



Gardco LED wall sconce 121 offers distinction through its styling, powerful optical design, array of distributions, and impressive selection of control possibilities. Designed to add an element of style to your application by pairing straight lines with rounded edges, the form of the 121 is timeless, yet contemporary, and will complement a wide assortment of architectural styles and designs, while delivering high light levels and functional distributions. 121 sconces are available in Type 2, 3, and 4 distributions, and provide output of up to 10,103 lumens. Energy saving control options help to increase energy savings and offer California Title 24 compliance. Emergency Battery Backup option available for path-of-egress and is integral to the luminaire.

Project: _____
 Location: _____
 Cat.No: _____
 Type: _____
 Lamps: _____ Qty: _____
 Notes: _____

Ordering guide

example: 121-32L-700-NW-G3-3-120-IMRI2-BZ

Prefix	Number of LEDs	Drive Current	LED Color - Generation	Distribution	Emergency	Voltage	Options		
							Controls	Electrical	Finish
121									
121 LED wall sconce	16L 16 LEDs (1 modules)	530 530mA	CW-G3 Cool White 5700K, 70CRI Generation 3	2 Type 2 3 Type 3 4 Type 4	EBPC Emergency Battery Pack Cold Weather ^{3,4,9} Leave blank to omit an emergency option	UNV 120-277V HVV 347-480V 120 120V 208 208V 240 240V 277 277V 347 347V 480 480V	DD 0-10V Dimming Driver ⁵ DCC Dual Circuit Control ^{6,7,8} DynaDimmer: Automatic Profile Dimming CS50 Safety 50% Dimming ^{5,6} CM50 Median 50% Dimming ^{5,6} CE50 Economy 50% Dimming ^{5,6} DA50 All Night 50% Dimming ^{5,6} Photoelectric systems PCB Photocontrol Button ^{9,10,11} Infrared Motion Response systems IMRI2 Integral with #2 lens ^{5,6} IMRI3 Integral with #3 lens ^{5,6} Network system (SiteWise) SW SW Integral module ^{3,12} Wireless system (luminaire mounted) LLC2 Module with #2 lens ^{5,6} LLC3 Module with #3 lens ^{5,6}	Fusing F1 Single (120, 277, 347VAC) ¹⁰ F2 Double (208, 240, 480VAC) ¹⁰ F3 Canadian Double Pull (208, 240, 480VAC) ¹⁰	Textured BK Black WH White BZ Bronze DGY Dark Gray MGY Medium Gray Customer specified RAL Specify optional color or RAL (ex: OC-LGP or OC-RAL7024) CC Custom color (Must supply color chip for required factory quote)
		650 650mA ¹							
700 700mA									
1000 1000mA									
32L 32 LEDs (2 modules)	530 530mA	NW-G3 Neutral White 4000K, 70CRI Generation 3	WW-G3 Warm White 3000K, 70CRI Generation 3						
	650 650mA ¹								
	700 700mA								
	1000 1000mA								

- 1. Only available with EBPC
- 2. Only available with 16 LEDs
- 3. Available in 120V or 277V only
- 4. EBPC available only in 530mA or 650mA
- 5. Not available with 1.2A drive current
- 6. Available in 120V thru 277V and UNV only.
- 7. DCC available only in 530mA with 32 LED
- 8. Not available with EBPC
- 9. Not available with DCC
- 10. Voltage must be specified
- 11. Not available in 480V
- 12. SW option is not available with any other control options with the exception of IMRI2, IMRI3 motion response options

121 LED wall sconce

Wall Mount

Luminaire Accessories (order separately)

Mounting Accessories

Wall Mount

WS Wall Mounted Box for Surface Conduit

System accessories

Wireless system remote mount module

LLCR2-(F) #2 lens - specify finish in place of (F)
LLCR3-(F) #3 lens - specify finish in place of (F)

Central Remote Motion Response

(used connected to SiteWise main panel)

MS2-A-FVR-3

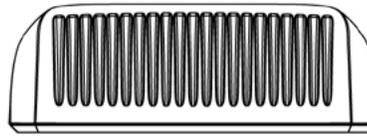
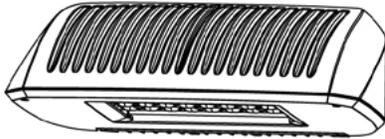
MS2-A-FVR-7

Wireless system remote controller accessory

Wireless system offers a remote radio/sensor module that allows to connected to a Limelight system (sold by other). Remote module can be mounted to wall or pole with j-box supplied. May be specified by choosing one of two different lenses to accommodate a variety of mounting heights/sensor detection ranges. Must specify option DD on luminaires that are planned to be used with remote mount controllers. See page 4 for Wireless system details.

Dimensions

Standard Luminaire

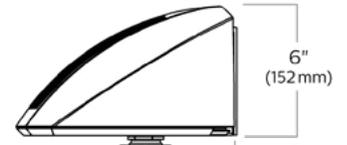
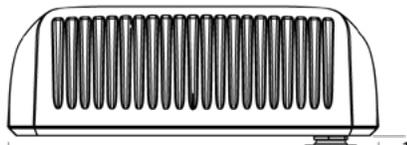
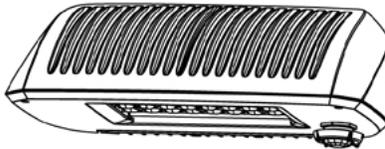


17"
(432 mm)

10"
(254 mm)

6"
(152 mm)

Motion Response

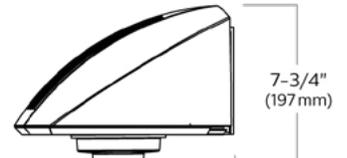
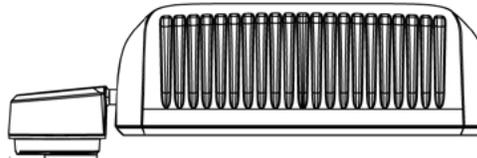
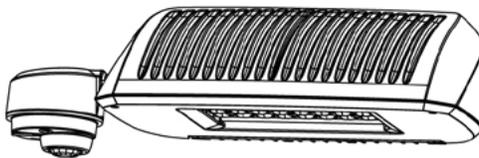


17"
(432 mm)

10"
(254 mm)

6"
(152 mm)

Wireless Controls



22"
(559 mm)

10"
(254 mm)

7-3/4"
(197 mm)

Luminaire Weights

LED wall sconce 121	Weight
Luminaire	15.0 lbs
Luminaire - EBPC (EM battery pack)	18.5 lbs
Luminaire - Integrated system controls	17.0 lbs

121 LED wall sconce

Wall Mount

LED Wattage and Ordering Code	LED Qty	LED Current (mA)	Color Temp. ¹	Average System Watts ²	Type 2			Type 3			Type 4		
					Lumen Output ^{2,3}	BUG Rating	Efficacy (LPW)	Lumen Output ^{2,3}	BUG Rating	Efficacy (LPW)	Lumen Output ^{2,3}	BUG Rating	Efficacy (LPW)
121-16L-530-NW-G3	16	530	4000K	28	2818	B1-U0-G0	100	2607	B1-U0-G1	93	2614	B1-U0-G1	93
121-16L-700-NW-G3	16	700	4000K	38	3698	B1-U0-G1	96	3421	B1-U0-G1	89	3430	B1-U0-G1	89
121-16L-1000-NW-G3	16	1000	4000K	55	4802	B1-U0-G1	88	4442	B1-U0-G1	81	4454	B1-U0-G1	81
121-16L-1200-NW-G3	16	1200	4000K	66	5364	B2-U0-G1	82	4962	B1-U0-G1	76	4975	B1-U0-G2	76
121-32L-530-NW-G3	32	530	4000K	52	5921	B2-U0-G1	114	5477	B1-U0-G2	105	5491	B1-U0-G2	106
121-32L-700-NW-G3	32	700	4000K	70	7534	B2-U0-G1	107	6969	B1-U0-G2	99	6988	B1-U0-G2	100
121-32L-1000-NW-G3	32	1000	4000K	107	10103	B2-U0-G1	95	9346	B2-U0-G2	88	9371	B2-U0-G2	88

LED Wattage and Lumen Values (Emergency Mode)⁴

Ordering Code	LED Qty	LED Current (mA)	Color Temp. ¹	Avg. System Watts		Type 2		Type 3		Type 4	
				Normal Mode	Emergency Mode	Normal Mode	Emergency Mode	Normal Mode	Emergency Mode	Normal Mode	Emergency Mode
121-16L-530-NW-G3-EBPC	16	530	4000K	28	14	2818	1353	2607	1252	2614	1255
121-16L-650-NW-G3-EBPC	16	650	4000K	37	14	3510	1353	3248	1252	3256	1255
121-32L-530-NW-G3-EBPC	32	265	4000K	28	14	2808	1764	2597	1632	2604	1636
121-32L-650-NW-G3-EBPC	32	325	4000K	32	14	3497	1764	3235	1632	3244	1636

- Contact outdoorlighting.applications@signify.com for details on cool or warm white color temperatures.
- Wattage and lumen output may vary by +/- 8% due to LED manufacturer forward volt specification and ambient temperature. Wattage shown is average for 120V through 277V input. Actual wattage may vary by an additional +/- 10% due to actual input voltage.
- Lumen values based on photometric tests performed in compliance with IESNA LM-79.
- For emergency EBPC option, publish values are based on initial lumens.

Luminaire options

DD: 0-10V dimming driver with leads supplied through back of luminaire (for secondary dimming controls by others).

Dynadimmer Automatic Profile Dimming: Automatic dimming profiles (CS50/CM50/CE50) offer safety, median, or economy settings, for shorter or longer duration. Dimming profiles provide flexibility towards energy savings goals while optimizing light levels during specific dark hours. 50% dimming is standard. DA50 offers 50% instantaneous dimming all night (during all dark hours). Other dimming settings are also available if different light levels are required (contact Technical Support for details).

Profile	Dimming		
	Schedule	Duration	Level
Economy	9 PM - 6 AM	9 hours	50%
Median	10 PM - 6 AM	8 hours	50%
Safety	11 PM - 6 AM	7 hours	50%
Reactive 50	all night	dynamic	

IMR12, IMR13: Infrared Motion Response Integral (IMRI). IMRI module is mounted integral to the luminaire door and is available with two different sensor lens types to accommodate various mounting heights and occupancy detection ranges (see charts for approximate detection patterns). Motion response used in combination of Dynadimmer and SiteWise are not programmable and used to override controllers schedule when motion is detected. When used not combined with any controller, IMRI is set/operates in the following fashion: The motion sensor is set to a constant 50%. When motion is detected by the PIR sensor, the luminaire returns to 100% light output. Dimming on low is factory set to 50% with 5 minute default in "full power" prior to dimming back to low. When no motion is detected for 5 minutes, the motion response system reduces the wattage by 50% of the normal constant wattage reducing the light level. IMRI can also be specified with automatic profile dimming for the added benefit of a combined dimming profile with sensor detection, where the PIR sensor will override the dimming profile when occupancy is detected. Passive infrared (PIR) motion sensor, WattStopper FSP-211, equipped with lens choice specified. Available from 120V to 277V input only. Motion sensor off state power is 0.0 watts. The FSP-211 can also be reprogrammed with WattStopper's FSIR-100 remote programming tool accessory.

DCC: Dual Circuit Control permits separate switching of 32L models only, where a quantity of (2) 16 LED modules are controlled independently by use of two sets of leads, one for each module.

SW

SiteWise option is a fully integrated controller that connects to SiteWise system in order to offer a complete area lighting management system. The communication signal is based on patented central dimming technology. SiteWise delivers it deliver optimal energy savings using your site's existing cabling. No additional wiring required, installation and commissioning are simple. An intuitive, mobile app makes it easy for authorized users to set schedules to meet site specific lighting needs, local regulations, and energy codes.

Wireless system

121 luminaires are available with optional wireless controllers ready to be connected to a Lmelight system (sold by other). The system allows you to Wirelessly manage the entire site, independent lighting groups or individual luminaires while on-site or remotely. Based on a high density mesh network with an easy to use web-based portal, you can conveniently access, monitor and manage your lighting network remotely. Wireless System can be combined with site and area, pedestrian, and parking garage luminaires as well, for a completely connected outdoor solution.

121 LED wall sconce

Wall Mount

Luminaire options (continued)

F1: Fusing Single (for 120, 277 or 347VAC)

F2: Fusing Double (for 208, 240 or 480VAC)

F3: Fusing Canadian Double Pull (for 208, 240 or 480VAC)

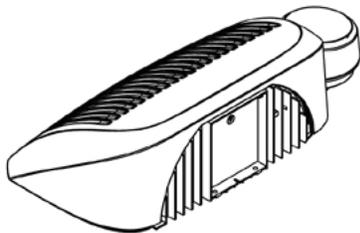
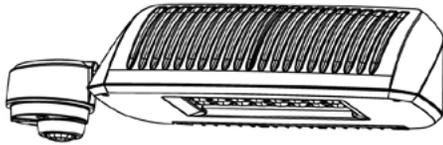
EBPC: Emergency battery pack is cold weather rated down to -20C (-4F) and integral to the luminaire, allowing for a consistent look between emergency and non-emergency sconces. A separate surface mount accessory box is not required. Dual light engines (32L) are wired in parallel, both operating in emergency mode to meet various redundancy lamp requirements. Also available with single light

engine (16L). Secondary driver with relay immediately detects AC power loss and powers luminaire for a minimum of 90 minutes from the time power is lost.

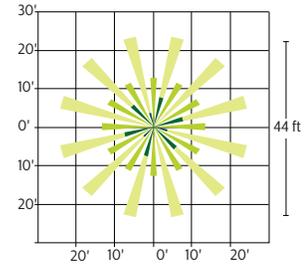
Infrared Motion Response and Wireless system sensor coverage patterns

LLC2/3 Luminaire Mounted Controller

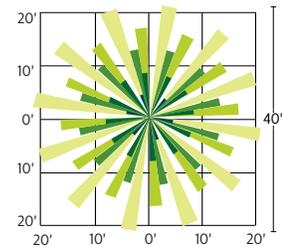
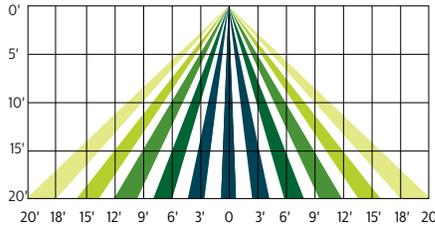
Controller attached to luminaire and includes radio, photocell and motion sensor with #2 or #3 lens for 8-20' mounting heights.



IMRI2/LLC2/LLCR2

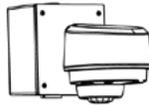


IMRI3/LLC3/LLCR3

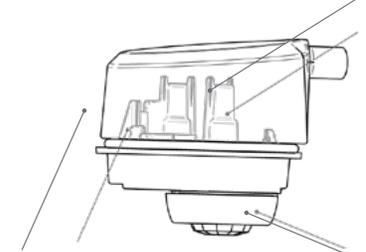


Remote Mount Wireless Controller

Used to extend the communication on site, to extend motion response and add other luminaires that are not pole mounted. Consult factory for more information.



Controller



Photocell

- Ambient light photocell on every wireless radio that averages the light levels of up to 5 controllers for an accurate reading and optimal light harvesting activity.
- Reports ambient light readings to 1500 Fc.

Wireless Radio

- 1.8 Watts max (no load draw)
- Operating voltage 120-277 VAC RMS
- Communicates using the ZigBee protocol
- Carries out dimming commands from Gateway
- Reports ambient light readings to 1500 Ft-Cd
- Transmission Systems Operating within the band 2400-2483.5Mhz
- ROHS Compliant

Motion Response

- Detects motion through passive infrared sensing technology with three different lens configurations
- Motion sensor coverage can be adjusted from a narrow to a wide detection range, which helps reduce false triggers to further increase energy savings.
- Sensing profiles can be updated to adapt to activity levels in the environment, such as occupancy level, wind, and mounting height

121 LED wall sconce

Wall Mount

SiteWise system

SiteWise is a complete area lighting management system including a luminaire integrated controller, dimming signal transmitter cabinet, and locally accessible user interface. Installation and commissioning are simple. The cabinet communicates with the luminaires using a patented central dimming technology. The control signal is embedded on the existing electrical line – no new cabling is required. An intuitive, locally accessible interface makes it easy for authorized users to set schedules in order to meet site specific lighting needs, local regulations, and energy codes.

SiteWise system diagram



SiteWise system interface



SiteWise has an intuitive user interface that makes it easy to plan, edit, and implement lighting schedules for your site. Authorized users can access the interface via a local app.

To ensure that only authorized users can access your lighting, SiteWise offers two user types, each with different permissions. An advanced user, or administrator, can set and edit schedules using the ten pre-set scenes, assign those schedules to calendar days, and check system status.

For everyday use, a basic user can manually override a schedule that is currently running but cannot create or edit schedules.

SiteWise system specifications

The SiteWise system includes both luminaires and controls. The controls used for SiteWise are circuit load dependent. Required for a complete installation are the following SiteWise components: user interface, control kit, dimming signal transmitter cabinet, and dimming signal receiver located in the luminaire (**SW** option). Optional luminaire-integrated or external motion sensors may also be specified as required. Within the electrical closet, the control kit and dimming signal transmitter cabinet are installed into the electrical system between the existing breaker panel and the site luminaires. New LED luminaires containing the dimming signal receiver are installed on the site. Once completed, use of the interface allows for scheduling and override capabilities. Wireless access point and tablet should be supplied by others. Complete information on the control system can be found on the SiteWise website at signify.com/sitewise

121 LED wall sconce

Wall Mount

Specifications

Housing

Main body cast housing and back plate made of a low copper die cast Aluminum alloy for a high resistance to corrosion, 0.100" (2.5mm) minimum thickness. Hinged door allows access to driver and LED compartment.

Mounting

Mounting is completed through integral back plate that features a separate recessed feature for hook and lock quick mount plate that secures with two set screws from bottom of luminaire. Mounting plate is located in the center of the luminaire width and 3.5" above the luminaire bottom (lens down position). Luminaire ships fully assembled, ready to install.

Light Engine

Composed of 4 main components: Heat Sink / LED Module / Optical System / Driver. Electrical components are RoHS compliant. IP66 sealed light engines. LEDs tested by ISO 17025-2005 accredited lab in accordance with IESNA LM-80 guidelines extrapolations in accordance with IESNA TM-21. Metal core board ensures greater heat transfer and longer lifespan.

Heat Sink

Integral door/heat sink design made of low copper die cast Aluminum alloy for a high resistance to corrosion.

LED Module

Composed of high performance white LEDs. Color temperature as per ANSI/NEMA bin Neutral White, 4000K nominal (+/- 275K), CRI 70 Min. Available in other color temperatures including Cool White, 5700K and Warm White, 3000K.

SiteWise Network System

SiteWise system includes a controller fully integrated in the luminaire that enables the luminaires to communicate with a dimming signal transmitter cabinet located on site using patented central dimming technology. A locally accessible mobile app allows users to access the system and set functionalities such as ON/OFF, dimming levels and scheduling. SiteWise is available with motion response options in order to bring the light back to 100% when motion is detected. Additional functionalities are available such as communication with indoor lighting and connection to BMS systems.

Hardware

All exposed screws are stainless and/or corrosion resistant and captive.

Optical System

The advanced LED optical systems provide IES Types 2, 3, 4. Composed of high performance UV stabilized optical grade polymer refractor lenses to achieve desired distribution optimized to get maximum spacing, target lumens and a superior lighting uniformity. System is rated IP66. Performance shall be tested per LM-63, LM-79 and TM-15 (IESNA) certifying its photometric performance. Dark sky compliant with 0% uplight and U0 per IESNA TM-15.

Driver

High power factor of 90% min. Electronic driver, operating range 50/60 Hz. Auto adjusting universal voltage input from 120 to 277 VAC or 347 to 480 VAC rated for both application line to line or line to neutral, Class I, THD of 20% max. The current supplying the LEDs will be reduced by the driver if the driver experiences internal overheating as a protection to the LEDs and the electrical components. Output is protected from short circuits, voltage overload and current overload. Automatic recovery after correction. Standard built in driver surge protection of 2.5kV (min).

Surge Protection

Each luminaire is provided as standard with surge protector (designed SP1) tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/5kA waveforms for Line Ground, Line Neutral and Neutral Ground, and in accordance with U.S. DOE (Department of Energy) MSSLC (Municipal Solid State Street Lighting Consortium) Model Specification for LED Roadway Luminaires Appendix D Electrical Immunity High Test Level 10kV / 5kA.

Wiring (supplied by others)

Splices must be made in the junction box.

Finish

Five standard colors offered in textured black, white, bronze, dark gray and medium gray. Color in accordance with the AAMA 2604 standard. Application of polyester powder coat paint 2.5 mils minimum. The thermosetting resins provides a discoloration resistant finish in accordance with the ASTM D2244 standard, as well as luster retention in keeping with the ASTM D523 standard and humidity proof in accordance with the ASTM D2247 standard. RAL and custom color matching available.

LED Products Manufacturing Standard

The electronic components sensitive to electrostatic discharge (ESD) such as light emitting diodes (LEDs) are assembled in compliance with EC61340-5-1 and ANSI/ESD S20.20 standards so as to eliminate ESD events that could decrease the useful life of the product.

LED Useful Life

Luminaire Useful Life accounts for LED lumen maintenance. Refer to IES files for energy consumption and delivered lumens for each option. Based on ISTMT in situ thermal testing in accordance with UL1598 and UL8750, LED LM-80/TM-21, expected to reach 100,000 + hours with >L70 lumen maintenance @ 25°C.

Certifications and Compliance

cULus Listed for Canada and USA suitable for wet locations when mounted downward facing. cULus Listed for Canada and USA suitable for damp locations when inverted upward facing when mounted in covered ceiling application. Emergency Battery Pack option is tested and listed to UL924 and CSA C22.2 No. 141-10 DesignLights Consortium qualified on models as listed on DLC QPL. Luminaire is rated for operation in ambient temperature of -40°C (-40°F) up to +40°C (+104°F)⁴.

Limited Warranty

5-year limited warranty. See signify.com/warranties for details and restrictions. Visit our eCatalog or contact your local sales representative for more information.

121 LED wall sconce

Wall Mount

LED Performance

Predicted lumen depreciation data ¹				
Ambient Temperature (°C)	Driver mA	Calculated L ₇₀ hours ^{1,2}	L ₇₀ per TM-21 ^{2,3}	Lumen Maintenance % @ 60,000 hours
25°C	up to 1200 mA	>100,000	>42,000	88%

1. Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions.
2. L₇₀ is the predicted time when LED performance depreciates to 70% of initial lumen output.
3. Calculated per IESNA TM21-11. Published L₇₀ hours limited to 6 times actual LED test hours.
4. 32L rated for 30°C at 1000mA.

