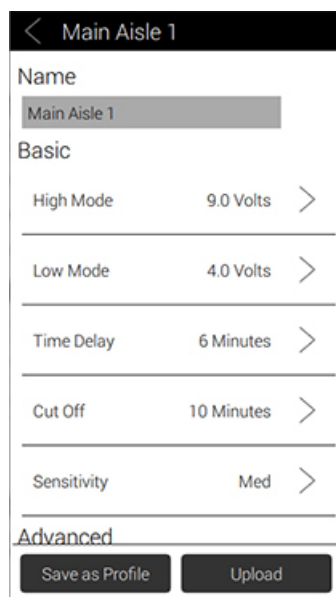
Setting determines how long after stand-by light level occurs the light will shut off. Up to 60 minutes.



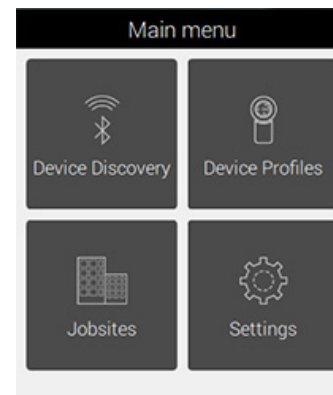
**CONTROL PRE-COMMISSIONING - WATTSTOPPER®**

- 1. High Mode:** When the sensor detects motion the dimming control output ramps up to the selected HIGH light level (default is 10V).
- 2. Low Mode:** After the sensor stops detecting motion and the time delay expires the dimming control output fades down to the selected LOW light level (default is 1V).
- 3. Time Delay:** The selected time period that must elapse after the last time the sensor detects motion for the electric lights to fade to LOW mode (default is 5 minutes).
- 4. Cut Off:** The time period that must elapse after the lights fade to LOW mode and the sensor detects no motion for the electric lights to turn OFF (default is 1 hour).
- 5. Sensitivity:** The response of the PIR detector to motion within the sensor's coverage area (default is max).
- 6. Setpoint:** When enabled, the selectable ambient light level threshold that will hold the electric lights off or at LOW level when the sensor detects motion (default is disabled).  
The Auto option invokes an automatic calibration procedure to establish an appropriate setpoint based upon the contribution of the electric light. As part of this procedure, the controlled load is turned on for two minutes to warm up the lamp, and then switched off and on eight times, terminating in an off state. After this process, a new setpoint value is automatically calculated.

- 7. Hold Off:** The selectable ambient light level threshold that will hold the lights off or at LOW level when the sensor detects motion (default is Disabled). A switch allows you to Enable or Disable this feature. If enabled, select Auto Format or Custom Value. If Custom is selected, the Range is 1 fc to 250 fc.  
The Auto option invokes an automatic calibration procedure to establish an appropriate setpoint based upon the contribution of the electric light. As part of this procedure, the controlled load is turned on to warm up the lamp, and then it is switched off and on eight times, terminating in an off state. After this process, a new setpoint value is automatically calculated. During this time, communication to the FSP-3x1 is disabled.



- 8. Ramp Up Time:** Time period for light level to increase from LOW to HIGH (default is disabled; lights switch instantly).



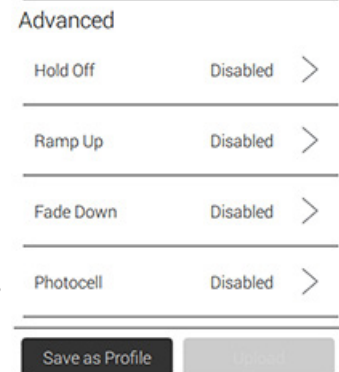
The Sensor Configuration App is a convenient tool for setting up FSP-3x1 sensors. Adjustable settings can be changed as needed for specific applications.



- 9. Fade Down Time:** Time period for light level to decrease from HIGH to LOW (default is disabled; lights switch instantly).



- 10. Photocell On/Off:** When enabled, the sensor will force the load OFF after the light level has exceeded the selected photocell setpoint for at least a minute. It will also force the load ON when the light level goes below the setpoint, even if no motion is detected (default if disabled).



Once ON (initially at High), the load will dim to Low following the Time Delay, and to OFF following the Cut Off time. To ensure dusk to dawn control, Cut Off must be disabled.

The photocell On/Off setpoint is automatically set to maintain a deadband of at least 10 fc above the Hold Off Setpoint to prevent cycling if the two features are used together.

WIRELESS CONTROL SYSTEM

POWERED BY

**SYNAPSE**



- Utility grade power monitoring.
- WiFi Mesh Receiver Nodes.
- Communication range is up to 1 mile line of sight.
- Control dimming and On/Off.
- Secure, over-the-air software upgrades.



- Manual/Remote/Web access to Nodes.
- Control up to 1000 Nodes.
- Weather protected.
- Optional, pre-configured 5 button switch to allow for control of all lighting (Central Base Station only).



**Wattstopper FDP-301**  
Network Controlled  
Sensor  
(Optional)



**Central Control  
Base Station**  
(Optional)

or



**SimplySnap Controller**



**WiFi or LAN Network**  
with  
browser based  
control interface

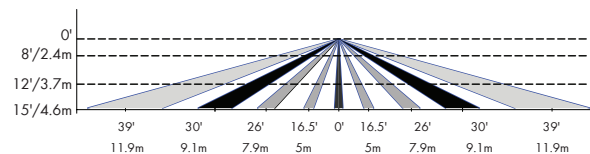
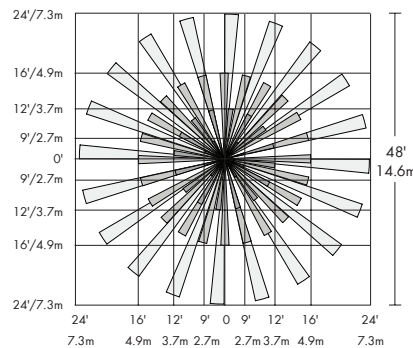


**Optional Cloud Control**  
with Verizon 4G LTE

WATTSTOPPER® FDP-301 NETWORK CONTROLLED MOTION SENSOR

**L2 Lens** The FDP-L2 is designed for mounting at heights between 8'-15'. It provides 48' diameter coverage area when mounted at height 8' or a 78' coverage area at 15'.

**Top View @ 8'**



**L7 Lens** The FDP-L7 has a lens that covers a 100' diameter area at a height of 40'

**Top View @ 40'**

