



Advanced Wireless Technology. Smart and Simple.





AirLink[™]Controlled Lighting

Compatible with:



LSI AirLink™ is a new family of controlled LED Iuminaires featuring integrated Lutron® Clear Connect™ Wireless Technology for new construction and retrofit applications, including use in a variety of buildings and infrastructures.

Integrated motion and light level sensors ensure maximum energy savings, quality and comfort, while wireless controls enable occupants to easily operate individual or groups of fixtures.

AirLink[™] boasts easy and fast installation, quick setup and can be used to meet stringent energy code requirements and support LEED certification.

Easy Install & Setup

With light and motion sensors built into each lighting fixture - and no control wiring - installation time is reduced by up to 90% compared to wired controlled systems. And setup - through a handheld laser pointer - is accomplished in just seconds.

Substantial Energy Savings

Combining high performance LED technology with integral sensors and controls delivers critical energy savings of 60% or more through the use of advanced sensors - occupancy sensing, daylight harvesting, high-end trim - and wireless dimming controls.

Achieve Code Compliance & More

AirLink™ can also:

- Be used to meet LEED certification
- Meet plug load requirements with optional plug load controller
- Meet requirements for smart fixture utility rebates



AirLink[™] will initially be available in a variety of troffers, designed for both new construction and retrofits in commercial office spaces, education facilities, hospitals, retail environments and more.



An Advanced Lighting System







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AIRLINK[™] 16AMP POWERPACK (AL-16A-PP)



APPLICATIONS

• Small offices • Conference rooms • Lounges • Classrooms

SPECIFICATIONS

ELECTRICAL	
Regulatory Approvals	 COFETEL CSA and IC Complies with requirements for use in a compartment handling environmental air (plenum) per NEC₈ 2011 300.22(C)(3) UL Listed, UL 2043 Plenum Rated, NOM (expected Q1 2012), and FCC Approved. Complies with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rule
Power / Load	Operating voltage: 120 – 277V ☉ 50/60 Hz Maximum load: 16A general purpose. No minimum load requirements Load types include (but are not limited to): Incandescent, MLV, ELV, Resistive, Inductive, Magnetic fluorescent, Electronic fluorescent Motor rating: 0.5 HP (120V ☉), 1.5 HP (277V ☉)
ENVIRONMENTAL	
Ambient Operating Temperature	32°F to 131°F (0°C to 55°C), 0%–90% humidity, non-condensing; indoor use only
OTHER	
Range	 Lutron_☉ Clear Connect[™] RF Technology allows for 30ft (10m) of range
Softswitch	 Lutron's Patented Softswitch_® circuit eliminates relay arcing at mechanical contacts Extends relay life to an average of 1 million cycles Output is non-latching
Contact Closure Output (CCO version only)	 Provides occupancy status to 3rd-party equipment such as building management systems, HVAC, and VAV controllers Provides both normally open (MNO) and normally closed (NC) dry contacts Maintained output type CC0 terminals accept 20 to 16AWG (0.5 to 1.5mm²) solid or stranded wire Output is latching Not for voltages greater that 24V The CC0 is not rated to control unclamped inductive loads. Inductive loads include, but are not limited to: relays, solenoids, and motors. To control these types of equipment, a flyback diode must be used (DC voltages only) Switching Resistive Output Output
Warranty	Limited Five-Year Warranty

AIRLINK[™] 16AMP POWERPACK (AL-16A-PP)

The AirLink[™] 16AMP Powerpack is a radio frequency (RF) device that controls up to 16A of general-purpose load based on input from AirLink[™] wireless switches and AirLink[™] ceiling-mounted wireless occupancy and daylight sensors. An optional low-voltage dry contact closure output is available to communicate occupancy status to 3rd-party systems such as HVAC controllers. Communication with RF input devices, such as AirLink[™] wireless switches and AirLink[™] ceiling-mounted wireless sensors, is accomplished using Lutron_® Clear Connect[™] RF Technology.

FEATURES

- · Capable of switching 16A of general-purpose loads
- Optional low-voltage dry contact closure output provides integration to building management systems, HVAC, VAV, etc.
- Receives wireless inputs from up to 9 AirLink[™] wireless switches, 6 AirLink[™] ceiling-mounted wireless occupancy/vacancy sensors, and 1 ceiling-mounted wireless daylight sensor
- · Mounts to a junction box through a standard half-inch (NPT trade size) knockout
- LED status indicator shows current load status and provides programming feedback
- Power failure memory: If power is interrupted, connected loads will return to the previous level prior to interruption
- Daylighting can be overridden by pressing the ON button on any associated AirLink[™] wireless switch and will be re-enabled after 2 hours or after the area becomes unoccupied

DIMENSIONS





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Catalog #

WIRING DIAGRAM



CCO Operation affected only by associated occupancy or vacancy sensors Room Occupied: NO = Close NC = Open Room Unoccupied: NO = Open NC = Close

6

6

Input Voltage

(Normally Open) (Normally Closed)

NC

COM -(Common)

NÓ

In some applications, an the Powerpack can be installed inside a 4in X 4in (102mm X 102mm) junction box.



SYSTEM DIAGRAM



DEFAULT OPERATION

White (Neutral)

Black (Hot) Conduit Nut

To Load

To 3rd-Party Equipment

Note: When wiring CCO to 3rd-party systems, use 20 to 16 AWG (0.5 to 1.5 mm²)

solid or standed wire

TRANSMITTING DEVICE	TRANSMITTED COMMAND	LOAD RELAY DEFAULT ACTION	CCO DEFAULT ACTION
	On	Close	No Action
AirLink™Wireless	Off	Open	No Action
Switch	Raise / Lower	No Action	No Action
	Preset	Close	No Action
AirLink™ Ceiling- Mounted Wireless	Occupied	Close	NO = Close, NC = Open
Occupancy Sensor	Unoccupied	Open	NO = Open, NC = Closed
AirLink™ Ceiling- Mounted Wireless	Occupied	No Action	NO = Close, NC = Open
Vacancy Sensor	Unoccupied	Open	NO = Open, NC = Closed
AirLink™ Ceiling- Mounted Wireless	Ambient Light Below Target Level	Close	No Action
Daylight Sensor	Ambient Light Above Target Level	Open	No Action

ORDERING INFORMATION (AL-16A-PP)

PART NO.	CAT. NO.	DESCRIPTION
632642	AL-16A-PP	AirLink™ 16AMP Powerpack, ON/OFF, contact closure output



_ Catalog #

07/27/16 © 2016

AIRLINK[™] 20AMP PLUG LOAD CONTROLLER (AL-20A-PLC)



APPLICATIONS

• Small offices • Conference rooms • Lounges • Classrooms

SPECIFICATIONS

ELECTRICAL	
Regulatory Approvals	 UL_© Listed (USA) UL 2043 Plenum Rated (USA) FCC approved. Complies with the limits for a Class B device, pursuant to Part 15 of the FCC rules (USA) cUL and IC (Canada) Complies with requirements for use in a compartment handling environmental air (plenum) per NEC_© 2014 300.22(C)(3) BAA compliant
Power / Load	 Operating voltage: 120 - 277 V ⊗ 50/60 Hz Standby power consumption < 1.25 W 20A: No minimum load requirements Load types include (but are not limited to): Incandescent, MLV, ELV, Resistive, Inductive Motor rating: 1.0.HP (120 V ⊗), 2.0.HP (240-277 V ⊗) Able to control 20A of receptacles The 20A plug load controller may be used with (but not limited to): monitors, fans, printers, humidifiers (Note: refer to manufacturer's guidelines for acceptable switching methods) The 20A plug load controller may NOT be suitable for use with devices that require any of the following: Shut-down process before power is interrupted, such as computers. Cool-down process before power is interrupted, such as projectors. Programming, such as clocks or DVRs. Long warm-up cycle. Not for use with loads that present a hazard if automatically energized. For example, heaters. Any receptacles that are controlled by an automatic control device must be marked with "Φ" located on the controlled receptacle outlet where visible after installation as stated in 2014 NECR Article 406.3(E).
ENVIRONMENTAL	
Ambient Operating Temperature	32°F to 104°F (0°C to 40°C), 0%–90% humidity, non-condensing; indoor use only
OTHER	
Range	 RF range is 30ft (9m) Utilizes Lutron_☉ Clear Connect[™] RF Technology
Warranty	Limited Five-Year Warranty

OVERVIEW

The AirLink[™] 20AMP Plug Load Controller is a radio-frequency (RF), receptacle switching solution that is capable of controlling 20 A receptacles based on input from AirLink[™] wireless switches and AirLink[™] ceiling-mounted wireless occupancy sensors. Communication with RF input devices, such as AirLink[™] wireless switches and / or AirLink[™] ceiling-mounted wireless occupancy/vacancy sensors, is accomplished using Lutron_® Clear Connect_® RF Technology.

FEATURES

- Able to control 20 A receptacles
- Capable of switching general-purpose loads
- Receives wireless inputs from a total of ten wireless controls maximum (AirLink[™] wireless switches or AirLink[™] ceiling-mounted wireless occupancy/vacancy sensors)
- Mounts to a U.S. style junction box through a standard size knockout
- · Heavy duty mechanically held, latching relays, with silver alloy contacts
- · Zero cross switching
- · Includes required controlled outlet labels for code compliance
- · Provides a fail safe mechanism to turn on the output in the event of a missing sensor
- · LED status indicator shows current load status and provides programming feedback
- Power failure memory: If power is interrupted, connected receptacles will return to the state prior to the power interruption
- · Zero cross switching and heavy-duty relays





Catalog #

AIRLINK[™] 20AMP PLUG LOAD CONTROLLER (AL-20A-PLC)

SYSTEM DIAGRAM



DEFAULT OPERATION

TRANSMITTING DEVICE	TRANSMITTED COMMAND	DEFAULT ACTION
	On	Close
	Off	Open
AirLink™ Wireless Switch (ALWS)	Raise	No Action
	Lower	No Action
	Preset	Close
AirLink™ Ceiling-Mounted Wireless	Occupied	Close
Occupancy Sensor (ALCM-W-OS)	Unoccupied	Open
AirLink™ Ceiling-Mounted Wireless	Occupied	Close
Vacancy Sensor (ALCM-W-VS)	Unoccupied	Open

Note: Unaffected Mode allows a system with an Occupancy sensor associated to multiple relay modules to be set up such that only selected loads turn on automatically. Other loads will require a manual turn-on with a AirLink[™] wireless switch. All loads will turn off automatically when the room is vacated. See the AirLink[™] 20A Plug Load Controller installation guide for more information on Unaffected Mode.

SPLIT-WIRED DUPLEX RECEPTACLE



WIRING DIAGRAMS

DUPLEX RECEPTACLE



NOTE: The 20A plug load controller is also capable of controlling 120 - 277 V ☉ lighting and receptacles. Receptacle wiring diagrams shown.

WARNING - ENTRAPMENT/FIRE HAZARD



To avoid the risk of entrapment, serious injury, or death, these controls must not be used to control equipment which is not visible from every control location or which could create hazardous situations such as entrapment if operated accidentally. Examples of such equipment which must not be operated by these controls include (but are not limited to) motorized gates, industrial doors, space heaters, etc. It is the installer's responsibility to ensure that the equipment being controlled is visible from every control location and that only suitable equipment is connected to these controls. Failure to do so could result in serious injury or death.

ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
624097	AL-20A-PLC	AirLink™ 20AMP Plug Load Controller
<u> </u>		·
		07/27/16



Project Name

__ Catalog # _

07/27/1 © 2010

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AIRLINK[™] 5AMP POWERPACK WITH 0–10V DIMMING (AL-5A-PP-D)



APPLICATIONS

Small offices
 Conference rooms
 Lounges
 Classrooms

SPECIFICATIONS

Regulatory Approvals• COFETEL and NOM (Mexico) • CSA and IC (Canada) • Complies with requirements for use in a compartment handling environmental air (plenum) per NEC® 2011 300.22(C)(3) • UL Listed, UL 2043 Plenum Rated and FCC Approved. Complies with the limits for a Class B digital device, pursuant to Part 15 of the FCC RulePower / Load• Operating voltage: 120 – 277 V © 50/60 Hz • Maximum load: 5A general purpose. No minimum load requirements • Output ratings: switch rate of 5AX. Rated for resistive or capacitive loads as defined by IEC/EN 60669-2-1, 0-10V control link for 60mA maximum output, source sink automatically configures • Standby power: 240 – 277V © 610mW, 120V © 550mW • BTU/hour when fully loaded: 9ENVIRONMENTAL32°F to 104°F (0°C to 40°C), 0%–90% humidity, non-condensing; indoor use onlyOTHERRange• Lutronto, Clear Connect TM RF Technology allows for 30ft (10m) of range0–10V Control Link• Communicates with up to 60mA of fixtures • Control link is IEC SELV/NEC® Class 2 • 0–10V control are be installed using NEC® Class 1 or Class 2 wiring methods. Alternately, it can be wired to basic or double-insulated devices • Terminals accept one 18 to 16AWG (0.75 to 1.5mm ²) solid wire • Always consult local wiring codes • Comparting lockout can be enabled for public spaces • 0–10V control mixive protection up to 30V == • Programming lockout can be enabled for public spaces • 0–10V control mixive protection up to 30V == • Programming lockout can be enabled for public spaces • 0–10V control mixive protection up to 30V == • Programming lockout can be enabled for public spaces • 0–10V control mixive protection up to 30V == • Programming lockout can be enabled for public spaces • 0–10V can be inverted for 10–0V control	ELECTRICAL	
Image: It is a special propose. No minimum load: SA general purpose. No dologe: No dologe: Standby power: 240 – 277V © 610mW, 120V © 550mW BTU/hour when fully loaded: 9 ENVIRONMENTAL Ambient Operating Temperature 0-10V Control Link • Lutron _® Clear Connect [™] RF Technology allows for 30ft (10m) of range 0-10V Control Link • Communicates with up to 60mA of fixtures • Control link is IEC SELV/NE© Class 1 or Class 2 wiring methods. Alternately, it can be wired to basic or double-insulated devices • Terminals accept one 18 to 16AWG (0.75 to 1.5mm ²) solid wire • Always consult local wiring codes	Regulatory Approvals	 CSA and IC (Canada) Complies with requirements for use in a compartment handling environmental air (plenum) per NEC® 2011 300.22(C)(3) UL Listed, UL 2043 Plenum Rated and FCC Approved. Complies with the limits for a Class B
Ambient Operating Temperature 32°F to 104°F (0°C to 40°C), 0%–90% humidity, non-condensing; indoor use only OTHER • Range • 0-10V Control Link • 0-10V control all be installed using NEC∞ Class 1 or Class 2 wiring methods. Alternately, it can be wired to basic or double-insulated devices • Terminals accept one 18 to 16AWG (0.75 to 1.5mr²) solid wire • • • Always consult local wiring codes • Compatible with ANSI E1.3 2001 (R2006), IEC 60329 Annex E • • • • • • • • • • • • • •	Power / Load	 Maximum load: 5A general purpose. No minimum load requirements Output ratings: switch rate of 5AX. Rated for resistive or capacitive loads as defined by IEC/EN 60669-2-1, 0-10V control link for 60mA maximum output, source sink automatically configures Standby power: 240 – 277V ⊖ 610mW, 120V ⊖ 550mW
Temperature non-condensing; indoor use only OTHER Range • Lutron _☉ Clear Connect [™] RF Technology allows for 30ft (10m) of range 0–10V Control Link • Communicates with up to 60mA of fixtures • Control link is IEC SELV/NEC _☉ Class 2 0–10V control Link • Communicates with up to 60mA of fixtures • Control link is IEC SELV/NEC _☉ Class 2 0–10V control can be installed using NEC _☉ Class 1 or Class 2 wiring methods. Alternately, it can be wired to basic or double-insulated devices • Terminals accept one 18 to 16AWG (0.75 to 1.5mm ²) solid wire • Always consult local wiring codes • Compatible with ANSI E1.3 2001 (R2006), IEC 60929 Annex E • 0–10V cantrol miswire protection up to 30V • Programming lockout can be enabled for public spaces • 0–10V can be inverted for 10– 0V control Default Operation • Associated wireless input devices control all connected fixtures together • Occupancy sensors: Occupied = 100%; Unoccupied = 0% (OFF) • AirLink [™] wireless switches: On = 100%; Favorite Level = 50%; Off = 0% (OFF) • Daylight Sensor: Decreases electric light in response to additional available daylight	ENVIRONMENTAL	
Range • Lutron _☉ Clear Connect™ RF Technology allows for 30ft (10m) of range 0–10V Control Link • Communicates with up to 60mA of fixtures • Control link is IEC SEL/NEC _☉ Class 2 • 0–10V control can be installed using NEC _☉ Class 1 or Class 2 wiring methods. Alternately, it can be wired to basic or double-insulated devices • Terminals accept one 18 to 16AWG (0.75 to 1.5mm ²) solid wire • Always consult local wiring codes • Compatible with ANSI E1.3 2001 (R2006), IEC 60929 Annex E • 0–10V control miswire protection up to 30V • Programming lockout can be enabled for public spaces • 0–10V can be inverted for 10– 0V control Default Operation • Associated wireless input devices control all connected fixtures together • Occupancy sensors: Occupied = 100%; Unoccupied = 0% (OFF) • AirLink™ wireless switches: On = 100%; Favorite Level = 50%; Off = 0% (OFF) • Daylight Sensor: Decreases electric light in response to additional available daylight		· · · · · · · · · · · · · · · · · · ·
o for 30ft (10m) of range 0-10V Control Link • Communicates with up to 60mA of fixtures • Control link is IEC SELV/NEC® Class 2 • O-10V control can be installed using NEC® Class 1 or Class 2 wiring methods. Alternately, it can be wired to basic or double-insulated devices • Terminals accept one 18 to 16AWG (0.75 to 1.5mm²) solid wire • Always consult local wiring codes • O-10V control miswire protection up to 30V :=: • Programming lockout can be enabled for public spaces • 0-10V control miswire protection up to 30V :=: • Programming lockout can be enabled for public spaces • 0-10V control miswire protection up to 30V :=: • Programming lockout can be enabled for public spaces • 0-10V control miswire protection up to 30V :=: • Programming lockout can be enabled for public spaces • 0-10V control miswire protection up to 30V :=: • Programming lockout can be enabled for public spaces • 0-10V control miswire protection up to 30V :=: • Programming lockout can be enabled for public spaces • 0-10V control miswire protection up to 30V :=: • Programming lockout can be inverted for 10- 0V control	OTHER	
 Control link is IEC SELV/NEC® Class 2 O-10V control can be installed using NEC® Class 1 or Class 2 wiring methods. Alternately, it can be wired to basic or double-insulated devices Terminals accept one 18 to 16AWG (0.75 to 1.5mm²) solid wire Always consult local wiring codes Compatible with ANSI E1.3 2001 (R2006), IEC 60929 Annex E O-10V control miswire protection up to 30V Programming lockout can be enabled for public spaces O-10V can be inverted for 10- 0V control Default Operation Associated wireless input devices control all connected fixtures together Occupancy sensors: Occupied = 100%; Unoccupied = 0% (OFF) AirLink^{rw} wireless switches: On = 100%; Favorite Level = 50%; Off = 0% (OFF) Daylight Sensor: Decreases electric light in response to additional available daylight 	Range	0,
fixtures together • Occupancy sensors: Occupied = 100%; Unoccupied = 0% (OFF) • AirLink ^w wireless switches: On = 100%; Favorite Level = 50%; Off = 0% (OFF) • Daylight Sensor: Decreases electric light in response to additional available daylight	0–10V Control Link	 Control link is IEC SELV/NEC® Class 2 O-10V control can be installed using NEC® Class 1 or Class 2 wiring methods. Alternately, it can be wired to basic or double-insulated devices Terminals accept one 18 to 16AWG (0.75 to 1.5mm²) solid wire Always consult local wiring codes Compatible with ANSI E1.3 2001 (R2006), IEC 60929 Annex E O-10V control miswire protection up to 30V Programming lockout can be enabled for public spaces
Warranty Limited Five-Vear Warranty	Default Operation	fixtures together • Occupancy sensors: Occupied = 100%; Unoccupied = 0% (OFF) • AirLink™ wireless switches: On = 100%; Favorite Level = 50%; Off = 0% (OFF) • Daylight Sensor: Decreases electric light in response
warranty Linneu rive-real Wallality	Warranty	Limited Five-Year Warranty

AIRLINK[™] 5AMP POWERPACK WITH 0−10V DIMMING

The AirLink[™] 5AMP Powerpack with 0–10V dimming is a radio frequency (RF) device that operates 0–10V controlled fluorescent ballasts or LED drivers based on input from AirLink[™] wireless switches and AirLink[™] ceiling-mounted wireless sensors. The dimming module with 0–10V control is ideal for small areas, such as: classrooms, conference rooms, and private offices. Communication with RF input devices, such as AirLink[™] wireless switches and AirLink[™] ceiling-mounted wireless sensors), is accomplished using Lutron_® Clear Connect[™] RF Technology.

FEATURES

- Controls up to 60mA of 0-10V controlled fixtures together
- Capable of switching 5A total
- 0-10V control link automatically sources or sinks to 3rd-party fixtures
- Configurable high- and low-end trim.
- Receives wireless inputs from up to 9 AirLink[™] wireless switches, 6 AirLink[™] ceiling-mounted wireless occupancy/vacancy sensors, and 1 ceiling-mounted wireless daylight sensor
- · Mounts to a junction box through a standard-size knockout
- LED status indicator shows current load status and provides programming feedback
- Power failure memory: If power is interrupted, connected loads will return to the previous level prior to interruption
- Daylighting can be overridden by pressing the Raise button on any associated AirLink[™] wireless switch and will be re-enabled after 2 hours; by pressing the ON, OFF or Preset buttons; or after the area becomes unoccupied

DIMENSIONS





Catalog #

ADVANCED CONFIGURATIONS

AirLink[™] Wireless Switches

· Up to 9 switches can be connected, each with set favorite levels

AirLink™ Ceiling-Mounted Wireless Daylight Sensor

- AirLink[™] ceiling-mounted wireless daylight sensor will affect the connected ballasts and LED drivers equally
- For multiple rows of daylighting, a separate dimming module must be used for each daylighting row

Minimum Light Level Setting (optional)

 Certain applications such as hallways, may require that the lights never turn off. For these areas, select the minimum light level option and the load will lower to programmed low-end level. Default operation lowers to OFF

High- and Low-End Trim

- High-end and low-end trim affect all connected fixtures equally, and can be configured from the dimming module or from any associated AirLink[™] wireless switch when unit is not in programming lock-out mode
- Adjustable low-end trim (0-45%). Trimmable low-end can ensure a stable light level. Some fixtures will flicker or drop out if trimmed too low

 The maximum light output of connected fixtures can be decreased down to 55% for energy savings in over-lit spaces. The perceived light output of low-end trim may vary between fixture manufacturers and model numbers. For best results do not mix different ballasts or drivers on the same 0–10V circuit

AirLink™ Ceiling-Mounted Wireless Occupancy Sensors

- AirLink[™] ceiling-mounted wireless occupancy and vacancy sensors control all connected ballasts or drivers
- AirLink[™] wireless switches can be used to adjust the Occupied levels of fixtures that they control from 1% to 100% (of output signal) or can make them unaffected by Occupancy events
- Vacancy events (area becomes unoccupied) turn all ballasts and driver models OFF or to minimum lighting level

Programming Lockout

- Once enabled, all AirLink[™] wireless switches can no longer perform programming or set favorite levels
- To change settings, programming lockout must be unlocked by a button combination directly on the dimming module

WIRING DIAGRAM



NOTE: Some applications (in the USA) require the Powerpack module to be installed inside an additional junction box. Please consult all local and national electric codes for proper installation methods.

ORDERING INFORMATION (AL-5A-PP-D)

PART NO.	CAT. NO.	DESCRIPTION
632640	AL-5A-PP-D	AirLink™ 5AMP Powerpack, 0–10V Dimming



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SYSTEM DIAGRAM



AIRLINK[™] 5AMP POWERPACK (AL-5A-PP)



APPLICATIONS

• Small offices • Conference rooms • Lounges • Classrooms

SPECIFICATIONS

ELECTRICAL	
Regulatory Approvals	 COFETEL CSA and IC Complies with requirements for use in a compartment handling environmental air (plenum) per NEC₈ 2011 300.22(C)(3) UL Listed, UL 2043 Plenum Rated, NOM, and FCC Approved. Complies with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rule
Power / Load	 Operating voltage: 120 – 277V S 50/60 Hz Maximum load: 5A general purpose. No minimum load requirements Load types include (but are not limited to): Incandescent, MLV, ELV, Resistive, Inductive, Magnetic fluorescent, Electronic fluorescent Motor rating: 1/6 HP (120V S), 1/3 HP (277V S)
ENVIRONMENTAL	
Ambient Operating Temperature	32°F to 131°F (0°C to 55°C), 0%–90% humidity, non-condensing; indoor use only
OTHER	
Range	 Lutron_☉ Clear Connect[™] RF Technology allows for 30ft (10m) of range
Softswitch	 Lutron's Patented Softswitch_® circuit eliminates relay arcing at mechanical contacts Extends relay life to an average of 1 million cycles Output is non-latching
Contact Closure Output (CCO version only)	 Provides occupancy status to 3rd-party equipment such as building management systems, HVAC, and VAV controllers Provides both normally open (MNO) and normally closed (NC) dry contacts Maintained output type CCO terminals accept 20 to 16AWG (0.5 to 1.5mm²) solid or stranded wire Output is latching Not for voltages greater that 24V The CCO is not rated to control unclamped inductive loads. Inductive loads include, but are not limited to: relays, solenoids, and motors. To control these types of equipment, a flyback diode must be used (DC voltages only) Switching Resistive Uotage Resistive Output is 0.5A
Warranty	Limited Five-Year Warranty

AIRLINK[™] 5AMP POWERPACK (AL-5A-PP)

The AirLink[™] 5AMP Powerpack is a radio frequency (RF) device that controls up to 5A of general-purpose load based on input from AirLink[™] wireless switches and AirLink[™] ceiling-mounted wireless occupancy and daylight sensors. An optional low-voltage dry contact closure output is available to communicate occupancy status to 3rd-party systems such as HVAC controllers. Communication with RF input devices, such as AirLink[™] wireless switches and AirLink[™] ceiling-mounted wireless sensors, is accomplished using Lutron_® Clear Connect[™] RF Technology.

FEATURES

- Capable of switching 5A of general-purpose loads
- Optional low-voltage dry contact closure output provides integration to building management systems, HVAC, VAV, etc.
- Receives wireless inputs from up to 9 AirLink[™] wireless switches, 6 AirLink[™] ceiling-mounted wireless occupancy/vacancy sensors, and 1 ceiling-mounted wireless daylight sensor
- · Mounts to a junction box through a standard half-inch (NPT trade size) knockout
- LED status indicator shows current load status and provides programming feedback
- Power failure memory: If power is interrupted, connected loads will return to the previous level prior to interruption
- Daylighting can be overridden by pressing the ON button on any associated AirLink[™] wireless switch and will be re-enabled after 2 hours or after the area becomes unoccupied

DIMENSIONS





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WIRING DIAGRAM



CCO Operation affected only by associated occupancy or vacancy sensors **Room Occupied:** NO = Close NC = Open **Room Unoccupied:** NO = Open NC = Close

6

Input Voltage

Red

(Switched Hot)

(Normally Open) (Normally Closed)

NC

COM -(Common)

NÓ

In some applications, an the Powerpack can be installed inside a 4in X 4in (102mm X 102mm) junction box.



SYSTEM DIAGRAM



DEFAULT OPERATION

White (Neutral)

Black (Hot)

Conduit Nut

To Load

To 3rd-Party Equipment

Note: When wiring CCO to 3rd-party systems, use 20 to 16 AWG (0.5 to 1.5 mm²) solid or standed wire.

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TRANSMITTING DEVICE	TRANSMITTED COMMAND	LOAD RELAY DEFAULT ACTION	CCO DEFAULT ACTION
	On	Close	No Action
AirLink [™] Wireless	Off	Open	No Action
Switch	Raise / Lower	No Action	No Action
	Preset	Close	No Action
AirLink™ Ceiling- Mounted Wireless	Occupied	Close	NO = Close, NC = Open
Occupancy Sensor	Unoccupied	Open	NO = Open, NC = Closed
AirLink™ Ceiling- Mounted Wireless	Occupied	No Action	NO = Close, NC = Open
Vacancy Sensor	Unoccupied	Open	NO = Open, NC = Closed
AirLink™ Ceiling- Mounted Wireless	Ambient Light Below Target Level	Close	No Action
Daylight Sensor	Ambient Light Above Target Level	Open	No Action

ORDERING INFORMATION (AL-5A-PP)

PART NO.	CAT. NO.	DESCRIPTION
632641	AL-5A-PP	AirLink™ 5AMP Powerpack, ON/OFF, contact closure output



_ Catalog #

AIRLINK[™] FIXTURE CONTROLLER (ALC/ALCE)



APPLICATIONS

• Small offices • Conference rooms • Lounges • Classrooms

SPECIFICATIONS

ELECTRICAL	
Regulatory Approvals	 Title 20/24 certified lighting control device. Complies with Title 20 and Title 24 Section 110.9 Enables compliance with lighting control requirements in ASHRAE 90.1 and IECC Complies with requirements for use in a compartment handling environmental air (plenum) per NEC₂ 2011 300.22(C)(3) ALC is cULus Listed, NOM Certified, and FCC Approved. Complies with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rule
Wiring	Control wires can be run as either Class 1 or Class 2 • ALC: gray and violet wires • Lutron _{\odot} EcoSystem _{\odot} : violet wires
Frequency	431.0-437.0 MHz (U.S.A., Canada)
Power / Load	 Operating voltage: 120 - 277V ♀ 50/60 Hz 1 A switching maximum, electronic ballast or LED driver for 0 - 10 V load Standby power consumption < 1 W ALC (0 - 10 V) Controls up to 6 mA of 0 - 10 V controlled fixtures. Controls up to 3 ballasts or drivers (IEC 60929 Annex E.2 requires the ballast or driver to limit the current draw to 2.0 mA maximum). 0 - 10 V control link on ALC automatically sources or sinks to third-party fixtures (Lutron_® EcoSystem_®) Controls up to 3 Lutron_® EcoSystem_® LED drivers or ballasts. Multiple ballasts or drivers control only one combined zone of lighting
ENVIRONMENTAL	
Ambient Operating Temperature	32°F to 104°F (0°C to 40°C), 0%–90% humidity, non-condensing; indoor use only
OTHER	
Range	 Wireless sensors and controls must be located within 60ft (18m) line of sight, or 30ft (9m), through walls, of the associated control module. Utilizes Lutron_© Clear Connect[™] RF Technology
Mounting	 Wireless fixture control mounts to a fixture or a U.Sstyle junction box through a standard 1/2 in (12.7 mm) knockout. NOTE: The wireless fixture control needs to be accessible for some programming steps. Record where it is mounted so that it can be easily located later.
Warranty	Limited Five-Year Warranty

OVERVIEW

The AirLinkTM wireless fixture controller is a radio-frequency (RF) device that controls the $0-10V \xrightarrow{\text{cr-}}$ or Lutron_® EcoSystem_® electronic fluorescent ballasts and LED drivers (depending on model). This is based on RF input from AirLinkTM wireless switch (ALWS), AirLinkTM ceiling-mounted wireless sensors, or wired inputs from the AirLinkTM fixture sensor. The control module mounts to a fixture or a U.S.-style junction box. Communication with RF input devices is accomplished using Lutron_® Clear Connect_® RF Technology. This controller works with AirLinkTM fixture sensors: occupancy (ALOS), vacancy (ALVS).

FEATURES

- Minimum Light Level Setting (optional). Certain applications, such as hallways, may require that the lights never turn off. For these areas, select the minimum light level option and the load will lower to programed low-end level
- Daylighting dims lights down to OFF. Occupancy sensor must go unoccupied (vacant) in order for the AirLink[™] fixture sensor to turn the lights off
- Occupied light level can be changed via the AirLink[™] ceiling-mounted wireless occupancy sensor
- · Favorite light level can be set using an ALWS
- Power failure memory: If power is interrupted, connected loads will return to the previous level prior to interruption
- Low-end trim adjustment (default is 1V ---- or ballasts/drivers minimum for Lutron_® EcoSystem_® ballasts/drivers). High-end trim adjustment (default is 10V ---- or 100% for Lutron_® EcoSystem_® ballasts/drivers)



RANGE DIAGRAM

NOTE: Wireless sensors and controls must be located within 60ft (18m) line of sight, or 30ft (9m), through walls, of the associated control module.





Clear Connect

AIRLINK[™] FIXTURE CONTROLLER (ALC/ALCE)

· Maximum of one (1) AirLink™ fixture sensor (occupancy/vacancy/daylight)

NOTE: Only one AirLink[™] wireless fixture control can be used per AirLink[™]

WIRING DIAGRAM

The following can be used per each AirLink[™] wireless fixture control: Wired:

fixture sensor, and vise versa





. Maximum of ten (10) AirLink™ wireless switches



Maximum of ten (10) AirLink[™] ceiling-mounted wireless occupancy sensors

Maximum of one (1) AirLink[™] ceiling-mounted wireless daylight sensors

NOTES

- When using an AirLink[™] ceiling-mounted wireless davlight sensor in conjunction with both an AirLink[™] wireless fixture control and AirLink[™] fixture sensor, the AirLink™ ceiling-mounted wireless daylight sensor will provide the daylighting input to the control module, and the AirLink[™] fixture sensor daylighting input will be ignored.
- When using an AirLink[™] ceiling-mounted wireless occupancy sensor in conjunction with both an AirLink[™] wireless fixture control and AirLink[™] fixture sensor, occupancy data from both sensors is used; either one detecting occupancy will turn the lights on, and the lights turn off only when both sensors have gone vacant (no longer detect occupancy).
- Grouping enables an AirLink[™] ceiling-mounted wireless occupancy sensor • or AirLink[™] ceiling-mounted wireless daylight sensor to group and control more than one fixture together.
- AirLink[™] ceiling-mounted wireless occupancy sensors can be used with the AirLink[™] fixture sensor to add coverage area.



ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
624087	ALC	AirLink™ fixture controller (0-10V)
634480	ALCE	AirLink™ fixture controller (Lutron _® EcoSystem _®)



Catalog #

07/29/16

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AIRLINK[™] CEILING-MOUNTED WIRELESS DAYLIGHT SENSOR (ALCM-W-PC)



APPLICATIONS

Small offices
 Conference rooms
 Lounges
 Classrooms

SPECIFICATIONS

ELECTRICAL		
Regulatory Approvals	Lutron Quality Systems Registered to ISO 9001:2008	
Standards	FCC certified IC certified COFETEL ANATEL AAVATEL ASEP CRC SUBTEL SUPERTEL SUPERTEL SUTEL Meets CA (U.S.A.) Energy Commission Title 24 requirements cULus Listed RoHS compliant	
Range	Local load controls must be located within 60ft (18m) I ine-of-sight, or 30ft (9m) through walls, of a sensor	
Power/Performance	 Operating voltage: 3V Operating current: 7µA Requires one CR 2450 lithium battery 10-year battery life Non-volatile memory (settings are stored during power loss) 	
ENVIRONMENTAL		
Ambient Operating Temperature	32°F to 104°F (0°C to 40°C)	
Relative Humidity	< 90% non-condensing; indoor use only	
CUUUS COMPLIANT CONNECT.		

OVERVIEW

AirLink[™] Ceiling-Mounted Wireless Daylight Sensor is a battery-powered sensor that automatically controls lights via RF communication to compatible dimming or switching devices. This sensor mounts to the ceiling and measures light in the space. The sensor then transmits the light level to the associated dimming or switching devices that automatically control the lights to balance light level in the space. The sensor combines both convenience and exceptional energy savings potential along with ease of installation.

FEATURES

- · Wireless daylight sensor has simple calibration
- Daylight compensation through Lutron® reliable open loop control
- · Designed to give a linear response to changes in viewed light level
- Light range 0 to 150fc (0 to 1600lx)
- Uses Lutron® Clear Connect® Technology
- Works with AirLink[™] wirelss occupancy/vacancy sensors and AirLink[™] wireless switches
- · Intuitive test mode provides instant system verification
- · Multiple ceiling-mount methods available for different ceiling materials
- · Front accessible test buttons make setup easy
- On a single-tap, lights fade ON or OFF, on a double-tap, lights go to full ON.
- 10-year battery life

DIMENSIONS



ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
624090	ALCM-W-PC	AirLink Ceiling-Mounted Wireless Daylight Sensor (Photocell)



07/27/16

AIRLINK[™] CEILING-MOUNTED WIRELESS DAYLIGHT SENSOR (ALCM-W-PC)

INSTALLATION OVERVIEW

Determine the Daylight Sensor mounting location using the diagrams (right)

- The arrow on the daylight sensor points toward the area viewed by the sensor.
- Place the daylight sensor so the arrow is pointed at the nearest window at a distance from the window ofone to two times the effective window height (H).
- The effective window height (H) starts at the window sill or 3 ft (1 m) up from the floor, whichever is higher, and ends at the top of the window.
- Ensure that the view of the daylight sensor is not obstructed (e.g. ceiling fans or pendant fixtures).
- Do not position the daylight sensor above an electric light that shines up at the ceiling or at the sensor.
- Do not position the daylight sensor in the well of a skylight or above indirect lighting fixtures.
- For narrow areas where the daylight sensor cannot be placed 1-2 (H) from windows, place sensor near windows facing into the space.
- Mount sensor(s) away from large metal surfaces (e.g. light fixtures or metal-backed ceiling tiles). Metal objects will affect the RF performance of the sensor.

MOUNTING

Location for average size areas

(Arrow on sensor points towards the area viewed by the sensor (towards the window)



H = Effective Window Height

Location for narrow areas

Arrow on sensor points towards the area viewed by the sensor (away the window)





AIRLINK[™] CEILING-MOUNTED WIRELESS OCC/VAC SENSOR (ALCM-W-OS, ALCM-W-VS)



APPLICATIONS

Small offices
 Conference rooms
 Lounges
 Classrooms

SPECIFICATIONS

ELECTRICAL	
Regulatory Approvals	+ Lutron $_{\scriptscriptstyle \otimes}$ Quality Systems Registered to ISO 9001:2008
Standards	FCC and IC certified COFETEL, ANATEL, SUTEL Meets CA (U.S.A.) Energy Commission Title 24 requirements (vacancy model only) cULus Listed RoHS compliant
Range	 360° coverage ranges from 324ft² (30.2m²) to 676ft² (62.4m²), depending on mounting height Local load controls must be located within 60ft (18m) line-of-sight—or 30ft (9m) through walls—of a sensor.
Power/Performance	 Frequency: 431.0 – 437.0 MHz (U.S.A, Canada, Mexico, Brazil) Operating voltage: 3V Operating current: 14µA Requires one CR 123 lithium battery 10-year battery life Non-volatile memory (settings are stored during power loss)
ENVIRONMENTAL	
Temperature/Use	32°F to 104°F (0°C to 40°C), Indoor use only
OTHER	
Testing	 Sensor Coverage Test: front accessible test button, lens illuminates orange in response to motion during test mode and is visible from 60ft (18m) Wireless Communication Test: front accessible test button, turn associated loads on and off
Warranty	5-Year Limited Warranty

ORDERING INFORMATION

c(VL)us

R_oHS

SENSORS

PART NO.	CAT. NO.	DESCRIPTION
624094	ALCM-W-OS	AirLink Ceiling-Mounted Wireless Occupancy Sensor
624615	ALCM-W-VS	AirLink Ceiling-Mounted Wireless Vacancy Sensor

OVERVIEW

AirLink[™] Ceiling-Mounted Wireless Occupancy and Vacancy Sensors are wireless, batterypowered, passive infrared (PIR) sensors that automatically control lights via RF communication to compatible dimming and switching devices. These sensors detect the heat (IR radiation of 9.5 µm) from people moving within an area to determine when the space is occupied. The sensors then wirelessly transmit the appropriate commands to the associated dimming and switching devices to turn the lights ON or OFF automatically. They combine both convenience and exceptional energy savings potential along with ease of installation.

FEATURES

- Wireless occupancy sensor has 3 settings available: Auto-On/Auto-Off, Auto-On Low-Light/ Auto-Off, and Manual-On/Auto-Off. Auto-On options:
 - Enabled: Sensor turns lights ON and OFF automatically
 - Low Light: Sensor turns light ON automatically only in low ambient light conditions; sensor turns lights OFF automatically
 - Disabled*: Lights must be turned ON manually from dimming or switching device; sensor turns lights OFF automatically
- Auto-On Low-Light feature will turn lights on automatically only if there is less than approximately 1 fc (10 Lux) of ambient light
- Uses Lutron_☉ Clear Connect_☉ technology and Lutron_☉ XCT[™] Technology with passive infrared motion detection for fine motion detection
- Simple and intuitive adjustments available for Timeout, Auto-On, and Activity settings:
 Time out options: 1 minute^{**}, 5 minutes, **15 minutes**, 30 minutes
- Activity options: Low Activity, Medium Activity, High Activity
- Supports advanced occupancy features, such as dependent occupancy groups and customizable occupied/unoccupied presets in some systems
- Multiple sensors can be added for extended coverage
- Multiple ceiling-mount methods available for different ceiling materials
- Front accessible test buttons make programming easy

Default factory settings shown in bold

- 15 second grace period begins when the lights are automatically turned OFF. They automatically turn back ON in response to motion. This grace period is provided as a safety and convenience feature if the lights turn OFF while the room is still occupied. After 15 seconds, the lights must be manually turned ON
- ** Intended for use in high-activity, briefly occupied areas only

DIMENSIONS



SENSOR ACCESSORIES

PART NO.	CAT. NO.	DESCRIPTION
632632	MASK KIT	Sensor Masking Kit
632633	CM-BKT	Ceiling Mount Bracket
632634	CM-WG	Ceiling Mount Wireguard



_ Catalog #

07/27/16

AIRLINK[™] CEILING-MOUNTED WIRELESS OCC/VAC SENSOR (ALCM-W-VS, ALCM-W-OS)

COVERAGE PATTERN

(If sensor is mounted in center of the room)



SENSOR COVERAGE CHART

CEILING HEIGHT	MAXIMUM SQUARE	COVERAGE AREA*
8ft (2.4m)	18ft x 18ft (5.5m x 5.5m)	324ft ² (30.2m ²)
9ft (2.7m)	20ft x 20ft (6.1m x 6.1m)	400ft ² (37.2m ²)
10ft (3.0m)	22ft x 22ft (6.7m x 6.7m)	484ft ² (44.9m ²)
12ft (3.7m)	26ft x 26ft (7.9m x 7.9m)	676ft ² (62.4m ²)

SENSOR PLACEMENT

- To detect motion, the sensor requires line-of-sight of room occupants. The sensor must have an unobstructed view of the room. DO NOT mount behind or near tall cabinets, shelves, hanging fixtures, ceiling fans, etc. The sensor cannot see through glass objects such as patio or shower doors.
- Hot objects and moving air currents can affect the performance of the sensor. To ensure proper operation, the sensor should be mounted at least 4 ft (1.2 m) away from HVAC vents and light bulbs that are below the ceiling line.
- The performance of the sensor depends on a temperature differential between the ambient room temperature and that of room occupants. Warmer rooms may reduce the ability of the sensor to detect occupants.
- Devices emitting Radio Frequency (RF) energy can affect the performance of sensors. To ensure proper operation, sensors should be mounted at least 4 ft (1.2 m) away from devices that emit radio waves (e.g., microwave ovens, wireless routers or other wireless devices)

MOUNTING

Temporary mounting is optional to test sensor coverage and wireless communication before permanently installing the sensor.

Drop Ceiling (Compressed Fiber Ceiling Tile)

The mounting wire is provided for both temporary and permanent mounting of the sensor to ceiling tiles. It is designed to allow temporary mounting, testing, and repositioning (if necessary) of the sensor without damaging a ceiling tile. Once the final position of the sensor has been chosen, the mounting wire should be twisted together to permanently secure the sensor in place.

Solid Ceiling (Drywall, Plaster, Concrete, or Wood)

• Permanent mounting: Screws and anchors (for drywall or plaster) provided to mount the sensor.

Recess-Mount

- Do not recess-mount sensor in a metal surface.
- Recess-mounting ring requires an opening of 3 in (76 mm) in diameter.
- Recess-mounting ring secures internally to ceiling. Sensor twists into the recess mounting ring and sits flush with ceiling (see image below).
- Recess-mounting ring purchased as a separate kit (632633)



LENS MASKING

Whenever possible, the sensor should be installed in a location where it cannot view areas outside the intended space, such as hallways or adjacent rooms. If this situation cannot be avoided, portions of the lens may be masked to block the view of the sensor into undesired areas. Ten (10) lens masks may be purchased in the kit (632632).



LSI INDUSTRIES INC.

AIRLINK[™] WIRELESS SWITCH (ALWS)



APPLICATIONS

Small offices
 Conference rooms
 Lounges
 Classrooms

SPECIFICATIONS

ELECTRICAL	
Regulatory Approvals	Lutron _⊕ Quality Systems registered to ISO 9001:2008. FCC Certified (U.S.A.) IC Certified (Canada) COFETEL Certified (Mexico) SUTEL Certified (Costa Rica) Anatel Certified (Brazil)
Power	 Operating Voltage: 3V (1) CR2032 Battery (included)
SYSTEM	
System Communication and Capacity	 Communicates using Radio Frequency (RF) at 431MHz to 437MHz. Thousands of system addresses prevent interference between systems. Can be assigned to control blinds, curtains or lighting devices that are within a 30 ft (9 m) range.
ENVIRONMENTAL	
Ambient Operating Temperature	32°F to 140°F (0°C to 60°C)
Relative Humidity	Maximum 90% non-condensing; indoor use only
OTHER	
Mounting Considerations	 Mounting of any RF devices on or in close proximity to a metal surface will drastically reduce the effective range of radio signal transmission or reception All RF devices must be mounted on non-conductive materials to ensure proper performance
Warranty	1 Year Limited Warranty

OVERVIEW

The AirLink[™] wireless switch is a flexible and easy to use device that allows the user to control AirLink[™] wireless load-control devices from anywhere in the space. This battery-operated control requires no external power or communication wiring.

FEATURES

- · Control available in a variety of button marking options
- Easy reconfiguration for use as:
 - Handheld remote
 - Wall-mount control (with or without faceplate; faceplate adapter kit sold separately)
 - A table top control (table top pedestal sold separately)
- Battery-powered. Requires no wiring
- · 10 year battery life (one CR2032 battery included)
- Can provide control of blinds, curtains, or lighting devices within a range of 30 ft (9 m) through walls and 60 ft (18 m) line-of-sight

DIMENSIONS



Press and Hold:

To save new preset level or position,

press and hold for 6 seconds

ORDERING INFORMATION All switches and wall kits available in White (WHT), Ivory (IV), and Light Almond (LA) Example: 624105WHT or ALWS-3B-WHT

PART NO.	CATALOG NO.	DESCRIPTION
624105WHT	ALWS-3B-WHT	AirLink™ Wireless Switch 3 Button in White
624105IV	ALWS-3B-IV	AirLink™ Wireless Switch 3 Button in Ivory
624105LA	ALWS-3B-LA	AirLink™ Wireless Switch 3 Button in Light Almond
624100WHT	ALWS-2B-WHT	AirLink™ Wireless Switch 2 Button in White
624100IV	ALWS-2B-IV	AirLink™ Wireless Switch 2 Button in Ivory
624100LA	ALWS-2B-LA	AirLink™ Wireless Switch 2 Button in Light Almond
624103WHT	ALWS-3B-WHT-KIT	AirLink™ Wireless Switch 3 Button Wall Kit in White (Included in Kit: AirLink™ Wireless Switch, wallplate adapter, and wallbox adapter)
624103IV	ALWS-3B-IV-KIT	AirLink™ Wireless Switch 3 Button Wall Kit in Ivory (Included in Kit: AirLink™ Wireless Switch, wallplate adapter, and wallbox adapter)
624103LA	ALWS-3B-LA-KIT	AirLink™ Wireless Switch 3 Button Wall Kit in Light Almond (Included in Kit: AirLink™ Wireless Switch, wallplate adapter, and wallbox adapter)



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Bottom Button

Lights dim to OFF

AIRLINK™ WIRELESS SWITCH ACCESSORIES

AIRLINK™ WIRELESS SWITCH WALL MOUNTING ACCESSORIES

The AirLink[™] 3 button wireless switch can be purchased with a wall mounting kit (see previous page, catalog number: ALWS-3B-XX-KIT) which includes a wallbox adaptor and a wallplate. These accessories can also be purchased separately (see ordering info below).

See the 4-step mounting instructions (to the right) for accessory drawings.

AIRLINK™ WIRELESS SWITCH TABLETOP PEDESTAL ACCESSORIES

The AirLink[™] wireless switch can also be attached to a pedestal for handheld or tabletop control. They can be purchased in 1, 2, 3, or 4 gang. All pedestals come in white with a glossy finish. Note that the pedestals are sold separately from the AirLink[™] wireless switches and other accessories.

See drawings (to the right) for 1–4 gang pedestal dimensions. Pedestals (with attached AirLink[™] wireless switches) can control lighting devices that are within a 30 ft (9 m) range.











ORDERING INFORMATION

WALL MOUNTING ACCESSORY ORDERING INFORMATION

All wallplates are available in White (WHT), Ivory (IV), and Light Almond (LA) Example: 624124WHT or WP-1-WHT

PART NO.	CATALOG NO.	DESCRIPTION	SWITCH CAPACITY
624123	WB-ADAPT	Wallbox Adaptor	1
624124WHT	WP-1-WHT	Wallplate 1 Gang in White	
624124IV	WP-1-IV	Wallplate 1 Gang in Ivory	1
624124LA	WP-1-LA	Wallplate 1 Gang in Light Almond	
624125WHT	WP-2-WHT	Wallplate 2 Gang in White	
624125IV	WP-2-IV	Wallplate 2 Gang in Ivory	2
624125LA	WP-2-LA	Wallplate 2 Gang in Light Almond	
624127WHT	WP-3-WHT	Wallplate 3 Gang in White	
624127IV	WP-3-IV	Wallplate 3 Gang in Ivory	3
624127LA	WP-3-LA	Wallplate 3 Gang in Light Almond	
624128WHT	WP-4-WHT	Wallplate 4 Gang in White	
624128IV	WP-4-IV	Wallplate 4 Gang in Ivory	4
624128LA	WP-4-LA	Wallplate 4 Gang in Light Almond	

TABLETOP PEDESTAL ACCESSORY ORDERING INFORMATION

PART NO.	CATALOG NO.	DESCRIPTION	SWITCH CAPACITY
624110	P-1-WHT	Pedestal 1 Gang in White	1
624111	P-2-WHT	Pedestal 2 Gang in White	2
624113	P-3-WHT	Pedestal 3 Gang in White	3
624114	P-4-WHT	Pedestal 4 Gang in White	4



AIRLINK[™] FIXTURE SENSORS (ALOS, ALVS)



APPLICATIONS

Small offices
 Conference rooms
 Lounges
 Classrooms

SPECIFICATIONS

ELECTRICAL		
Regulatory Approvals	cULus Listed	
Wiring	Sensor wires are IEC SELV / $\ensuremath{NEC}\xspace$ Class 2 rated	
Power / Load	Operating voltage: 12V Operating current: 25 mA IEC SELV / NEC _® Class 2	
ENVIRONMENTAL		
Ambient Operating Temperature	32°F to 104°F (0°C to 40°C), 0%–90% humidity, non-condensing; indoor use only	
GREEN LASER		
Output	 Wave output: constant Wavelength: 532nm Output power: 5mW maximum 	

DIMENSIONS





OVERVIEW

The AirLink[™] fixture sensor (optional) mounts to the ceiling or to a fixture and measures light in the space (daylighting) while detecting people moving within an area to determine passive infrared occupancy. The sensor controls the lights to balance light level in the space, combining convenience, exceptional energy savings, and ease of installation. The sensor contains two wires which connect to the AirLink[™] wireless fixture control (ALC).

FEATURES

- Occupancy sensor timeout (fixture sensor): 15 minutes
- Utilizes a green laser pointer (see laser warning) to associate AirLink[™] wireless switches (ALWS) and AirLink[™] ceiling-mounted wireless sensors to AirLink[™] wireless fixture controls via RF
- 2-wire connection between an AirLink[™] fixture sensor and an AirLink[™] wireless fixture control. The wires are interchangeable to eliminate miswiring. Sensor comes with 2 ft (0.6m) of wires. (If hanging pendant fixtures, the maximum wire length between fixture sensor and fixture control is 12ft (3.7m). Sensor should be mounted no more than 2 ft (0.6m) from the fixture)
- Passive infrared motion detection with exclusive Lutron_® XCT[™] Technology for major and minor motion detection
- Up to 300ft² (27.9m²) major motion coverage and 150ft² (13.9m²) minor motion coverage and 360° field-of-view
- · Daylight sensor has simple, automatic calibration straight out-of-the-box
- Designed to give a linear response to changes in perceived light level. Detects ambient light level changes from 0 to 150 fc (0 to 1600 lx)

APPLICATIONS AND SELECTING THE RIGHT CONTROL

AirLink[™] Fixture Sensor:

- Great for individual control in cubicles. Maximize energy savings (fixtures in unoccupied spaces do not turn on)
- · Simplifies the determination of what is needed for a job

Airlink™ Ceiling-Mounted Wireless Sensor:

- · Cover large areas with a single sensor, which can mount anywhere in the space
- In order to turn on and off multiple fixtures together (known as "grouping"), an AirLink™ ceiling-mounted wireless occupancy sensor must be used.
- In order to have a row of fixtures dim up or down together in response to daylight, an AirLink™ ceiling-mounted wireless daylight sensor must be used.

Daylighting:

Clear

Connect.

- AirLink[™] wireless fixture controls have two options for daylighting. The AirLink[™] fixture sensor can be used for simple, out-of-the-box daylighting. The AirLink[™] ceiling-mounted wireless daylight sensor can be added for the ability to adjust and fine tune daylighting settings.
- AirLink[™] ceiling-mounted wireless daylight sensors provide the ultimate flexibility in daylighting: target light level (tuning) and gain value (through calibration) can be adjusted independently. Daylighting rows/zones can be setup so that multiple fixtures dim in unison. AirLink[™] ceiling-mounted wireless daylight sensors can be placed anywhere since they are completely wireless, and performance can be optimized through placement and fine tuning.



WARNING 🗼 DANGER

Eye injury and/or blindness hazard; avoid direct eye exposure to laser beam.

- Use of laser pointer is NOT recommended for use with products located near reflective surfaces
 Do NOT aim or shine laser pointers at any person, pet, vehicle, or aircraft directly, or through reflection by mirrors or other shiny surfaces. Do NOT view the laser beam through binoculars, magnifying glass, or other optical devices.
- Do NOT allow children to use laser pointers.
- Bead and follow the laser pointer manufacturer's instructions on safe use. In the event of injury, get medical attention immediately.



🔟 Catalog # 🔄

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SENSOR RANGE DIAGRAM

Major motion: Movement of a person entering or passing through an area.

Minor motion: Movement of a person occupying an area and engaging in small activities (e.g., reaching for a telephone, turning the pages of a book, opening a file folder, pick up a coffee cup, etc.).



ORDERING INFORMATION

The AirLink[™] fixture sensors (ALOS and ALVS^{*}) are sold in conjunction with the AirLink[™] fixture controller (ALC). You can find the ordering information for these products on any AirLink[™] compatible fixture specification sheet.

* Lights do not turn on automatically with a vacancy sensor. An AirLink[™] wireless switch is needed to turn on the lights



Catalog # _



APPLICATIONS

• Small offices • Conference rooms • Lounges • Classrooms

SPECIFICATIONS

ELECTRICAL	
Regulatory Approvals	 RoHS compliant Lutron_☉ Quality Systems Registered to ISO 9001:2008 cULus_☉ listed FCC certified IC certified COFETEL certified SUTEL certified SUTEL certified Meets CA (U.S.A.) Energy Commission Title 24 requirements
Power / Load	 Operating voltage: 3 V Operating current: 14 μA nominal Requires one CR 123 lithium battery
ENVIRONMENTAL	
Ambient Operating Temperature	32°F to 104°F (0°C to 40°C), 0%–90%; indoor use only Note: For unconditioned environments where the air temperature may approach the temperature of the occupants, additional sensors will be needed to achieve the same coverage. This is true of any sensor that relies exclusively on passive infrared technology.
OTHER	
Warranty	5-Year Limited Warranty
Operation	 RF Range - Distance between local load controls and sensor should not exceed 60 ft (18 m) line-of-sight or 30 ft (9 m) through walls.
Tests	Sensor Coverage Test Dedicated test button Lens illuminates orange in response to motion during test mode Wireless Communication Test Dedicated test button Turn associated loads on and off





OVERVIEW

The AirLink[™] wireless mounted sensors (available in occupancy or vacancy) are battery-powered, passive infrared (PIR) sensors that automatically control lights via RF communication to compatible dimming or switching devices. These sensors detect the heat from people moving within an area to determine when the space is occupied. The sensors then wirelessly transmit the appropriate commands to the associated dimming or switching devices to turn the lights on or off automatically. They combine both convenience and exceptional energy savings along with ease of installation.

FEATURES

- Wireless occupancy/vacancy sensor has 2 settings available: Auto-On/Auto-Off, and Manual-On/Auto-Off
- · Vacancy model meets CA Title 24 requirements
- Passive infrared motion detection with exclusive Lutron_® XCT[™] Technology for fine motion detection
- 180° field of view model: Minor motion = 1500 ft² (139.4 m²) Major motion = 3000 ft² (278.7 m²)
- 90° field of view model: Minor motion = 1225 ft² (113.8 m²) Major motion = 2500 ft² (232.3 m²)
- Hallway model with long, narrow field of view: Major motion = coverage of up to 150 ft (45.7 m)
- Simple and intuitive adjustments available for Auto-On, Timeout and Activity settings: Auto-On Settings:
 - Enabled: Sensor turns lights ON and OFF automatically
 - Disabled*: Lights must be turned ON manually from dimming or switching device; sensor turns lights OFF automatically
- Timeout Options:
- 1 minute**, 5 minutes, 15 minutes, 30 minutes
- Activity Options
- Low Activity, Medium Activity, High Activity
- Accessible test buttons make setup easy
- · Lens illuminates during test mode to verify ideal locations
- Multiple sensors can be added for extended coverage; refer to product specification submittal
 of receiving device to determine system limits
- 10-year battery life design
- Non-volatile memory (saved changes are stored during power loss)

Default factory settings shown in bold

- 15 second grace period begins when the lights are automatically turned OFF. They automatically turn back ON in response to motion. This grace period is provided as a safety and convenience feature if the lights turn OFF while the room is still occupied. After 15 seconds, the lights must be manually turned ON
- ** Intended for use in high-activity, briefly occupied areas only

DIMENSIONS





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COVERAGE DIAGRAMS

180° Wall-Mount Sensors

Available in occupancy (ALWM-W-OS) and vacancy (ALWM-W-VS)



TESTED COVERAGE AREA

Major motion coverage: 3000ft² (278.7m²) Minor motion coverage: 1500ft² (139.4m²) Compliant to NEMA WD7 test grid (shown below)







*Sensor mounting shown at 7ft (2.1m). Mounting height should be between 6ft and 8ft (1.6m and 2.4m)

90° Corner-Mount Sensors

Available in occupancy (ALCR-W-OS) and vacancy (ALCR-W-VS)

HORIZONTAL BEAM DIAGRAM



TESTED COVERAGE AREA

Major motion coverage: 2500ft² (232.3m²) Minor motion coverage: 1225ft² (113.8m²) Compliant to NEMA WD7 test grid (shown below)



VERTICAL BEAM DIAGRAM*



*Sensor mounting shown at 7ft (2.1m). Mounting height should be between 6ft and 8ft (1.6m and 2.4m)



__ Catalog #

COVERAGE DIAGRAMS CONTINUED

Hallway Sensors

Available in occupancy (ALHW-W-OS) and vacancy (ALHW-W-VS)

- · Designed to mount at the end of a hallway with a clear view down the length of a hall
- · Detection at longer distances is best when motion occurs at right angles to the sensor
- · Multiple sensors can be used to extend coverage

TOP VIEW





*Sensor mounting shown at 7ft (2.1m). Mounting height should be between 6ft and 8ft (1.6m and 2.4m) and centered within hallway.

ORDERING INFORMATION

SENSORS

PART NUMBER	CATALOG NUMBER	DESCRIPTION	PLACEMENT
632617	ALWM-W-OS	AirLink™ Wall-Mounted Wireless Occupancy Sensor	Wall
632619	ALWM-W-VS	AirLink™ Wall-Mounted Wireless Vacancy Sensor	vvan
624096	ALCR-W-OS	AirLink™ Corner-Mounted Wireless Occupancy Sensor	Corner
632616	ALCR-W-VS	AirLink™ Corner-Mounted Wireless Vacancy Sensor	Corner
632620	ALHW-W-OS	AirLink™ Hallway Wireless Occupancy Sensor	Hollwov
632624	ALHW-W-VS	AirLink™ Hallway Wireless Vacancy Sensor	Hallway

SENSOR ACCESSORIES

PART NUMBER	CATALOG NUMBER	DESCRIPTION	PLACEMENT
632637	HW-BKT	Flexible Mounting Armature	Wall, Hall, Ceiling
632635	WM-WG	Wall-Mounted Wireguard (Accessory for Wall-Mount Sensor)	Wall
632636	CR-WG	Corner-Mounted Wireguard (Accessory for Corner-Mount Sensor)	Corner
632638	HW-WG	Hallway-Mounted Wireguard (Accessory for Hallway-Mount Sensor)	Hallway



MAXIMUM RECOMMENDED HALLLWAY LENGTH

HALL WIDTH	HALL LENGTH
6ft (1.8m) or less	50ft (15.2m)
8ft (2.4m) or less	100ft (30.5m)
10ft (3.0m) or more	150ft (45.7m)

INSTALLATION OVERVIEW

- · The mounting height of the sensor should be between 6ft and 8ft (1.6m and 2.4m)
- For smaller rooms less than 12ft × 12ft (3.7m × 3.7m), detection may be improved by mounting the sensor at 6ft (1.8m) from the floor
- · The ability to detect motion requires that the sensor have line-of-sight of all room occupants. The sensor must have an unobstructed view of the room. DO NOT mount behind or near tall cabinets, shelves, hanging fixtures, etc. The sensor cannot detect occupants through glass objects such as patio or shower doors
- Hot objects and moving air currents can affect the performance of the sensor. To ensure proper operation, the sensor should be mounted at least 4ft (1.2m) away from light bulbs and HVAC vents
- · The performance of the sensor depends on a temperature differential between the ambient room temperature and that of room occupants. Warmer rooms may reduce the sensor's ability to detect occupants
- Distance between local load controls and sensor should not exceed 60ft (18m) line-of-sight or 30ft (9m) through walls

Figure A

180° Wall-Mount Sensor (ALWM-W-OS/VS) 180° Hallway Sensor (ALHW-W-OS/VS)





Figure C

Mounting Bracket (for wall or ceiling)

MOUNTING

- 80° and hallway sensors mount directly to wall with mounting bracket (included). See Figure A
- 90° sensors mount directly in corner or on wall offset away from corner with mounting bracket (included). See Figure B
 - Temporary mounting is recommended to test sensor coverage and wireless communication before permanently installing the sensor.
 - · Temporary mounting: A 3M[™] Command[™] adhesive strip is provided for temporarily mounting and testing the sensor. This strip is designed for easy, damage-free removal and is not reusable.
 - · Permanent mounting: Mounting bracket, screws, and anchors are provided to mount sensor.
- The Flexible Mounting Armature, HW-BKT (purchased separately), allows sensors to be mounted at greater heights on a ceiling, wall, or other flat surface.
 - The ball-and-clamp design expands the coverage area for AirLink[™] standard wall-, corner-, or hall-mount sensors. See Figure C.
 - Common mounting areas: warehouse aisles, loading docks, long hallways.

Figure B

90° Corner-Mount Sensor (ALCR-W-OS/VS)







3M and Command are trademarks of 3M Company

Catalog #

08/12/16

LED HIGH EFFICIENCY, EXPANSIVE CAVITY RECESSED (ASC)



DIMENSIONS



LIGHT OUTPUT - ASC								
	SS -	Super S	aver	H0 ·	High Ou	ıtput	Wa	atts
Description	WW	NW	I CW	WW	NW	CW	SS	I HO
2 x 2	2875	2990	3515	3400	3520	4175	30	37
2 x 4	4630	5150	5575	5675	6265	6855	45	54
1 x 4	2890	2935	3455	3440	3490	4095	30	37

LED Chips are frequently updated therefore values may increase.

AirLink[™] ALOS AND ALVS COVERAGE PATTERN



PRODUCT HIGHLIGHTS

- Long life, high brightness LEDs virtually eliminate maintenance.
- RoHS compliant, recyclable "green" design contains no mercury or other hazardous materials.
- Cooler running electronic components allow for improved lumen performance.
- Specifically designed to spread uniform illumination throughout the room cavity from ceiling to floor.
- Available with AirLinkTM wireless controls for maximum energy savings.

EXPECTED LIFE - Projected life of at least 60,000 hours. Contact factory for TM-21 detail.

- **LEDs** Use of closely spaced medium-power, high brightness chips minimizes pixelation and provides uniform lens luminance. Available in Cool White (5000K), Neutral White (4000K) and Warm White (3500K) color temperatures. CRI >= 80. LM_80 reports available.
- **HOUSING** Formed code-guage steel housing, painted after fabrication. Integral NECcompliant earthquake clips are standard.
- **FINISH** All metal parts are painted after fabrication following treatment with phosphate rust inhibitor. Finish coating of housing reflecting surfaces is with high-reflectance (minimum 92%) matte white polyester powder. Matte white reflectors for soft indirect light distribution.
- **LENS** Specially designed frosted extruded acrylic lens with micro prisms for maximum source diffusion and soft, even illumination.
- **INSTALLATION** Unit simply lifts through grid ceiling and rests on T-bars. Wiring access/strain relief plate attaches with one screw, allowing connections to be made from below the ceiling.
- **ELECTRICAL** Universal voltage (120-277 Vac, 50/60 Hz input), Power factor > 0.9, THD < 20%, in-rush current < 15 Amps.
- **DRIVER** High-performance driver features over-voltage, under voltage, short-circuit and over temperature protection. Class A sound rating. 0-10 volt dimming (1% 100%) standard.
- AirLink[™] LSI AirLink[™] controls featuring Lutron Clear Connect makes each luminaire controllable, creating a wireless communication with other AirLink[™] control devices such as dimmers, switches, occupancy sensors and photocontrols. The integrated sensor is both a passive infrared motion detector and photocell. The photocell provides a simple out-of-the-box daylight harvesting solution. The motion detector uses exclusive Lutron XCT[™] technology which provides fine motion detection and 360° sensor field-of-range.

OPERATING TEMPERATURE - -40°C - +40°C (-40°F - +104°F)

WARRANTY - Limited 5-year warranty.

- PHOTOMETRICS Please visit our web site at <u>www.lsi-industries.com</u> for detailed photometric data.
- **LISTING** Listed to UL 1598 and UL 8750. Suitable For Damp Locations. IC Rated. For a list of the specific products in this series that are DLC listed, please consult the LED Lighting section of our website or the Design Lights website at www.designlights.org.

This product, or selected versions of this product, meet the standards listed below. Please consult factory for your specific requirements.





Catalog #____

LED HIGH EFFICIENCY, EXPANSIVE CAVITY RECESSED (ASC)

LUMINAIRE ORDERING INFORMATION

TYPICAL ORDER EXAMPLE: ASC24 LED HO NW UE ALOS EM

Prefix	Shield	Light Source	Output	Color Temperature	Line Voltage	Controls	Options
ASC14 - (1x4) ³ ASC22 - (2x2) ASC24 - (2x4)	(blank) - Acrylic	LED	SS -Super Saver HO - High Output	CW - Cool White (5000K) NW - Neutral White (4000K) WW - Warm White (3500K)	UE - Universal Voltage (120-277V) 347 - 347V ¹	Blank (none) ALC - AirLink [™] Controller ALOS - AirLink [™] Controller w/ Occupancy Sensor ALVS - AirLink [™] Controller w/ Vacancy Sensor	EM - Emergency Battery FC1 - 6' 3/8' (3) #18 Leads (For Use In Non-Dimming Applications) FC15D - 6' 3/8'' (5) #18 Leads (For Use In Dimming Applications) SD50 - Step Dimming to 50% L3D - Lutron Hi-lume 1% LDE1 - Lutron Hi-lume 1% (with Soft-On, Fade-to-Black) LDE5 - Lutron 5-Series

ACCESSORY ORDERING INFORMATION (Accessories are field in		
Description	Order Number	
Flange Kit - 1x4	FK14	
Flange Kit - 2x2	FK22	
Flange Kit - 2x4	FK24	

AIRLINK™ CONTROL A	CCESSORIES Order as	separate catalog number.	Visit http://www.lsi-airlink.com for complete listing	g of AirLink™ controls.	
Wireless switches	Catalog number	Part Number	Wireless Occupancy Sensors	Part Number	
On/Off & Raise Lower	ALWS 3B-(color)-KIT ²	624103CLR ²	Wireless 360° 400 ft ² , Ceiling Mount	624094	
			Wireless 180° 3000 ft ² , Wall Mount	632617	
Wireless Photocell controls	Catalog number	Part Number	Wireless 90° 2500 ft ² , Corner Mount	624096	
On/Off & Dimming	ALCM-W-PC	624090	Wireless, Hallway 150 ft Length	632620	
Commission Laser Kit (See Laser warnings)	AL-CLK	634574			

FOOTNOTES:

- 1 Not available with AirLink
- 2 Available colors are White, Ivory and Light Almond (WHT, IV, LA)
- 3 ASC14 not available with ALOS or ALVS

LASER Warnings:

Warning: Eye injury and/or blindness hazard; avoid direct eye exposure to laser beam.

- Use of laser pointer is NOT recommended for use with AirLink products located near reflective surfaces.
- Do NOT aim or shine laser pointers at any person, pet, vehicle, or aircraft directly, or through reflection by mirrors or other shiny surfaces.
- Do NOT view the laser beam through binoculars, magnifying glass, or other optical devices.

• Do NOT allow children to use laser pointers.

· Read and follow the laser pointer manufacturer's instructions on safe use. In the event of injury, get medical attention immediately.



LED LOW PROFILE RECESSED TROFFER (LPASC)



DIMENSIONS





LIGHT OU	TPUT	- LPAS	SC 0					
	SS -	Super S	aver	HO ·	- High Oı	ıtput	Wa	tts
	ww	NW	CW	WW	NW	CW	SS	HO
LPASC14 -(1X4)	3075	3295	3695	3580	3860	4330	29	35
LPASC22 -(2X2)	2810	3060	3430	3320	3620	4055	29	35
LPASC24 -(2X4)	3525	3790	4275	4320	4656	5185	36	46

LED Chips are frequently updated therefore values may increase.

AirLink™ ALOS AND ALVS COVERAGE PATTERN



PRODUCT HIGHLIGHTS

- Long life, high brightness LEDs virtually eliminate maintenance.
- RoHS compliant, recyclable "green" design contains no mercury or other hazardous materials.
- Cooler running electronic components allow for improved lumen performance.
- Direct/Indirect lighting delivers even illumination throughout the space.
- Available with AirLinkTM wireless controls for maximum energy savings.

EXPECTED LIFE - Projected life of at least 60,000 hours. Contact factory for TM-21 detail.

- LEDs Use of closely spaced medium-power, high brightness chips minimizes pixelation and provides uniform lens luminance. Available in Cool White (5000K), Neutral White (4000K) and Warm White (3500K) color temperatures. CRI >= 80. LM_80 reports available.
- HOUSING Formed code-guage steel housing, painted after fabrication. Integral NECcompliant earthquake clips are standard.
- FINISH All metal parts are painted after fabrication following treatment with phosphate rust inhibitor. Finish coating of housing reflecting surfaces is with high-reflectance (minimum 92%) matte white polyester powder. Matte white reflectors for soft indirect light distribution.
- LENS Frosted extruded acrylic lens with micro prisms for maximum diffusion. even illumination.
- **INSTALLATION** Unit simply lifts through grid ceiling and rests on T-bars. Wiring access/strain relief plate attaches with one screw, allowing connections to be made from below the ceiling.
- ELECTRICAL Universal voltage (120-277 Vac, 50/60 Hz input), Power factor > 0.9, THD < 20%, in-rush current < 15 Amps.
- DRIVER High-performance driver features over-voltage, under voltage, short-circuit and over temperature protection. Class A sound rating. 0-10 volt dimming (1% - 100%) standard.
- AirLink™ LSI AirLink™ controls featuring Lutron\ Clear Connect makes each luminaire controllable, creating a wireless communication with other AirLink™ control devices such as dimmers, switches, occupancy sensors and photocontrols. The integrated sensor is both a passive infrared motion detector and photocell. The photocell provides a simple outof-the-box daylight harvesting solution. The motion detector uses exclusive Lutron XCT[™] technology which provides fine motion detection and 360° sensor field-of-range.
- OPERATING TEMPERATURE -40°C +40°C (-40°F +104°F)
- WARRANTY Limited 5-year warranty.
- PHOTOMETRICS Please visit our web site at www.lsi-industries.com for detailed photometric data.
- LISTING Listed to UL 1598 and UL 8750. Suitable For Damp Locations. IC Rated. For a list of the specific products in this series that are DLC listed, please consult the LED Lighting section of our website or the Design Lights website at www.designlights.org.

This product, or selected versions of this product, meet the standards listed below. Please consult factory for your specific requirements.

ARRA









Project Name

Catalog #

」 Fixture Type

LED LOW PROFILE RECESSED TROFFER (LPASC)

LUMINAIRE ORDERING INFORMATION

TYPICAL ORDER EXAMPLE: LPASC24 LED HO NW UE ALOS EM

Prefix	Light Source	Output	Color Temperature	Line Voltage	Controls	Options
LPASC14 - (1x4) ¹ LPASC22 - (2x2) LPASC24 - (2x4)	LED	SS -Super Saver HO - High Output	CW - Cool White (5000K) NW - Neutral White (4000K) WW - Warm White (3500K)	UE - Universal Input Voltage (120-277V) 347 - 347V ²	Blank (none) ALC - AirLink [™] Controller ALOS - AirLink [™] Controller w/ Occupancy Sensor ALVS - AirLink [™] Controller w/ Vacancy Sensor	 EM - Emergency Battery FC1 - 6' 3/8" (3) #18 Leads (For Use In Non-Dimming Applications) FC15D - 6' 3/8" (5) #18 Leads (For Use In Dimming Applications) SD50 - Step Dimming to 50% L3D - Lutron Hi-lume 1% LDE1 - Lutron Hi-lume 1% (with Soft-On, Fade-to-Black) LDE5 - Lutron 5-Series

ACCESSORY ORDERING INFORMATION	(Accessories are field installed)
Description	Order Number
Flange Kit - 1x4	FK14
Flange Kit - 2x2	FK22
Flange Kit - 2x4	FK24

AIRLINK™ CONTROL A	ACCESSORIES Order as	separate catalog number.	Visit http://www.lsi-airlink.com for complete listing) of AirLink™ controls.	
Wireless switches	Catalog number	Part Number	Wireless Occupancy Sensors	Part Number	
On/Off & Raise Lower	ALWS 3B-(color)-KIT ³	624103CLR ³	Wireless 360° 400 ft ² , Ceiling Mount	624094	
			Wireless 180° 3000 ft ² , Wall Mount	632617	
Wireless Photocell controls	Catalog number	Part Number	Wireless 90° 2500 ft ² , Corner Mount	624096	
On/Off & Dimming	ALCM-W-PC	624090	Wireless, Hallway 150 ft Length	632620	
Commission Laser Kit (See Laser warnings)	AL-CLK	634574			

FOOTNOTES:

- 1 LPASC14 not available with ALOS or ALVS
- 2 Not available with AirLink
- 3 Available colors are White, Ivory and Light Almond (WHT, IV, LA)

LASER Warnings:

- Warning: Eye injury and/or blindness hazard; avoid direct eye exposure to laser beam.
- Use of laser pointer is NOT recommended for use with AirLink products located near reflective surfaces.
- Do NOT aim or shine laser pointers at any person, pet, vehicle, or aircraft directly, or through reflection by mirrors or other shiny surfaces.
- Do NOT view the laser beam through binoculars, magnifying glass, or other optical devices.
- Do NOT allow children to use laser pointers.
- Read and follow the laser pointer manufacturer's instructions on safe use. In the event of injury, get medical attention immediately.



LED LOW PROFILE RECESSED TROFFER (LPEC)



DIMENSIONS



LPEC22 LPEC24

LIGHT OUTPUT	- LPEC	;						
	SS - 3	Super S	aver	HO - High Output			Watts	
	ww	NW	CW	WW	NW	CW	SS	HO
LPEC14 -(1X4)	3050	3200	3650	4305	4520	5125	29	46
LP <u>EC22 -(2X2)</u>	2880	3025	3450	4040	4250	4870	29	46
LPEC24 -(2X4)	3530	3670	4195	4200	4485	5130	36	47
	VHO - Ve							
	ww	NW	CW	VHO				
LPEC24 -(2X4)	5915	6190	7080	60				

LED Chips are frequently updated therefore values may increase.

AirLink™ ALOS AND ALVS COVERAGE PATTERN



PRODUCT HIGHLIGHTS

- · Long life, high brightness LEDs virtually eliminate maintenance.
- RoHS compliant, recyclable "green" design contains no mercury or other hazardous materials.
- Cooler running electronic components allow for improved lumen performance.
- Direct/Indirect lighting delivers even illumination throughout the space.
- Available with AirLinkTM wireless controls for maximum energy savings.

EXPECTED LIFE - Projected life of at least 60,000 hours. Contact factory for TM-21 detail.

- **LEDs** Use of closely spaced medium-power, high brightness chips minimizes pixelation and provides uniform luminance. Available in Cool White (5000K), Neutral White (4000K) and Warm White (3500K) color temperatures. CRI >= 80. LM_80 reports available.
- **HOUSING** Formed code-guage steel housing, painted after fabrication. Integral NECcompliant earthquake clips are standard.
- **FINISH** All metal parts are painted after fabrication following treatment with phosphate rust inhibitor. Finish coating of housing reflecting surfaces is with high-reflectance (minimum 92%) matte white polyester powder.
- LENS High transmittance acrylic, full radius lens with minimum diode visiblity.
- **INSTALLATION** Unit simply lifts through grid ceiling and rests on T-bars. Wiring access/ strain relief plate attaches with one screw, allowing connections to be made from below the ceiling.
- **ELECTRICAL** Universal voltage (120-277 Vac, 50/60 Hz input), Power factor > 0.9, THD < 20%, in-rush current < 15 Amps.
- **DRIVER** High-performance driver features over-voltage, under voltage, short-circuit and over temperature protection. Class A sound rating. 0-10 volt dimming (1% 100%) standard.
- AirLink[™] LSI AirLink[™] controls featuring Lutron Clear Connect makes each luminaire controllable, creating a wireless communication with other AirLink[™] control devices such as dimmers, switches, occupancy sensors and photocontrols. The integrated sensor is both a passive infrared motion detector and photocell. The photocell provides a simple out-of-the-box daylight harvesting solution. The motion detector uses exclusive Lutron XCT[™] technology which provides fine motion detection and 360° sensor field-of-range.
- OPERATING TEMPERATURE -40°C +40°C (-40°F +104°F)
- WARRANTY Limited 5-year warranty.
- **PHOTOMETRICS** Please visit our web site at <u>www.lsi-industries.com</u> for detailed photometric data.
- **LISTING** Listed to UL 1598 and UL 8750. Suitable For Damp Locations. IC Rated. For a list of the specific products in this series that are DLC listed, please consult the LED Lighting section of our website or the Design Lights website at www.designlights.org.

This product, or selected versions of this product, meet the standards listed below. Please consult factory for your specific requirements.





Project Name Catalog #____ 」 Fixture Type _

Clear

Connect Wireless

LED LOW PROFILE RECESSED TROFFER (LPEC)

LUMINAIRE ORDERING INFORMATION

LPEC24 **ALOS** LED HO NW UE EM TYPICAL ORDER EXAMPLE:

Prefix	Light Source	Drive Current	Color Temperature	Line Voltage	Controls	Options
LPEC14 - (1x4) ¹ LPEC22 - (2x2) LPEC24 - (2x4)	LED	SS -Super Saver HO - High Output VHO - Very High Output ²	CW - Cool White (5000K) NW - Neutral White (4000K) WW - Warm White (3500K)	UE - Universal Voltage (120-277V) 347 - 347V ³	Blank (none) ALC - AirLink [™] Controller ALOS - AirLink [™] Controller w/ Occupancy Sensor ALVS - AirLink [™] Controller w/ Vacancy Sensor	EM - Emergency Battery FC1 - 6' 3/8" (3) #18 Leads (For Use In Non-Dimming Applications) FC15D - 6' 3/8" (5) #18 Leads (For Use In Dimming Applications) SD50 - Step Dimming to 50% L3D - Lutron Hi-lume 1% LDE1 - Lutron Hi-lume 1% (with Soft-On, Fade-to-Black) LDE5 - Lutron 5-Series

ACCESSORY ORDERING INFORMATION	(Accessories are field installed)
Description	Order Number
Flange Kit - 2x4	FK24
Flange Kit - 2x2	FK22
Flange Kit - 1x4	FK14

Wireless switches	Catalog number	Part Number	Wireless Occupancy Sensors	Part Number
On/Off & Raise Lower	ALWS 3B-(color)-KIT ⁴	624103CLR ⁴	Wireless 360° 400 ft ² , Ceiling Mount	624094
			Wireless 180° 3000 ft ² , Wall Mount	632617
Wireless Photocell controls	Catalog number	Part Number	Wireless 90° 2500 ft ² , Corner Mount	624096
On/Off & Dimming	ALCM-W-PC	624090	Wireless, Hallway 150 ft Length	632620
Commission Laser Kit	AL-CLK	634574		
(See Laser warnings)				

FOOTNOTES:

- 1 LPEC14 not available with ALOS or ALVS
- 2 VHO available in 2x4 only.
- 3 Not available with AirLink
- 4 Available colors are White, Ivory and Light Almond (WHT, IV, LA)

LASER Warnings:

- Warning: Eye injury and/or blindness hazard; avoid direct eye exposure to laser beam.
- Use of laser pointer is NOT recommended for use with AirLink products located near reflective surfaces. . Do NOT aim or shine laser pointers at any person, pet, vehicle, or aircraft directly, or through reflection by mirrors or other shiny surfaces.
- Do NOT view the laser beam through binoculars, magnifying glass, or other optical devices.
- · Do NOT allow children to use laser pointers.
- Read and follow the laser pointer manufacturer's instructions on safe use. In the event of injury, get medical attention immediately.



LED SIDE LIGHT RECESSED TROFFER (SLI)



DIMENSIONS



END VIEW

2 x 2 Length = 23-13/16"(605mm) 2 x 4 Length = 47-13/16"(1214mm)

LIGHT OUTPUT - SLI								
	SS -	Super S	aver	HO	- High Oı	ıtput	Wa	tts
	WW	NW	CW	WW	NW	CW	SS	HO
SLI22 (2X2)	2569	2408	2991	2973	3083	3517	29	36
SLI24 (2X4)	4004	4184	4797	5035	5269	6012	45	59

LED Chips are frequently updated therefore values may increase.

AirLink[™] ALOS AND ALVS COVERAGE PATTERN



PRODUCT HIGHLIGHTS

- · Long life, high brightness LEDs virtually eliminate maintenance.
- RoHS compliant, recyclable "green" design contains no mercury or other hazardous materials.
- Cooler running electronic components allow for improved lumen performance.
- Indirect unit with balanced illumination from sides of fixture and superior, low angle brightness control.
- Available with AirLinkTM wireless controls for maximum energy savings.

EXPECTED LIFE - Projected life of at least 60,000 hours. Contact factory for TM-21 detail.

- **LEDs** Use of closely spaced medium-power, high brightness chips minimizes pixelation and provides uniform luminance. Available in Cool White (5000K), Neutral White (4000K) and Warm White (3500K) color temperatures. CRI >= 80. LM_80 reports available.
- **HOUSING** Formed code-guage steel housing, painted after fabrication. Integral NECcompliant earthquake clips are standard.
- **FINISH** All metal parts are painted after fabrication following treatment with phosphate rust inhibitor. Finish coating of housing reflecting surfaces is with high-reflectance (minimum 92%) matte white polyester powder.
- **INSTALLATION** Unit simply lifts through grid ceiling and rests on T-bars. Wiring access/strain relief plate attaches with one screw, allowing connections to be made from below the ceiling.
- ELECTRICAL Universal voltage (120-277 Vac) Input 50/60 Hz. Power factor > 0.95, THD < 20%
- DRIVER High-performance isolated driver features over-voltage, under-voltage, short-circuit and over temperature protection. Class A sound rating. 0-10 volt dimming (1% - 100%) standard.
- AirLink[™] LSI AirLink[™] controls featuring Lutron[®] Clear Connect[™] makes each luminaire controllable, creating a wireless communication with other AirLink[™] control devices such as dimmers, switches, occupancy sensors and photocontrols. The integrated sensor is both a passive infrared motion detector and photocell. The photocell provides a simple out-of-the-box daylight harvesting solution. The motion detector uses exclusive Lutron XCT[™] technology which provides fine motion detection and 360° sensor field-of-range.
- OPERATING TEMPERATURE -40°C +40°C (-40°F +104°F)
- WARRANTY Limited 5-year warranty.
- **PHOTOMETRICS** Please visit our web site at <u>www.lsi-industries.com</u> for detailed photometric data.

LISTING - Listed to UL 1598 and UL 8750. Suitable For Damp Locations. IC Rated.

This product, or selected versions of this product, meet the standards listed below. Please consult factory for your specific requirements.

Clear Connect Wireless



Catalog #__

LED SIDE LIGHT RECESSED TROFFER (SLI)

LUMINAIRE ORDERING INFORMATION

TYPICAL ORDER EXAMPLE: SLI24 LED HO NW UE ALOS EM

Prefix	Light Source	Drive Current	Color Temperature	Line Voltage	Controls	Options (factory installed)
SLI22 - (2x2) SLI24 - (2x4)	LED	SS - Super Saver HO - High Output	CW - Cool White (5000K) NW - Neutral White (4000K) WW - Warm White (3500K)	UE - Universal Voltage (120-277V) 347-347V ¹	Blank (none) ALC - AirLink™ Controller ALOS - AirLink™ Controller w/ Occupancy Sensor ALVS - AirLink™ Controller w/ Vacancy Sensor	 EM - Emergency Battery FC1 - 6' 3/8" (3) #18 Leads (For Use In Non-Dimming Applications) FC15D - 6' 3/8" (5) #18 Leads (For Use In Dimming Applications) SD50 - Step Dimming to 50% L3D - Lutron Hi-lume 1% LDE1 - Lutron Hi-lume 1% (with Soft-On, Fade-to-Black) LDE5 - Lutron 5-Series

ACCESSORY ORDERING INFORMATION	(Accessories are field installed)
Description	Order Number
Flange Kit - 2x4	FK24
Flange Kit - 2x2	FK22
	Description Flange Kit - 2x4

Wireless switches	Catalog number	Part Number	Wireless Occupancy Sensors	Model number	Part Number
On/Off & Raise Lower	ALWS 3B-(color)-KIT ²	624103CLR ²	Wireless 360° 400 ft ² , Ceiling Mount	ALCM-W-OS	624094
			Wireless 180° 3000 ft ² , Wall Mount	ALWM-W-OS	632617
Wireless Photocell controls	Catalog number	Part Number	Wireless 90° 2500 ft ² , Corner Mount	ALCR-W-OS	624096
On/Off & Dimming	ALCM-W-PC	624090	Wireless, Hallway 150 ft Length	ALHW-W-OS	632620
Commission Laser Kit (See Laser warnings)	AL-CLK	634574			

FOOTNOTES:

1 - Not available with AirLink

2 - Available colors are White, Ivory and Light Almond (WHT, IV, LA)

LASER Warnings:

- Warning: Eye injury and/or blindness hazard; avoid direct eye exposure to laser beam.
- Use of laser pointer is NOT recommended for use with AirLink products located near reflective surfaces.
- Do NOT aim or shine laser pointers at any person, pet, vehicle, or aircraft directly, or through reflection by mirrors or other shiny surfaces.
- Do NOT view the laser beam through binoculars, magnifying glass, or other optical devices.
- Do NOT allow children to use laser pointers.
- · Read and follow the laser pointer manufacturer's instructions on safe use. In the event of injury, get medical attention immediately.



Catalog #_

ARCHITECTURAL LED TROFFER - TRIUMPH (TRI)



DOE LIGHTING FACTS

Department of Energy has verified representative product test data and results in accordance with its Lighting Facts Program. Visit www.lightingfacts.com for specific catalog strings.

	iHT OU	<u> 1907 - X</u>	ALM			
		3000K	Lumens 3500K	(Nominal) 4000K	5000K	Watts (Nominal)
ଟି	LW	2363	2432	2623	2883	28
TRI22 (2x2)	SS	2723	2801	3022	3321	34
III.	HO	3667	3773	4070	4473	43
2x4)	SS	3938	4052	4371	4804	44
TRI24 (2x4)	HO	4821	4960	5351	5881	55
TRI24 (2x4)	VHO	7630	7850	8468	9306	84

LED Chips are frequently updated therefore values may increase.

AirLink™ ALOS AND ALVS COVERAGE PATTERN

Ceiling 9ft (2.7m) Floor



US & Int'l. patents pending

PRODUCT HIGHLIGHTS

- Long Life, high brightness LED's virtually eliminate maintenance.
- · RoHS compliant, recyclable "green" design contains no mercury or other hazardous materials.
- Cooler running electronic components allow for improved lumen performance.
- Direct unit with balanced illumination and supperior, low angle brightness control.
- Available with AirLinkTM wireless controls for maximum engergy savings.

EXPECTED LIFE - Projected life of at least 60,000 hours. Contact factory for TM-21 detail.

- **LEDs** Use of closely spaced medium-power, high brightness chips minimizes pixelation and provides uniform lens luminance. Available in 5000K, 4000K, 3500K, and 3000K color temperatures. CRI >= 80
- HOUSING 20-guage cold rolled steel housing, painted after fabrication. Integral NECcompliant earthquake clips are standard.
- FINISH All metal parts are painted after fabrication following treatment with phosphate rust inhibitor. Finish coating of housing reflecting surfaces is with high-reflectance (minimum 92%) polyester powder.
- LENS High transmission opal lens eliminates bright spots from individual LED's and provides high vertical illumination and visual comfort. Made from impact-resistant .080" acrylic.
- **INSTALLATION** Unit simply lifts through grid ceiling and rests on T-bars. Wiring access/ strain relief plate attaches with one screw, allowing connections to be made from below the ceiling.
- ELECTRICAL Universal voltage (120-277 Vac) Input 50/60 Hz. Power factor > 0.95, THD < 20%
- DRIVER High-performance driver features over-voltage, under voltage, short-circuit and over temperature protection. Class A sound rating. 0-10 volt dimming (1% - 100%) standard.
- AirLink™ LSI AirLink™ controls featuring Lutron Clear Connect makes each luminaire controllable, creating a wireless communication with other AirLink™ control devices such as dimmers, switches, occupancy sensors and photocontrols. The integrated sensor is both a passive infrared motion detector and photocell. The photocell provides a simple outof-the-box daylight harvesting solution. The motion detector uses exclusive Lutron XCT[™] technology which provides fine motion detection and 360° sensor field-of-range.

OPERATING TEMPERATURE - -40°C to +40°C (-40°F to +104°F)

WARRANTY - LSI LED fixtures carry a limited 5-year warranty.

- PHOTOMETRICS Please visit our web site at www.lsi-industries.com for detailed photometric data.
- LISTING Listed to UL 1598 and UL 8750. Suitable For Damp Locations. IC Rated.

This product, or selected versions of this product, meet the standards listed below. Please consult factory for your specific requirements.

us







15ft

Catalog #

ARCHITECTURAL LED TROFFER - TRIUMPH (TRI)

LUMINAIRE ORDERING INFORMATION

TYPICAL ORDER EXAMPLE: TRI24 LED HO 30 UE ALOS EM

Prefix	Light Source	Output	Color Temperature	Input Voltage	Controls	Options
TRI22 - (2x2) TRI24 - (2x4)	LED	LW - Low Watt HO - High Output VHO - Very High Output	30 - 3000K 35 - 3500K 40 - 4000K 50 - 5000K	UE - Universal Voltage (120-277V) 347-480V ¹	Blank (none) ALC - AirLink™ Controller ALOS - AirLink™ Controller w/ Occupancy Sensor ALVS - AirLink™ Controller w/ Vacancy Sensor	EM - Emergency Battery FC1 - 6' 3/8" (3) #18 Leads (For Use In Non-Dimming Applications) FC15D - 6' 3/8" (5) #18 Leads (For Use In Dimming Applications) SD50 - Step Dimming to 50% L3D - Lutron Hi-lume 1% LDE1 - Lutron Hi-lume 1% (with Soft-On, Fade-to-Black) LDE5 - Lutron 5-Series

ACCESSORY ORDERING INFORMATION	(Accessories are field installed)
Description	Order Number
Flange Kit - 2x4	FK24
Flange Kit - 2x2	FK22

Wireless switches	Catalog number	Part Number	Wireless Occupancy Sensors	Part Number
On/Off & Raise Lower	ALWS 3B-(color)-KIT ²	624103CLR ²	Wireless 360° 400 ft ² , Ceiling Mount	624094
			Wireless 180° 3000 ft ² , Wall Mount	632617
Wireless Photocell controls	Catalog number	Part Number	Wireless 90° 2500 ft ² , Corner Mount	624096
On/Off & Dimming	ALCM-W-PC	624090	Wireless, Hallway 150 ft Length	632620
Commission Laser Kit	AL-CLK	634574		
(See Laser warnings)				

FOOTNOTES:

1 - Not available with AirLink

2 - Available colors are White, Ivory and Light Almond (WHT, IV, LA)

LASER Warnings:

Warning: Eye injury and/or blindness hazard; avoid direct eye exposure to laser beam.

• Use of laser pointer is NOT recommended for use with AirLink products located near reflective surfaces.

• Do NOT aim or shine laser pointers at any person, pet, vehicle, or aircraft directly, or through reflection by mirrors or other shiny surfaces.

• Do NOT view the laser beam through binoculars, magnifying glass, or other optical devices.

• Do NOT allow children to use laser pointers.

Read and follow the laser pointer manufacturer's instructions on safe use. In the event of injury, get medical attention immediately.

DIMENSIONS





47-7/8"





Catalog #_____

🔄 Fixture Type 🛯

LSI AirLink™ Wireless Controlled Lighting compatible with



Introducing New 2'x2' and 2'x4' Triumph[™] Architectural Troffers

- Multiple outputs from 2,300 9,300 lumens
- Up to 110 lumens per watt
- 3000K, 3500K, 4000K and 5000K CCT
- 0-10V Dimming driver standard (1% 100%)
- LSI AirLink[™] Controls available, featuring Lutron[®] Clear Connect[™] Wireless Technology and factory installed occupancy/daylight sensor

🍯 AírLink™

 High transmission opal lens eliminates bright spots; provides high vertical illumination and visual comfort



Lutron and the Clear Connect Wireless logo are trademarks of Lutron Electronics Co., Inc.



10000 Alliance Road Cincinnati, Ohio 45242 Phone 513.793.3200 Fax 513.793.0147

www.lsi-industries.com

RŏHS

LPEC LED Low Profile Recessed Troffer

Leading Specification Features



Marketing Positioning Statement

The LPEC's low profile design makes it ideal for shallow plenum applications. Available in 2'x2', 2'x4' and 1'x4' sizes, this LED direct/ indirect fixture delivers even illumination with excellent, low angle brightness control throughout the space. Utilizing a high transmittance acrylic full radius lens, the LPEC has minimum diode visibility. Cooler running electronic components allow for improved lumen performance with lumen outputs ranging from 2797 through 6871 total lumens and availability in cool white, neutral white or warm white color temperatures. Installation is quick and easy as the LPEC simply lifts through the grid ceiling, rests on T-bars and electrical connections are conveniently made from below the ceiling. LPEC, providing unmatched lighting performance in a low profile recessed LED troffer.



Proprietary	Thermal Management System	Leading Sele	ection of Light Output Options			
Thermal Management	Cooler running electronic components allow for improved lumen performance Designed to maximize surface area	Photometrics	LM79 & LM80 reports available Application assistance available on request			
	improving distribution and exchange of heat to surroundings	LEDs	Closely spaced medium-power, high brightness chips			
Outstanding	Uniformity & Visual Comfort		Minimizes pixilation and provides uniform lens luminance			
Even Illumination	Direct/Indirect lighting delivers even illumination throughout the space		Available in Cool White (5000K), Neutral White (4000K) or Warm White (3500K)			
	Excellent, low angle brightness control Unmatched lighting performance in a low profile recessed troffer	Color Rendering Index	CRI of 80 (CW > 70) facilitates recognition of specific colors of various objects to meet industry			
Lens	High transmittance acrylic, full radius lens		standards			
	Minimum diode visibility	Three Drive Currents	SS, HO and VHO available			
	Cleans easily	Currents	Expands available solutions for customer specific applications			
Lumen Output	Wide range of lumen outputs available by varying the drive currents and LED color temperature		SS is the most energy efficient, while HO and VHO can be utilized to drive for greater lumen outputs			
	Range of 2964 to 4974 lumens (nominal) for LPEC14 Range of 2797 to 4727 lumens (nominal) for LPEC22	Input Voltage	Universal voltage 120V thru 277V (50/60hz input): 347V also available			
	Range of 3430 to 6871 lumens (nominal) for LPEC24					
LIGHT OUTPU LPEC14 -(1X4) LPEC22 -(2X2) LPEC24 -(2X4)	H0 - High Output Watts WW NW CW WW NM CW SS - Super Saver H0 - High Output Watts WW NW CW WW NW CW SS H0 2964 3100 3539 4181 4388 4974 29 46 2797 2939 3346 3924 4127 4727 29 46 3430 3562 4071 4079 4353 4982 36 47 VHO - Very High Output Watts WH NW CW YHO 5742 6009 6871 60 4871 60					

LED Chips are frequently updated therefore values may increase.

Mounting and rests on T-barsUnit simply lifts through grid ceiling and rests on T-barsFeatures over-voltage, over-current and short-circuit (with auto recovery) protectionWiring access/strain relief plate attaches with one screwO-10V dimming driverAllows electrical connections to be made from below the ceilingFinishMeintenance- FreeOnce installed, LPEC is virtually maintenance freeFinishDrivers and key electronic components can easily be accessed from below the ceilingFinishEnvironmentolly With exceptional Telfability in a Recessed TrofferMinimum 60,000 hours depending upon ambient temperature of installation location Once installed, virtually maintenance freeProtectionDriver module is sealed to IP66 protection levelsEnvironmentolly With exceptional "green" technology, LPEC is RoHS compliant earthquake clips ar estandardVorrontyHousingFormed code-gauge steel housing maintenance benefits of LED in a low profile housingVorrontyAttroctive/ Cleon StylingPerformance, energy efficiency and maintenance benefits of LED in a low profile housingDec	Unparalleled	Speed & Ease of Installation	Driver	High-performance isolated driver				
Wiring access/strain relief plate attaches with one screwO-10V dimming driverAllows electrical connections to be made from below the ceilingFinishAll parts painted after fabrication following treatment with phosphate rust inhibitorMointenance- reeOnce installed, LPEC is virtually maintenance free Drivers and key electronic components can easily be accessed from below the ceilingFinishAll parts painted after fabrication following treatment with phosphate rust inhibitorExceptional Reliability in a Recessed TrofferMinimum 60,000 hours depending upon ambient temperature of installation location once installed, virtually maintenance freeEnvironmentollyWith exceptional "green" technology, LPEC is RoHS compliantProtection Driver module is sealed to IP66 protection levels Class A sound ratingHousingFormed code-gauge steel housing Painted after fabrication Integral NEC-compliant earthquake clips are standardWarrontyAttroctive/ Cleon StylingPerformance, energy efficiency and maintenance benefits of LED in a lowDic	Mounting			and short-circuit (with auto recovery)				
made from below the ceilingInitial action of the products list of th								
Freemaintenance free Drivers and key electronic components can easily be accessed from below the cellinghigh reflectance (minimum 92%) polyester powderEnvironmentallyRecessedLong-LifeMinimum 60,000 hours depending upon ambient temperature of installation locationEnvironmentallyWith exceptional "green" technology, LPEC is RoHS compliantDriver module is sealed to IP66 protection levelsHousingFormed code-gauge steel housing Painted after fabrication Integral NEC-compliant earthquake clips are standardWarrantyLimited 5-year warrantyAttractive/ Clean StylingPerformance, energy efficiency and maintenance benefits of LED in a lowPortection a lowDesign consultation low			Finish					
can easily be accessed from below the ceilingLong-LifeMinimum 60,000 hours depending upon ambient temperature of installation locationExceptional Reliability in a Recessed TrafferOnce installed, virtually maintenance freeEnvironmentally ResponsibleProtectionDriver module is sealed to IP66 protection levelsEnvironmentally LPEC is RoHS compliantClass A sound ratingDesign contains no mercury or other hazardous materials Greater than 80% recyclable by weightWarrantyHousingFormed code-gauge steel housing Painted after fabrication Integral NEC-compliant earthquake clips are standardWarrantyAttractive/ Clean StylingPerformance, energy efficiency and maintenance benefits of LED in a lowDuc		maintenance free		high reflectance (minimum 92%) polyester				
Exceptional Reliability in a Recessed Protection Driver module is sealed to IP66 protection levels Environmentally With exceptional "green" technology, Responsible Design contains no mercury or other hazardous materials Class A sound rating Design contains no mercury or other hazardous materials Design contains no mercury or other hazardous materials Listed to UL 1598 and UL 8750 Greater than 80% recyclable by weight Suitable for damp locations Housing Formed code-gauge steel housing IC rated Painted after fabrication Integral NEC-compliant earthquake clips are standard DLC Attractive/ Performance, energy efficiency and maintenance benefits of LED in a low Performance, nergy efficiency and maintenance benefits of LED in a low		can easily be accessed from below the	Long-Life					
TrafferProtectionDriver module is sealed to IP66 protection levelsEnvironmentally With exceptional "green" technology, LPEC is RoHS compliantClass A sound ratingDesign contains no mercury or other hazardous materialsWarrantyGreater than 80% recyclable by weightListed to UL 1598 and UL 8750 Suitable for damp locationsHousingFormed code-gauge steel housing Painted after fabrication Integral NEC-compliant earthquake clips are standardUCAttractive/ Clean StylingPerformance, energy efficiency and maintenance benefits of LED in a lowPotection				Once installed, virtually maintenance free				
Responsible LPEC is RoHS compliant Class A sound rating Design contains no mercury or other hazardous materials Warranty Limited 5-year warranty Greater than 80% recyclable by weight Listed to UL 1598 and UL 8750 Housing Formed code-gauge steel housing Suitable for damp locations Painted after fabrication Integral NEC-compliant earthquake clips are standard DLC Attractive/ Performance, energy efficiency and maintenance benefits of LED in a low Performance benefits of LED in a low		Reliadility in a Recessed	Protection					
Design contains no including of other hazardous materials Listed to UL 1598 and UL 8750 Greater than 80% recyclable by weight Suitable for damp locations Housing Formed code-gauge steel housing Painted after fabrication Ic rated Integral NEC-compliant earthquake clips are standard DLC Attractive/ Performance, energy efficiency and maintenance benefits of LED in a low				Class A sound rating				
Greater than 80% recyclable by weight Listing Listed to UL 1598 and UL 8750 Housing Formed code-gauge steel housing Suitable for damp locations Painted after fabrication IC rated Integral NEC-compliant earthquake clips are standard DLC Attractive/ Performance, energy efficiency and maintenance benefits of LED in a low		o j	Warranty	Limited 5-year warranty				
Housing Formed code-gauge steel housing IC rated Painted after fabrication Integral NEC-compliant earthquake clips are standard DLC Selected versions of this product are on the DLC Qualified Products List (QPL). Consult the LSI website or the DLC QPL website at www.designlights.org for specific products listed. Attractive/ Clean Styling Performance, energy efficiency and maintenance benefits of LED in a low na low			Listing	Listed to UL 1598 and UL 8750				
Painted after fabrication IC rated Integral NEC-compliant earthquake clips are standard DLC Attractive/ Clean Styling Performance, energy efficiency and maintenance benefits of LED in a low		Greater than 80% recyclable by weight		Suitable for damp locations				
Integral NEC-compliant earthquake clips are standardDLCSelected versions of this product are on the DLC Qualified Products List (QPL). Consult the LSI website or the DLC QPL website at www.designlights.org for specific products listed.Attractive/ Clean StylingPerformance, energy efficiency and 	Housing	Formed code-gauge steel housing		IC rated				
Attractive/ Clean StylingPerformance, energy efficiency and maintenance benefits of LED in a lowthe LSI website or the DLC QPL website at www.designlights.org for specific products listed.		Painted after fabrication	DLC	Selected versions of this product are on the				
Attractive/ Clean StylingPerformance, energy efficiency and maintenance benefits of LED in a lowproducts listed.		• • • •		DLC Qualified Products List (QPL). Const the LSI website or the DLC QPL website a				
		maintenance benefits of LED in a low						





LED Recessed Lighting



LED Recessed Lighting

DIRECT/INDIRECT									FRAMED LENS				
SERIES	LPASC	LPEC	LPRT	ASC	SLI	PEC-RAD	SHPEC	ELFP	GA	GA TSLR	Triumph	LEL	
DESCRIPTION	Low Profile Direct/Indirect Lighting	Direct/Indirect Lighting Low Profile for Shallow Plenum Applications	Lowest Profile Direct/Indirect Lighting Proprietary Low Profile Lens	Dual Lenses Soft Even Illumination from Ceiling to Floor Low Profile Lens	Indirect Side Lit Diodes Open Cavity No Lens	Direct/Indirect Lighting Balanced Illumination / Low Angle Brightness Control	Low Profile Telescoping Housing Allows Installation in Tightest Plenums Tri-Radius Lens Does Not Extend Below Ceiling Line	Edge-Lit Flat Panel Light	Low Profile Flat Prismatic P12 Lens Steel Door Frame	Low Profile High Diffusion Opal Acrylic Split Angled Lens Steel Door Frame	Specification Grade Recseed Troffer Deliver Even illumination and provides Maximun Visual, Comfort	Low Profile Deep Louver for Improved Cutoff	
SIZE	2 × 4, 2 × 2, 1 × 4	2 x 4, 2 x 2, 1 x 4	2 × 4, 2 × 2, 1 × 4	2 x 4, 2 x 2, 1 x 4	2 × 4, 2 × 2	2 × 4, 2 × 2, 1 × 4	2 × 4, 2 × 2	2 x 4, 2 x 2, 1 x 4	2 × 4, 2 × 2, 1 × 4	2 x 4, 2 x 2	2x4, 2x2	2 × 4,	
COLOR TEMPERATURE (Nominal)	Cool White (5000K) Neutral White (4000K) Warm White (3500K)	Cool White (5000K) Neutral White (4000K) Warm White (3500K)	Cool White (5000K) Neutral White (4000K) Warm White (3500K)	Cool White (5000K) Neutral White (4000K) Warm White (3500K)	Cool White (5000K) Neutral White (4000K) Warm White (3500K)	Cool White (5000K) Neutral White (4000K) Warm White (3500K)	Cool White (5000K) Neutral White (4000K) Warm White (3500K)	50 - (5000K) 40 - (4000K) 35 - (3500K)	Cool White (5000K) Neutral White (4000K) Warm White (3500K)	Cool White (5000K) Neutral White (4000K) Warm White (3500K)	50 - (5000K) 40 - (4000K) 35 - (3500K) 30 - (3000K)	Cool White (5000K) Neutral White (4000K) Warm White (3500K)	
LUMEN (Range)	2 x 4: 3525 - 5185 2 x 2: 2810 - 4055 1 x 4: 3075 -4330	2 x 4: 3530 - 7080 2 x 2: 2880 - 4870 1 x 4: 3050 - 5125	2 x 4: 3515 - 7110 2 x 2: 2820 - 5060 1 x 4: 2930 - 5110	2 x 4: 4630 - 6855 2 x 2: 2875 - 4175 1 x 4: 2890 - 4095	2 x 4: 4004 - 6012 2 x 2: 2408 - 3517	2 x 4: 4860 - 10925 2 x 2: 3490 - 5370 1 x 4: 2950 - 4175	2 x 4:3470 - 7030 2 x 2: 1390 - 4005	2 x 4: 4789 - 4924 2 x 2: 3604 - 3986 1 x 4: 3749 - 4110	2 x 4: 5160 - 9595 2 x 2: 3027 - 4825 1 x 4: 3215 - 5070	2 x 4: 4820 - 9940 2 x 2: 2805 - 5155	2 x 4: 4047 - 9299 2 x 2: 2483- 4650	2 x 4: 5050 - 7575	
LPW (Max)	2 × 4:118 2 × 2:118 1 × 4: 127	2 x 4:118 2 x 2:118 1 x 4: 125	2 x 4: 122 2 x 2: 124 1 x 4: 122	2 x 4: 126 2 x 2: 117 1 x 4: 115	2 x 4: 108 2 x 2: 102	2 x 4: 132 2 x 2: 119 1 x 4: 128	2 x 4: 117 2 x 2: 118	2 × 4: 109 2 × 2: 110 1 × 4: 1154	2 × 4: 114 2 × 2: 109 1 × 4: 115	2 x 4: 118 2 x 2: 122	2 × 4: 110 2 × 2: 110	2 x 4: 136	
INPUT WATTS (Range)	29-46	29-46	27-58	30-54	29-59	27 - 86	14-60	36 - 45	29-88	29-88	27 - 84	45-61	
CRI	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥80	≥85	
HOUSING DEPTH	2 1/2"	3 1/8"	2 1/4"	3 1/2"	3 3/8″	5 1/16″	2 1/8″	2 3/8″	3 1/4"	3 1/4"	<u>۲</u> "	Ц"	
DIMMING	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
CONTROLS	AirLink™ Enabled	AirLink™ Enabled	Consult Factory	AirLink™ Enabled	AirLink™ Enabled	Consult Factory AirLink [™] Enabled					AirLink™ Enabled	Consult Factory	
DLC					No	No	No				No	No	
WARRANTY	5 Years	5 Years	5 Years	5 Years	5 Years	5 Years	5 Years	5 Years	5 Years	5 Years	5 Years	5 Years	

For a list of the specific products in this series that are DLC listed, please consult the LED section of our website or the Design Lights website at www.designlights.org.



About AirLink[™] Controlled Lighting

LSI AirLink[™] is a new family of controlled LED luminaires featuring integrated Lutron[®] Clear Connect[™] Wireless Technology. Integrated motion and light level sensors ensure maximum energy savings, quality and comfort, while wireless controls enable occupants to easily operate individual or groups of fixtures. AirLink[™] boasts easy and fast installation, quick setup and can be used to meet stringent energy code requirements and support LEED certification. Please refer to the matrix to see which luminaires are AirLink[™] enabled.



About LSI Industries, Inc.

LSI is a leading manufacturer and supplier of IMAGE-enhancing interior & exterior LED Lighting Fixtures, Lighting Controls, Poles/Brackets and Graphics. LSI utilizes its advanced technological capabilities to develop and sell energy-efficient, innovative products across commercial, industrial, banking, petroleum, quick serve restaurant, and automotive segments, to name a few. Operations span the globe, with concentrations in North America, Latin America and Australia. LSI is traded on NASDAQ under LYTS and can be visited online at http://www.lsi-industries.com







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7 www.lsi-industries.com

Lutron and Clear Connect Wireless are trademarks of Lutron Electronics Co., Inc.



Automotive LED Interior Lighting



Automotive LED Interior Lighting

			SHOWR	OOM & OF	-ICE AREA				SERVICE BAY AREA				
SERIES	ASC	PEC	SLI	LPEC	XIRR	ELFP	AUL/AUM	LAD6	PMX	XLHB2	Triumph	EG3	
DESCRIPTION	Dual Lenses Soft Even Illumination from Ceiling to Floor Low Profile Lens	Direct/Indirect Lighting Balanced Illumination / Low Angle Brightness Control	Indirect Side lit Diodes Open Cavity No Lens	Direct/Indirect Lighting Low Profile for Shallow Plenum Applications	Round Recessed fixture for high mounting heights	Edge-Lit Flat Panel Light	High Bay Lighting with Symmetrical Distribution Shallow Acrylic Prismatic Refractor Multiple Mounting Options and Housing Finish Colors	Direct Lighting 6" Architectural Round Recessed Downlight Open Reflector, White Trim	Excellent High Bay Lighting Shallow Fixture Depth Rugged Fixture with Unique Hinged & Latched Door Frame (Optional)	Linear Design Delivers Efficient, Uniform, High Lumen Output for Most Applications Symmetric, Symmetric W/ Diffused Lens, or Aisle Lighter Distribution	Specification Grade Recseed Troffer Deliver Even illumination and provides Maximun Visual, Comfort	Enclosed & Gasketed Wet Location Vaportight	
SIZE (FEET)	2 × 4, 2 × 2, 1 × 4	2 × 4, 2 × 2, 1 × 4	2 × 4, 2 × 2	2 × 4, 2 × 2, 1 × 4	2×2	2 × 4, 2 × 2, 1 × 4	AUL - 22" Dia. Refractor AUM - 16" Dia. Refractor	6" round	15 11/16 × 48	14 × 47 5/8	2x4, 2x2	4 FT, 8FT	
HOUSING DEPTH (INCHES)	3 1/2	5 1/16	3 3/8	3 1/8	3.5	2 3/8″	AUL - 8 1/2 AUM - 6 7/8	7 1/2	4 3/4	4	4	4 1/2	
COLOR TEMPERATURE (Nominal)	Cool White (5000K) Neutral White (4000K) Warm White (3500K)	Cool White (5000K) Neutral White (4000K) Warm White (3500K)	Cool White (5000K) Neutral White (4000K) Warm White (3500K)	Cool White (5000K) Neutral White (4000K) Warm White (3500K)	Cool White (5000K) Neutral White (4000K) Warm White (3500K)	50 - (5000K) 40 - (4000K) 35 - (3500K)	AUL Cool White (5000K) Neutral White (4000K) Warm White (3500K) AUM 50 - (5000K) 40 - (4000K) 35 - (3500K) 30 - (3000K)	40 - (4000K) 35 - (3500K) 30 - (3000K)	Cool White (5000K) Neutral White (4000K) Warm White (3500K)	50 - (5000K) 40 - (4000K)	50 - (5000K) 40 - (4000K) 35 - (3500K) 30 - (3000K)	Cool White (5000K) Neutral White (4000K) Warm White (3500K)	
LUMEN (Range)	2 x 4: 4630 - 6855 2 x 2: 2875 - 4175 1 x 4: 2890 - 4095	2 x 4: 4860 - 10925 2 x 2: 3490 - 5370 1 x 4: 2950 - 4175	2 × 4: 4004 - 6012 2 × 2: 2408 - 3517	2 x 4: 3530 - 7080 2 x 2: 2880 - 4870 1 x 4: 3050 - 5125	13000 - 19000	2 × 4: 4789 - 4924 2 × 2: 3604 - 3986 1 × 4: 3749 - 4110	AUL - 15489 - 23923 AUM - 8170 - 15734	1321-4103	10335 - 16400	6256 - 42452	2 x 4: 4047 - 9299 2 x 2: 2483- 4650	4FT: 6390 - 7360 8FT: 12048 - 14720	
LPW (Max)	2 × 4: 126 2 × 2: 117 1 × 4: 115	2 x 4: 132 2 x 2: 119 1 x 4: 128	2 × 4: 108 2 × 2: 102	2 x 4: 118 2 x 2: 118 1 x 4: 125	131	2 x 4: 109 2 x 2: 110 1 x 4: 1154	AUL - 136 AUM - 146	97	147	124	2 × 4: 110 2 × 2: 110	4FT: 122 8FT: 122	
INPUT WATTS (Range)	30-54	29-86	29-59	29 - 46	14-60	36 - 45	AUL - 29 - 88 AUM - 74 - 108	14 - 45	86 - 111	68 -392	27 - 84	60-121	
CRI	≥80	≥80	≥80	≥80	≥80	≥80	AUL - ≥80 ; Cool White ≥ 70 AUM - ≥80	≥80	≥80	≥80	≥80	≥80	
DIMMING	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
CONTROLS	Airlink™ Equiped	Consult Factory	Airlink™ Equiped	Airlink™ Equiped	Consult Factory	Consult Factory	Consult Factory	Consult Factory	Platinum/Gold Mounted in Fixture Occupancy Sensor	Platinum/Gold Using Circuit or Zone Controllers Occupancy Sensor Integral Motion Sensor (IMS)	AirLink™ Enabled	Platinum/Gold Using Circuit or Zone Controllers	
DLC		No	No		No			No			No		
WARRANTY	5 Years	5 Years	5 Years	5 Years	5 Years	5 Years	5 Years	5 Years	5 Years	5 Years	5 Years	5 Years	

For a list of the specific products in this series that are DLC listed, please consult the LED section of our website or the Design Lights website at www.designlights.org.

About LSI Industries, Inc.

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LSI Graphic Solutions integrates lighting, graphics and technology to engage, guide and connect. Ask your LSI representative about custom architectural fixtures and fixtures with integrated signage & graphics.









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