





# ECL G2 6 | LED Strip

### **Features:**

- High performance LED technology
- 0-10V dimming drivers standard
- DALI drivers available
- Field replaceable LED boards and drivers
- Frosted diffuser available to help minimize glare and improve aesthetics
- A wide variety of lumen packages and lengths allows for flexibility in design and helps maximize energy savings
- Advanced controls available
- Buy American Act compliant (All base luminaires are BAA compliant. Addition of options may change eligibility. Contact factory for details.)

## **Applications:**

Suitable for most commercial, industrial and institutional applications

- Office
- Retail
- Warehouse
- Coves
- Valences

## **Ambient Operating Temp.:**

- -30°C to 40°C [LW, ML, MD, MH, HI]
- -30°C to 35°C [VH]
- -30°C to 30°C [SH]

## Predicted Lifetime:

- L70: ≥ 129,000 hrs (calculated)
- L80: ≥ 81,000 hrs (calculated)
- L90: ≥ 39,000 hrs (reported) (based on LM-80, TM-21 and in-situ laboratory testing)

## Construction:

 Precision brake formed from cold rolled steel with a highly durable matte white finish. Optional matte black and metallic silver options constructed of brake formed aluminum

### Certifications:

• UL 1598 listed for US and Canada, suitable for damp locations



## Warranty:

- 5 year limited system warranty see <u>www.LumenFocus.com</u> for complete warranty terms and conditions
- 10 year warranty option available on specific models (Not available on all models. Certain conditions apply. Consult factory or sales representative for details.)













Ordering Guide: example: ECL G2 6 MD UV FR 940										
Series	Version	Length	Output	Voltage	Shielding	CRI/CCT	Hanging	Controls	Options	Finish
ECL	<b>G</b> 2	6								
ECL	<b>G2</b> Gen 2	<b>6</b> 6′	<b>LW</b> Low	UV 120-277	Blank No Lenses	930 90 CRI/3000K	Blank None	Blank No Controls	Blank No Options	Blank White
			ML Medium Low MD Medium MH Medium High HIgh VH Very High SH Super High	<b>34</b> 347V	FR Frosted Acrylic Diffusers	935 90 CRI/3500K 940 90 CRI/4000K 950 90 CRI/5000K	VC V-Chain Hangers QC 10' Quick Hang Cable Kit QC20 20' Quick Hang Cable Kit SH Slide Hanger	ZSOL Leviton Intellect Solo Programmable PIR/ Daylight Harvesting Sensor <sup>(1)</sup> ZLD1 Leviton Bluetooth-enabled Programmable Dimming/Occupancy/Daylight Harvesting Sensor with Grouping (120-277V) <sup>(1)</sup> ZLDU Leviton Bluetooth-enabled Programmable Dimming/Occupancy/Daylight Harvesting Sensor with Grouping, Scheduling (120-480V) <sup>(1)</sup> Z211L Wattstopper FSP Programmable Photo/ Motion Multi-Voltage Sensor	EXT10 10-Year Extended Warranty(5)  C6 6' Single Circuit Cord C65W 6' Single Circuit Cord with Low Voltage Connections  C10 10' Single Circuit Cord C105W 10' Single Circuit Cord with Low Voltage Connections	BK Matte Black SL Metallic Silver
$^{(2)}$ "_" = $1e^{(3)}$ 120-27	ge 5 for mo ens type. Se	e Page 5 e Page 5	for more de for more de					(high/low/off) <sup>(2)</sup> Z311L_ Wattstopper FSP Bluetooth-enabled Programmable Photo/Motion Multi-Voltage Sensor (high/low/off) <sup>(2)</sup> ZOSMD  Microwave Daylight/Motion Sensor With Step-Dimming (High/Low/Off) <sup>(3)</sup> ZSLFC2  Keystone SmartLoop Wireless Bluetooth	D6 6' Dual Circuit Cord D10 10' Dual Circuit Cord P(NEMA) Plug (Specify NEMA configuration) SC Safety Cable	

Mesh Occupancy/Daylight Harvesting Smart Sensor<sup>(1)</sup>

#### **ZLDS**

Leviton Intellect DALI Sensor with Dimming/ Occupancy/Daylight Harvesting with Newtork Capabilities<sup>(4)</sup>

#### ZL7S

Leviton Intellect 0-10V Sensor with Dimming/Occupancy/Daylight Harvesting with Newtork Capabilities<sup>(4)</sup>

### **ZLDC**

Leviton Intellect DALI Fixture Controller with Newtork Capabilities  $^{(4)}$ 

#### ZL7C

Leviton Intellect 0-10V Fixture Controller with Newtork Capabilities<sup>(4)</sup>

#### **ZENLO**

Enlighted Micro Sensor with Dimming/ Occupancy/Daylight Harvesting and Enlighted One System<sup>(4)</sup>

### **ZENLC**

Enlighted Micro Sensor with Dimming/ Occupancy/Daylight Harvesting and Enlighted Connected System<sup>(4)</sup>

#### ZENLI

Enlighted Micro Sensor with Dimming/ Occupancy/Daylight Harvesting and Enlighted IoT System<sup>(4)</sup>

Fuse

#### EM6 6.5W Emergency Pack<sup>(6)</sup>

EM10

10W Emergency Pack<sup>(6)</sup>

## EM14

14W Emergency Pack<sup>(6)</sup>

## QWH(\_)

Quick Wire Harness<sup>(7)</sup>

#### SDT(480V)

480V to 277V Step Down Transformer

#### CC

Conformal Coating

## LVL

0-10V Dimming Leads for Easy Field Access

#### BAA

Buy American Act Compliant



<sup>(5)</sup> Not available on all models. Certain conditions apply. Consult factory or sales representative for details.

<sup>(6) 120-277</sup>V / 0°C-55°C ambient. To estimate lumen output in emergency mode, multiply EM wattage by the Lumens per Watt of the luminaire it is installed in.

ex. ECL G2 6 MD UV 940 EM10  $\rightarrow$  151.8 LPW x 10W = 1,518 lm

 $<sup>^{\</sup>scriptscriptstyle{(7)}\text{"}\_\text{"}}$  for 2-circuit wiring, specify circuit A or B here.



## Accessories (order separately)

WG(ECL6) Wire Guard



## Controls Accessories (order separately)



#### For Leviton Programmable Sensor

ZLSOR-RA1 IR Programming Remote



#### For WattStopper Controls

FSIR-100 Wireless IR Programming Tool

(For Z211Lx)



#### For Keystone SmartLoop Controls

KTSL-WS1-B-SG/G2 5-Button Bluetooth Wireless Wall Switch

KTSL-TK1-USB USB Time Keeper



#### For Leviton Intellect Controls

DRKDN-U1W 1-Button Wireless Wall Controller DRKDN-U2W 2-Button Wireless Wall Controller DRKDN-U2W 4-Button Wireless Wall Controller DRKDN-U8W 8-Button Wireless Wall Controller



#### For Enlighted Controls

WS-2-00-IL

WS-2-00 Enlighted Remote Control Wall Switch

(for Enlighted Connected & IoT) Enlighted Remote Control Wall Switch

(for Enlighted One)

## **Performance Chart:**

Catalog #	Watts	Lumens (930)	LPW (930)	Lumens (935)	LPW (935)	Lumens (940)	LPW (940)	Lumens (950)	LPW (950)
ECL G2 6 LW UV FR 9xx	21.9	3187.4	145.7	3200.8	146.3	3276.9	149.7	3276.9	149.7
ECL G2 6 ML UV FR 9xx	32.4	4737.4	146.4	4757.4	147.0	4870.4	150.5	4870.4	150.5
ECL G2 6 MD UV FR 9xx	43.9	6165.8	140.5	6191.8	141.1	6338.9	144.4	6338.9	144.4
ECL G2 6 MH UV FR 9xx	51.6	7690.2	149.1	7722.6	149.8	7906.0	153.3	7906.0	153.3
ECL G2 6 HI UV FR 9xx	62.2	9106.4	146.4	9144.8	147.0	9362.0	150.5	9362.0	150.5
ECL G2 6 VH UV FR 9xx	83.6	12303.0	147.1	12354.9	147.7	12648.3	151.2	12648.3	151.2
ECL G2 6 SH UV FR 9xx	106.0	15095.3	142.4	15158.9	143.0	15518.9	146.4	15518.9	146.4
ECL G2 6 LW UV 9xx	21.9	3350.3	153.1	3364.4	153.7	3444.3	157.4	3444.3	157.4
ECL G2 6 ML UV 9xx	32.4	4979.6	153.9	5000.6	154.6	5119.3	158.2	5119.3	158.2
ECL G2 6 MD UV 9xx	43.9	6481.0	147.7	6508.3	148.3	6662.9	151.8	6662.9	151.8
ECL G2 6 MH UV 9xx	51.6	8083.2	156.8	8117.3	157.4	8310.1	161.2	8310.1	161.2
ECL G2 6 HI UV 9xx	62.2	9571.8	153.9	9612.1	154.5	9840.4	158.2	9840.4	158.2
ECL G2 6 VH UV 9xx	83.6	12931.8	154.6	12986.3	155.3	13294.8	158.9	13294.8	158.9
ECL G2 6 SH UV 9xx	106.0	15866.8	149.7	15933.6	150.3	16312.1	153.9	16312.1	153.9

## Schematic:

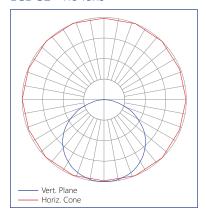




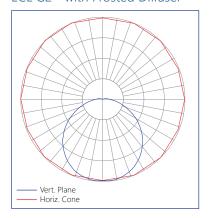


## Photometric Data:

Relative Luminous Intensity ECL G2 - no lens



## Relative Luminous Intensity ECL G2 - with Frosted Diffuser





The ECL G2 features field replaceable boards and drivers. This allows you to upgrade to more efficient technology in the future. Or, in the rare event of a failure, you can rapidly replace defective components. Re-boardABILITY helps to ensure you won't get stuck with an obsolete light fixture. Learn more about Re-boardABILITY here.



## **Controls Summary:**

Control Code	Туре	Capabilities	Communication
ZSOL	Motion (PIR), Daylight Harvesting	High/Low/Off	Wired 0-10V, Programmable via IR remote (sold separately)
ZLD1	Motion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim, Grouping	Wired 0-10V, Programmable via Bluetooth App (iOS, Android)
ZLDU	Motion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim, Grouping, Scheduling	Wired 0-10V, Programmable via Bluetooth App (iOS, Android)
Z211Lx	Motion (PIR), Photosensor	High/Low/Off, High-End Trim	Wired 0-10V, Programmable via IR remote (sold separately)
Z311Lx	Motion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim	Wired 0-10V, Programmable via Bluetooth App (iOS, Android)
ZOSMD	Motion (Microwave), Photosensor	On/Low/Off	Wired 1-10V
ZSLFC2	Motion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim, Grouping, Scheduling, LLLC (Keystone TechSmartLoop)	Wireless Bluetooth Mesh, Programmable via Keystone SmartLoop App for iOS or Android
ZLxS	Motion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim, Grouping, Scheduling, Demand Response*, BMS Integration*, LLLC (GreenMAX DRC)	Wireless Zigbee 2.4 GHz Mesh, Programmable via GreenMAX DRC app. for iOS or Android along with DRKDN-UxW Wall Controller (sold separately)
ZLxC	Controller, No Sensors	High/Low/Off, High-End Trim, Grouping, Scheduling, Demand Response*, BMS Integration*, LLLC (GreenMAX DRC)	Wireless Zigbee 2.4 GHz Mesh, Programmable via GreenMAX DRC app. for iOS or Android along with DRKDN-UxW Wall Controller (sold separately)
ZENLO	Motion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim, Grouping, Upgradable to Connected (ZENLC) or IoT (ZENLI)	Wireless Bluetooth Low Energy Mesh, Programmable via Enlighted Room Controller WS-2- 00-IL (sold separately)
ZENLC	Motion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim, Grouping, Scheduling*, Energy Monitoring*, BMS Integration*, Upgradable to IoT (ZENLI), LLLC (Enlighted IoT)	Wireless Bluetooth Low Energy Mesh, Programmable via Enlighted IoT Software
ZENLI	Motion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim, Grouping, Scheduling*, Energy Monitoring*, BMS Integration*, LLLC (Enlighted IoT)*, Space - Building Utilization*, Where - Real Time Location Services*	Wireless Bluetooth Low Energy Mesh, Programmable via Enlighted IoT Software



LLLC = Luminaire Level Lighting Control

\* Additional equipment required. Contact LumenFocus representative for details



## Dimming Sensors (Z211/Z311)

- The Wattstopper FSP sensor provides multi-level control based on motion and/or daylight contribution
- Comes pre-installed on the fixture
- Rated for cold locations
- Parameters for Bluetooth-enabled Z311 adjustable via phone app iOS or Android
- Parameters for Z211 adjustable via wireless configuration tool (FSIR-100 sold separately)
- Available with black lens for black finishes (pictured right)
- Two lenses available, tailored for the ideal detection area and mounting height:
- L2: 360° lens, maximum coverage 48', diameter from 8' height
- L3: 360° lens, maximum coverage 40', diameter from 20' height





Phone app interface for **Z**311 sensor

## **Keystone SmartLoop** Wireless Control System

The SmartLoop wireless lighting control system by Keystone is a Bluetooth mesh lighting control system that allows you to set up and manage your lighting ecosystem quickly and easily. It's powerful enough to run a space with multiple lighting zones, but simple enough to program in minutes with your smartphone – perfect for warehouses, offices, schools, and auditoriums, whether new construction or retrofit.

- Wireless Bluetooth 2.4 GHz mesh network
- Supports up to 100 devices on a single region, with unlimited regions
- Independent per-fixture control: Occupancy, Daylight Harvesting, Task Tuning, Grouping, Scene Setting, Scheduling
- Commissioned via SmartLoop mobile app for iPhone and Android



## ZSLFC2



- Up to 16' mounting height. 16' radius at 16' height.
- Works with 0-10V dim-to-off drivers with 12V aux. power

## **SmartLoop Accessories**

- Bluetooth Wireless Wall Switch: KTSL-WS1-B-SG/G2
  - Battery Powered: 2x CR2032
  - 5 Button: Power Toggle, Dimming, Automatic Sensor/Preset Level Operation, Scene Activation

USB Time Keeper:

### KTSL-TK1-USB

- Relays time to system components after a power loss
- Powered by standard USB charging port
- Internal CR1220 battery backup



## Microwave Occupancy Sensor (ZOSMD)

The Leviton OSM3D-DDW (or equivalent) detects motion through low density materials using high frequency electromagnetic waves. This means it can sit

discretely behind the ECL G2's frosted lens. The ZOSMD features automatic switching based on motion and ambient light level. ZOSMD option adds step-dimming functionality - standby dimming level 10% / 20% / 30% / 50%. Max mounting height for ZOSMD 40 feet.



## Leviton Intellect Solo Dimming Sensor (ZSOL)

The ECL G2 can be equipped with an integrated Leviton Intellect Solo Sensor ("ZSOL" option). This is a 0-10V dimming Passive Infrared (PIR) occupancy and daylight harvesting sensor.

Other features:

- Partial-on
- Partial-off
- 8' to 10' mounting height
- IP20 rated
- Detection angle: 120 degrees
- IR remote available for programming sensor from the floor (sold separately)
- Can be used to comply with IECC, ASHRAE 90.1 and 2019 Title 24, Part 6 dimming, occupancy/vacancy sensing and daylight harvesting requirements.



## Smart Sensors (ZLD1/ZLDU)





The ZLDx option includes high bay and low bay lenses along with aisleway masks that can easily be installed

or swapped out in the field. The high bay lens is good for 20'-40' mounting heights, while the low bay lens is good for 8'-20' mounting heights.

- Leviton Smart IP66 passive infrared (PIR) sensors
- Features mesh grouping (16 devices per group), occupancy sensing, daylight harvesting, scheduling (for ZLDU only), single-level switching
- · Comes pre-installed on the center face of the fixture
- Rated for cold locations
- · Configurable through the Leviton Smart Sensor App using a smartphone or other Bluetoothenabled iOS or Android device





## **GreenMAX DRC Wireless Networked Control System**

## with Leviton Intellect Sensors & Controllers

The GreenMAX DRC Wireless Keypad Room Controllers are used as the brain of the system, managing the fixture integrated Leviton Intellect sensors & controllers. Wirelessly commission, configure, control, monitor and provision the GreenMAX DRC system using the GreenMAX DRC App and an Android or iOS smart device.

- Occupancy/Vacancy Sensing
- · Multi-Level Lighting, Partial-On, Partial-Off
- Daylight Harvesting
- Task Tuning
- Scheduling
- Grouping
- Demand Response
- BMS Integration
- ZigBee 2.4 GHz Wireless Mesh Network
- Up to 75' between devices
- \* DRKDN-UxW room controller required for full functionality and programming of Intellect sensors & controllers





- PIR Occupancy Sensor
- Daylight Sensor
- 0-10V or DALI
- Up to 20' mounting height



- Wireless fixture controller, no sensor
- 0-10V or DALI



- 1-, 2-, 4-, and 8-button configurations
- Line voltage powered: 120-277V
- Max capacity: 60 devices
- Programmable: On/Off/Raise/Lower/ Toggle/Scene
- Use any Android or iOS device for configuration using the GreenMAX DRC App

## **Enlighted**: All-in-one sensors, upgradeable systems

Enlighted's SMART Micro Sensor is an all-in-one unit: task tuning, high-end trimming, daylight harvesting, and occupancy/vacancy detection. **Max installation height is 15 feet.** 

Enlighted sensors come standard with the Enlighted One system (the "ZENLO" option). Enlighted Connected ("ZENLC") offers even more options. The Enlighted IoT ("ZENLI") option allows the full implementation of Enlighted's services. Each system can be fully upgraded to the next tier in the future. So if you start with Enlighted One but want to add energy reporting or building management systems integration in the future, you can.



Enlighted Capabilities*	Enlighted One (ZENLO)	Enlighted Connected (ZENLC)	Enlighted IoT (ZENLI)
Motion and Switch Groups	✓	✓	✓
Daylight Harvesting	✓	✓	✓
Schedule Lighting		✓	✓
Energy Reporting & Optimization		✓	✓
Environment Data & Lighting Controls API		✓	✓
Building Management System Integration		✓	✓
Where & Space Applications			✓
Location & Occupancy APIs & Beaconing			✓
Future App & API Ready			✓

Note: Additional equipment required for ZENLC and ZENLI

## Real-time data analytics

Enlighted's control units compile data in real-time, which can be viewed via the Energy Manager. The Energy Manager is part of the Enlighted Connected and Enlighted IoT configurations.

- Real-time measurements and verification of energy savings
- Space analytics data can be compiled into motion trails and heat maps
- Analyze traffic density and congestion in a space



Learn more about our available advanced controls options here:

www.lumenfocus.com/controls-overview

© 2023 Enlighted for all Enlighted content and images.

 $\ \, \mathbb{O}$  2023 Leviton Manufacturing Co. Inc. for all Leviton content and images.





## Other Options:



**Shielding** Frosted acrylic diffuser lenses minimize glare and improve aesthetics.



Conformal coating Grants LED boards added

Grants LED boards added protection from moisture and corrosion in more hazardous environments.



**Cords** are available in single circuit or dual circuit, 6' or 10'. Standard plug is optional, as are other NEMA configurations if specified.

Wireguards are available for added protection (shipped separately).





Hanging The QC hanging kit (1) comes in 10' or 20'. Cables are pre-looped for easy installation and designed for easy fixture height adjustment. V-hangers and slide hangers are also optional.

Finish in addition to the standard white finish, the ECL G2 is also available in matte black (pictured) and metallic silver.



