



# Modular design for ultimate savings





# A single garage luminaire with boundless possibilities

The Gardco LED garage luminaire G3 delivers an affordable parking garage lighting solution with a comprehensive range of features. Blending low-profile flexibility with excellent performance, G3 provides a high quality solution specifically designed to meet the challenges of parking garage applications. Whether you are seeking energy savings, or require an enhanced sense of security and optimal light levels, the G3 has you covered.

The G3 luminaire's versatile modular construction allows for complete design flexibility. A single installed luminaire can have from one to two LED modules, varying your light levels while keeping overall installation and operation costs low. Combining the benefits of LED with stand-alone or integral wireless control solutions, G3 provides even more design flexibility and energy savings.

## Lowest wattage two per bay solution

The G3's lowest wattage solution is a single 16 LED array that consumes up to 55 watts per luminaire combined in a typical two per bay configuration. This arrangement meets IES RP-8 design guidelines, offering one of the most energy efficient solutions available today. Designed as a direct replacement for a standard 150 watt (185 system watts) pulse start system, the standard G3 saves 85% in energy costs<sup>1</sup>.

## Lowest cost one per bay solution

If your design criteria requires a one per bay configuration, the dual 16 LED array G3 meets IES RP-8 design guidelines by utilizing the Type 1R optical system. This arrangement provides a 70% energy savings when compared with traditional 150 watt pulse start systems (185 system watts)<sup>2</sup>. By reducing your luminaire requirements, the installation and system maintenance costs are also reduced by 50%.

## Enhanced light levels for improved sense of security

When safety and sense of security are top priorities, higher light levels than what the IES RP-8 recommends may be necessary. With the G3's modular design, you can use up to two LED arrays. This provides the flexibility of utilizing higher lumen packages without the need for additional luminaires and is also ideal for garage entrance and exit transitions or where higher than normal ceilings exist.

## Stand-alone motion response controls provide additional energy savings

Parking garages are perfect applications for control systems offering increased energy savings. The Gardco G3 luminaire offers several control configurations, including an integral stand-alone motion response system. This is the simplest controls solution available today and can save additional energy during unoccupied times. It requires no additional wiring or commissioning at installation and can be easily updated in the field using the available FSIR-100 wireless hand held programmer.

1. G3 at 55 watts per bay compared to 150PSMH at 370 watts per bay = 85% savings.  
2. G3 at 55 watts per bay compared to 150PSMH at 185 watts per bay = 70% savings.

# Modular design increases light levels without adding luminaires

G3's modular design uses one to two 16 LED arrays. You now have the flexibility of utilizing higher lumen packages in single or two luminaire per bay applications to provide enhanced light levels.



### Single LED array

G3's lowest wattage solution is a single 16 LED array that consumes up to 55 watts per luminaire.



### Twin LED array

The dual 16 LED array G3 consumes up to 103 watts per luminaire.



# More control means greater savings



## Luminaire solutions

**Basic. Autonomous. Affordable.**

Simple, individual outdoor lighting dimming and management without the need for remote access.

### 0-10V Dimming

Luminaires are equipped with a dimmable LED driver allowing connection to external dimming controls.

### Programmable motion response

Upon easy installation, Programmable Motion Response dims the luminaires to 25% light output, increases to 100% light output only when motion is detected, and returns to the original low output after five minutes. This maximizes outdoor lighting energy savings while supporting security efforts. Settings are easily adjusted at the luminaire with an optional wireless hand held programmer.

## For more information on controls

Visit us at [signify.com/prolighting](http://signify.com/prolighting) for more on stand-alone and connected outdoor lighting solutions, and select Controls Outdoor, or request our outdoor lighting solutions brochure

# Construction features

The configuration of hardware, components and accessories reflects the impressive design and engineering of the G3 luminaire. Each element demonstrates an innovative, practical and refined approach to achieving long-term performance and trouble-free operation.

## Mounting system

A die formed galvanized steel plate is supplied for mounting to a recessed, surface, or rigid pendant hung j-box. An integral hanger tab on the plate supports the luminaire during wiring. The luminaire is then securely attached to the j-box assembly with a lift, shift and click motion.

## Long-lasting finishes

The finish is a fade and abrasion resistant, electrostatically applied, thermally cured TGIC powdercoat. G3 housing components are thoroughly cleaned and chromate acid treated prior to paint application.

## Cast aluminum enclosure

IP66 rated driver housing. The outer housing functions as a protective covering.

## Heat sink

Radiating fins of die cast aluminum comprise the upper part of the G3 luminaire and efficiently conduct heat away from the LED components. The fins are specifically designed to maximize airflow, assist in cooling and increase the overall thermal efficiency of the luminaire, providing the longest possible LED and component life.

## Driver access door

Held in place with two phillips head screws, the driver door allows for easy access to the driver tray and wiring. The door is fully gasketed to prevent intrusion of the elements.

## PIR Sensor

Optional MR motion response sensor provides added energy savings up to 95% during unoccupied periods and works as a 'Smart Luminaire' requiring no added wiring or commissioning at install.

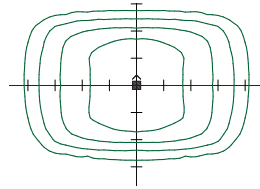
## Advanced LED arrays

The Class 1 advanced LED arrays are available in four unique configurations. Each LED is encased in its own unique optic and placed within the array to provide precise illumination patterns. Optical arrays are IP66 rated.



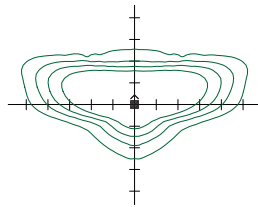
# G3 Optics

Type 1R



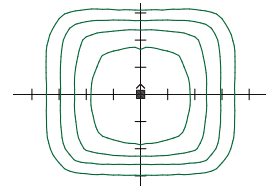
The rectangular Type 1R optical system was invented for parking bays. It provides maximum candlepower at the corners of the distribution, eliminating brightness in the driving lane and providing fill-in light at the corners. The Type 1R eliminates energy-wasting overlap, precisely and evenly filling the bay. Higher lumen utilization for the covered area means fewer luminaires are required to completely illuminate the garage to the required light levels.

Type 3



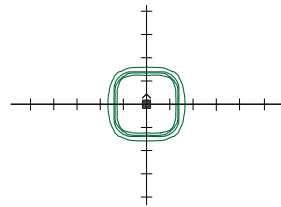
Type 3 optics produce an asymmetrical pattern that directs the majority of the light forward and equally on both sides of the luminaire. The G3 Type 3 is extremely useful along the parking garage perimeter.

Type 5



The Type 5 produces a square distribution. This distribution is intended for luminaire mounting at or near the center of the parking bay as well as in areas where sufficient, evenly distributed light is necessary.

CD



The Concentrated Downlight (CD) optic provides high light levels directly underneath the luminaire and is ideal when footcandle requirements are greater than normal, such as at garage entrances and exits.

The G3 employs a sophisticated high output Class 1 LED array system that delivers one of four unique distribution patterns. This system delivers increased light output and a longer lifespan than conventional HID sources, while consuming a small fraction of the energy. These unique distributions provide remarkable flexibility in precisely matching light distribution patterns to difficult garage constraints.

The Type 1R is a rectangular distribution specifically designed for parking garage geometry. Consider Type 1R for one luminaire per bay applications, ramps, and drive lanes leading up to or exiting parking stall decks.

The Type 3 provides greater forward punch while minimizing backlight. Consider Type 3 for perimeter mounted luminaires to direct the light into the parking garage and away from the property line (LEED compliance, property cut-off, avoid light trespass).

The Type 5 is a straightforward choice for maximizing luminaire spacing within parking bays. The square distribution improves overall uniformity (both average to min and max to min), providing a more uniform blanket of light on the garage deck without distracting hot spots or dark spots. It also helps get into the corners of the garage.

Finally, the Concentrated Downlight (CD) optic provides high light levels directly underneath the luminaire and is ideal when footcandle requirements are greater than normal, such as at garage entrances and exits. The CD also has a square distribution which improves overall uniformity (both average to min and max to min) and improves entrance and exit areas / ramps coverage by helping to extend the light further beyond what a round distribution would do. Also consider CD for other instances when enhanced lighting is required such as payment areas, lobbies and waiting areas, etc. and for security lighting per IES G-1.

# G3 Dimensions

Single LED array

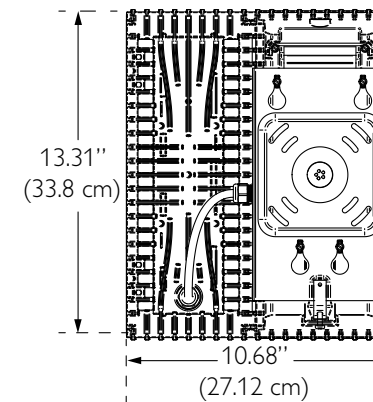


Twin LED array

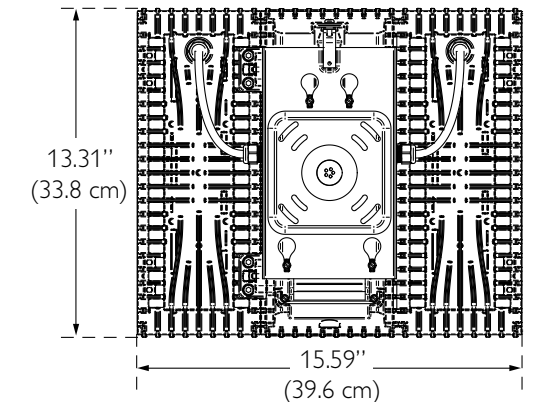


## G3 standard luminaires (EZ Hanger Plate Mount shown)

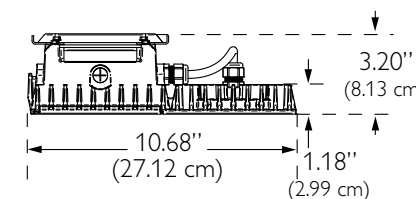
1 LED Array Top View



2 LED Array Top View

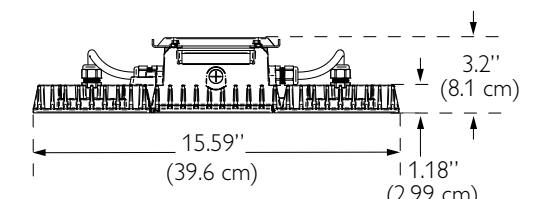


1 LED Array Side View



Approximate luminaire weight:  
9.75 Lbs (4.42 Kg)

2 LED Array Side View



Approximate luminaire weight:  
12.5 Lbs (5.67 Kg)

# G3 Ordering

## Description

The Gardco G3 parking garage luminaire combines excellent performance with value, providing one of the most energy efficient lighting solutions for the energy and budget conscious. A complete selection of optical systems are available, including a concentrated downlight for use at entrances or at higher mounting heights. G3 luminaires are available with dimming, as well as motion response technology to expand potential energy savings.



## Ordering guide

						Options				
Prefix	Configuration (nominal lumens)	Color Temperature	Distribution	Mounting	Voltage	Dimming Control	Sensing	Fusing	Options	Finish
<b>G3</b>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>G3</b> G3 LED Parking Garage luminaire	<b>A01</b> 3,000 <b>A02</b> 4,800 <b>A03</b> 6,300 <b>A04</b> 8,600 <b>A05</b> 10,900 <b>A06</b> 12,900	<b>730</b> 70CRI 3000K <b>740</b> 70CRI 4000K <b>750</b> 70CRI 5000K	<b>5SQ</b> Type 5 Square <b>5CD</b> Type 5 Concentrat- ed Downlight <b>T1R</b> Type 1 Rectangular <b>T3A</b> Type 3 Asymmetric	<b>SUR</b> Surface/ indirect pen- dant Mount (pendant and junction box by others) <b>SBO</b> Surface Mount, Bridge/Over- pass vibration rated	<b>120</b> <b>208</b> <b>240</b> <b>277</b> <b>347</b> <b>480</b> <b>UNV</b> (120-277V) <b>HVU</b> (347-480V)	<b>none</b> leave blank (0-10V dimming driver standard) <b>DLEA</b> 0-10V Dimming Leads Exter- nally Accessible (controls by others) <b>BILV</b> Bi-level with motion sensor	<b>none</b> leave blank <b>L2</b> Integral Sensing, #2 lens <b>L3</b> Integral Sensing, #3 lens  (factory customiz- able, contact factory)	<b>none</b> leave blank <b>FS1</b> Single Fuse (120, 277, 347V) <b>FS2</b> Double Fuse (208, 240, 480V) <b>FS3</b> Double Fuse Canadian double pull (208, 240, 480V)	<b>none</b> 10kV / 10kA surge protec- tion standard <b>PCB</b> Photocontrol Button <b>BXS</b> Bird Exclud- ing Shroud (for standard surface mount only, factory installed)	<b>MG</b> Medium Gray <b>BZ</b> Bronze <b>BK</b> Black <b>WH</b> White

## Accessories (order separately)

### FSIR-100

Hand-held Wireless Remote Programming Tool (For use with BILV-L2 or BILV-L3 motion response when field programming is required). Only one is needed per job.

### BX-16L and BX-32L

Bird Excluding Shroud (field installed, for use with PB-NP pendant mount). Choose for either 1 array 16L 16 LEDs or 2 array 32L 32 LEDs.

### PB-NP

Balanced J-box for Pendant Mount (field installed, Medium Gray paint).

Prior to ordering, consult specification sheets on [gardcolighting.com](http://gardcolighting.com) for the most current information, notes, and exclusions.