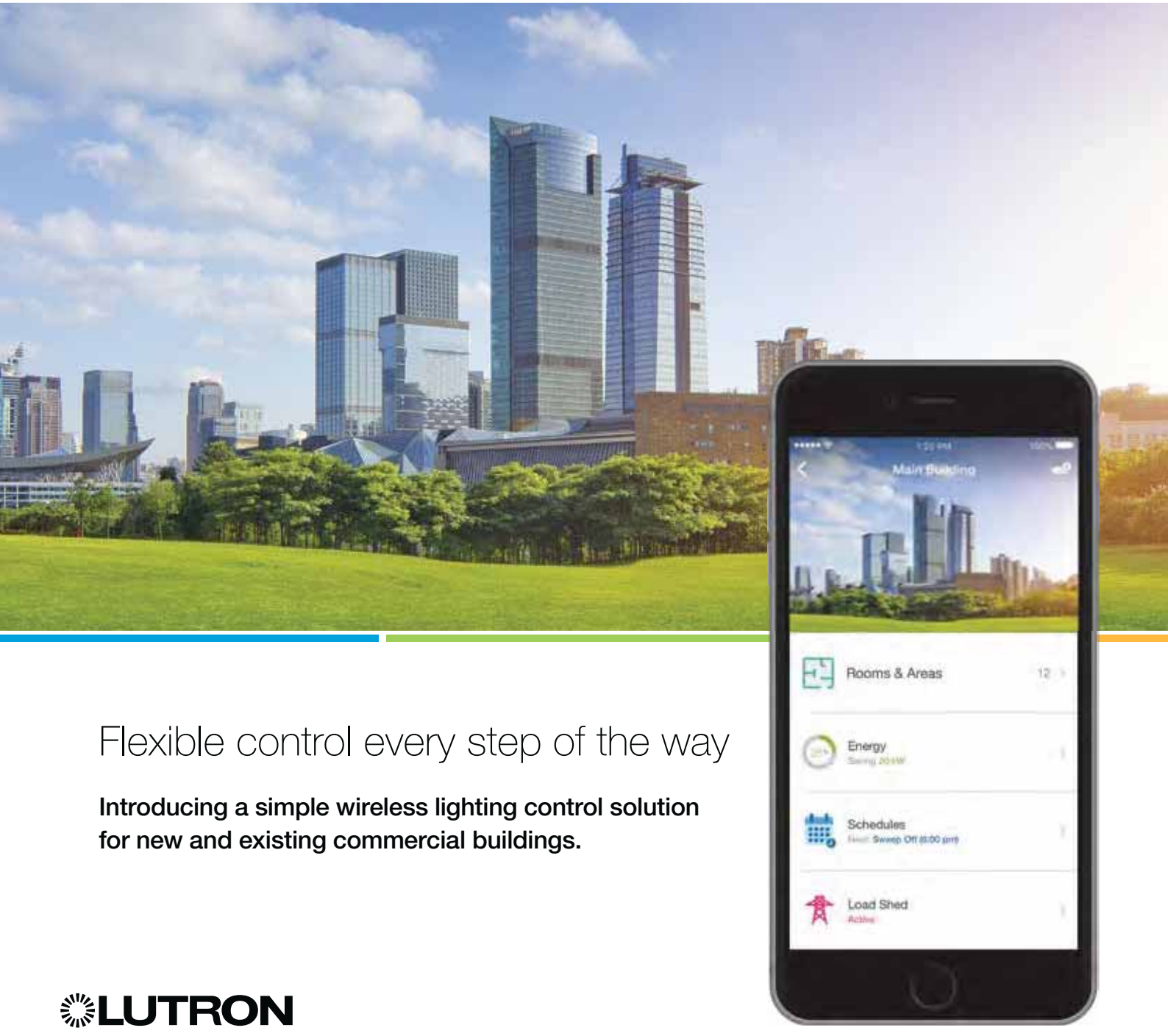
VIVE

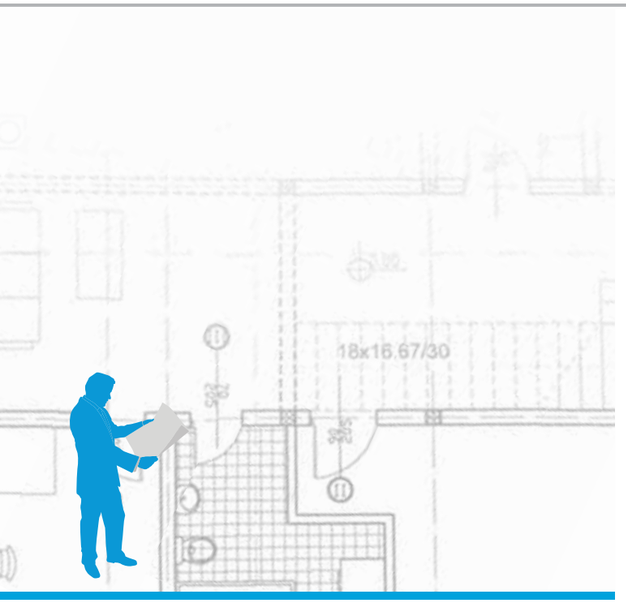
Simple, scalable, wireless
lighting control

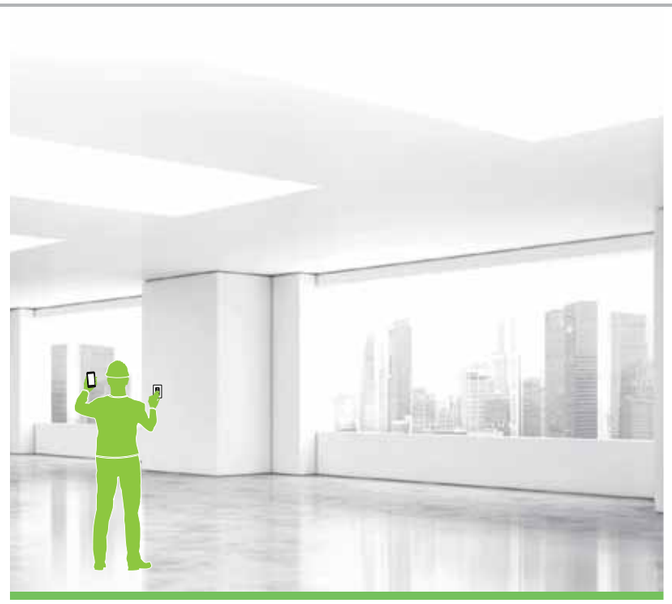


Flexible control every step of the way

Introducing a simple wireless lighting control solution for new and existing commercial buildings.

LUTRON





DESIGN

The flexibility you need to design your building

Build your system from a full suite of products — specify a simple occupancy sensor solution, or design a fully integrated lighting management system using the same suite of products

Easily match controls to the fixture package — switching, DALI, 0–10V, or any combination

Expand the system at any time — add control options, add new areas, easily upgrade software to add new features

INSTALL

Wireless simplifies installation and reduces callbacks

Less wiring makes installation faster — reduce labour time by up to 70%[1]

Setup is as simple as pushing a button or using your smart device — no manufacturer commissioning required, further reducing time and labour cost (the Lutron services team is always available if you want some additional support)

Start small and expand at any time — with no new wiring — meet budget requirements and changing space needs

Eliminate callbacks — Lutron's proven reliability helps you stay within budget and reduces your time on the job

For a list of sources please visit lutron.com/references.

MAINTAIN

Maximise productivity and building performance

Monitor, adjust, and manage your system from any smart device — easily adjust the lighting control to accommodate building churn, improve occupant comfort, and enhance energy efficiency

Energy savings — lighting uses more electricity than any other building system. Lutron solutions can save up to 60%[2] or more of that lighting energy

Minimise down time — wireless controls install quickly to minimise disruption to building occupants

Expand capability — add new controls or upgrade software at any time without replacing the existing system

Simpify integration — using BACnet protocol, connect with other building systems at the time of initial installation or whenever you expand the system

For a list of sources please visit lutron.com/references.

Vive wireless hub

Vive software

The Vive wireless family gives you the right solution now and for years to come

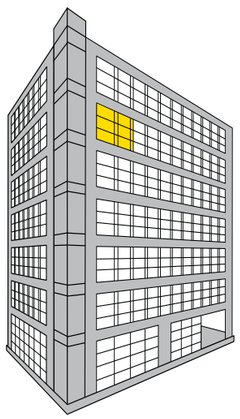
- Any budget
- Area, fixture and sensor controls
- Meet latest building regulations and standards
- No factory setup required

When you choose Lutron solutions, you can be confident that the system just works, and it will keep working.

Scalable solutions — start small and grow

Vive wireless solutions offer a multi-strategy approach that accommodates your budget and performance needs now, and for the future of your building.

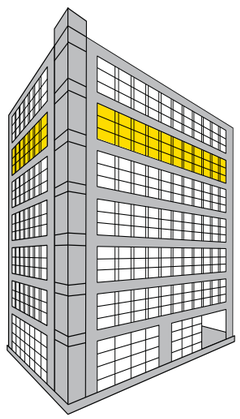
1



Single office space

Start by adding control in a single space and expand as budgets and occupant schedules allow.

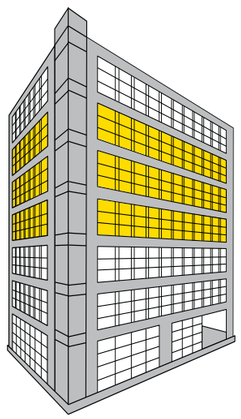
2



Single floor

Expand to new areas or an entire floor at any time without reprogramming or replacing existing equipment. By connecting to a Vive wireless hub.

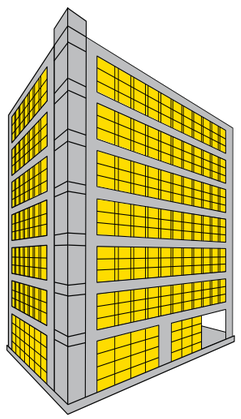
3



Multiple floors

Duplicate the success of one floor across other floors as your business expands or tenants change. Control can be independent on each floor, or linked via Vive wireless hubs.

4



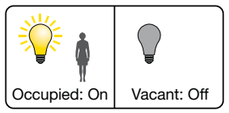
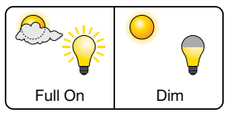
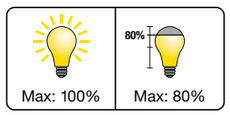
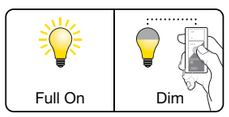
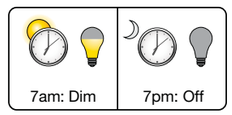
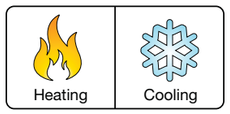
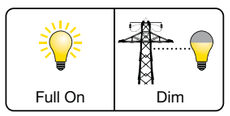
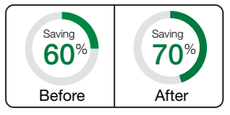
Entire building

Vive offers seamless integration to other building management systems through BACnet.

Energy-saving control strategies

Combine lighting control strategies to maximise efficiency

What is the savings opportunity?
Lutron solutions can save 60%[3] or more lighting energy.

		Potential savings
	**Occupancy/vacancy sensing** turns lights on when occupants are in a space and off when they vacate the space.	20–60% Lighting
	**Daylight harvesting** dims electric lights when daylight is available to light the space.	25–60% Lighting
	**High-end trim** sets the maximum light level based on customer requirements in each space.	10–30% Lighting
	**Personal dimming control** gives occupants the ability to adjust the light level.	10–20% Lighting
	**Scheduling** provides pre-programmed changes in light levels based on time of day.	10–20% Lighting
	**HVAC integration** controls heating, ventilation, and air conditioning systems through contact closure, or BACnet protocol.	5–15% HVAC
	**Load shedding** automatically reduces lighting loads during peak electricity usage times.	30–50% Peak Period
	**System Optimisation Service** from Lutron identifies important lighting control adjustments to save additional energy and create a more productive work environment on an ongoing basis.	Variable

For a list of sources please visit lutron.com/references.

Transform existing buildings with wireless lighting controls

Wireless controls and sensors

Remotes

Occupancy and daylight sensors

Lighting control modules

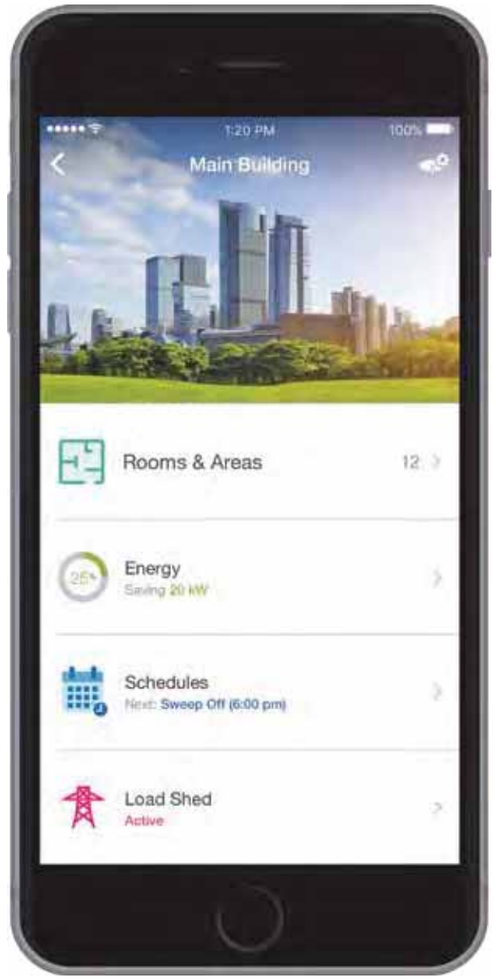
Centralised control and integration

Vive wireless hub

Load Shedding

BACnet integration

Simple-to-use software



Vive software

Communication protocols

Communicate via RF to control components

Communicate via WiFi to smart devices

Communicate via wired Ethernet to Vive hub

The right control in the right space

The Vive product family lets you personalise control to each space in your building without locking you into more or less control than you need

Simple switching

Classroom
Occupancy sensors control all lights together by switching lights on and off in response to room occupancy.

Remote | PowPak | Occupancy sensor

Simple switching

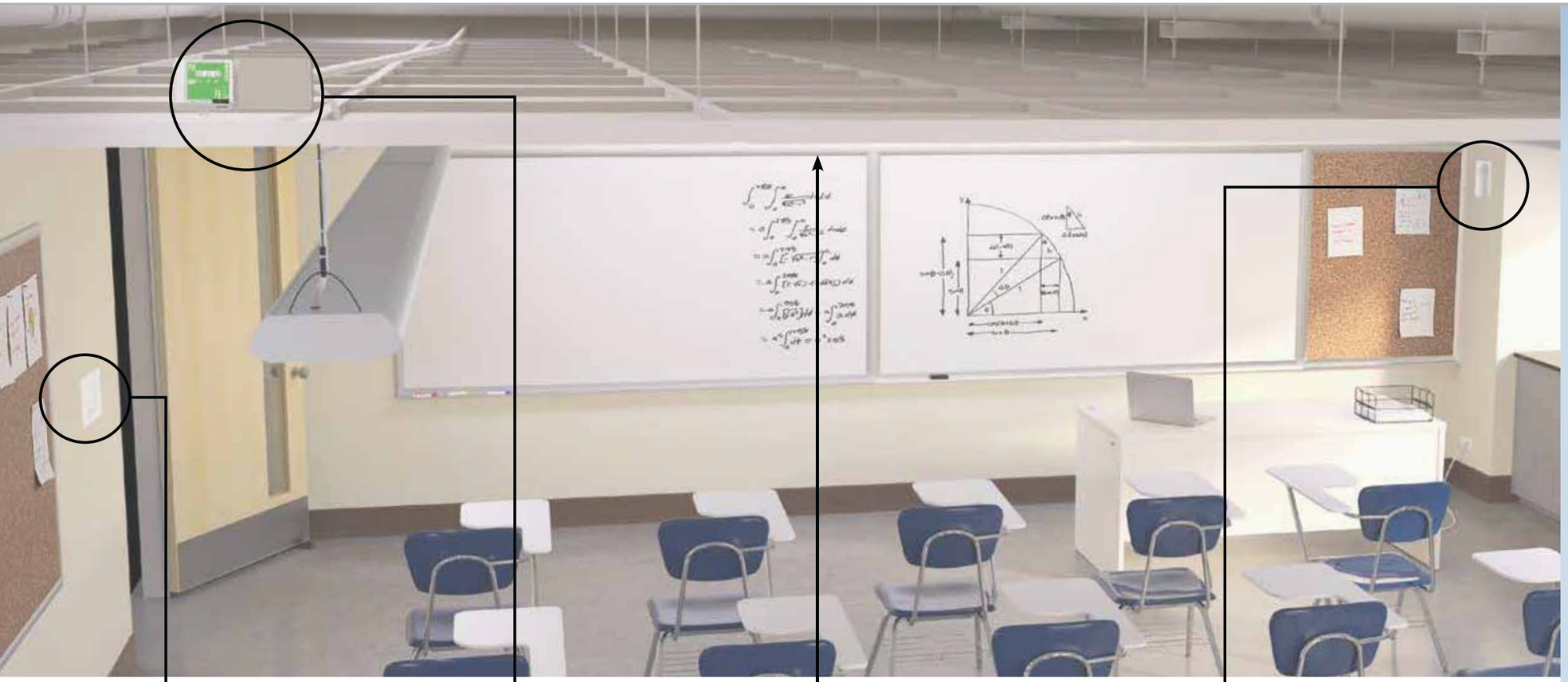
Area dimming and sensing

Open office
Dim a group of lights together while also providing manual control. Save additional energy with daylight harvesting.

Dimming module | Occupancy sensor | Daylight sensor | Pico remote

Area dimming and sensing

Flexible installation



Wireless Remote
Mount anywhere

No wires —
Put it where it is most accessible

Wireless Load Control
Junction box or marshalling box

Easy Retrofit —
PowPak modules mount on a standard junction box or marshalling box in the ceiling to control a group of lights

Wireless Daylight Sensor
Ceiling mount

No wires —
10 year battery life

Wireless Occupancy Sensor
Corner/Ceiling/wall mount

No wires —
Easily mount it anywhere

Vive Wireless Hub

- Add a Vive Hub to any job for simple set-up, control and monitoring
- Each hub wirelessly communicates with devices in a 929 m^2 (10,000 sq. ft.) area

Simple setup and programming options with the Vive wireless hub

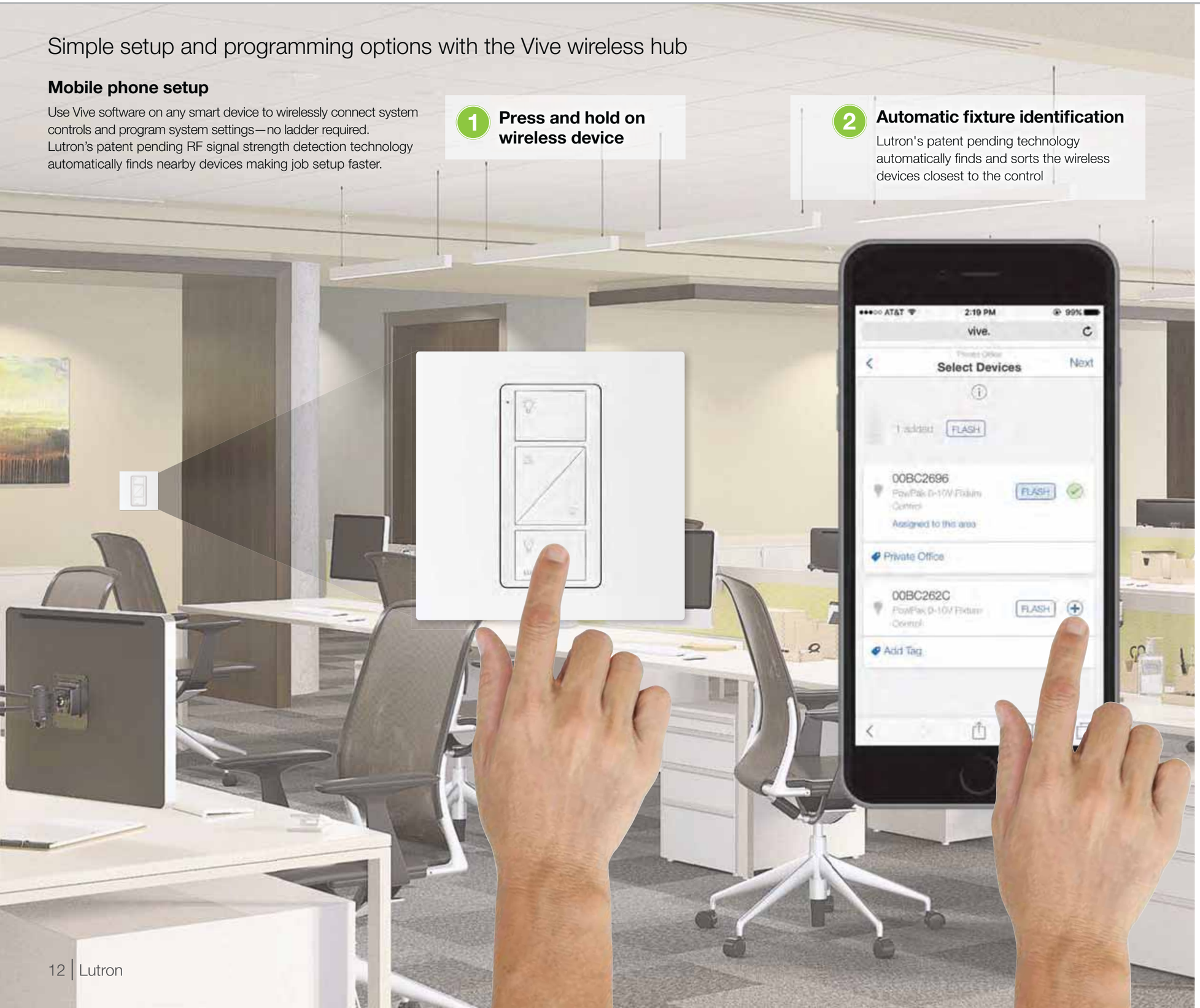
Mobile phone setup

Use Vive software on any smart device to wirelessly connect system controls and program system settings—no ladder required. Lutron's patent pending RF signal strength detection technology automatically finds nearby devices making job setup faster.

1 Press and hold on wireless device

2 Automatic fixture identification

Lutron's patent pending technology automatically finds and sorts the wireless devices closest to the control



For systems without a Vive wireless hub

Push button set up

Use simple button-press programming to select and associate wireless devices—it is as easy as setting a station on your car radio.

PowPak

Press and hold for 6 seconds

Occupancy sensor

Press and hold for 6 seconds

It works! Sensor now talks to the wireless dimmer

Save energy and improve building performance

Energy Reporting

Quickly view and display instantaneous power information to drive decision making and demonstrate savings.

Schedules

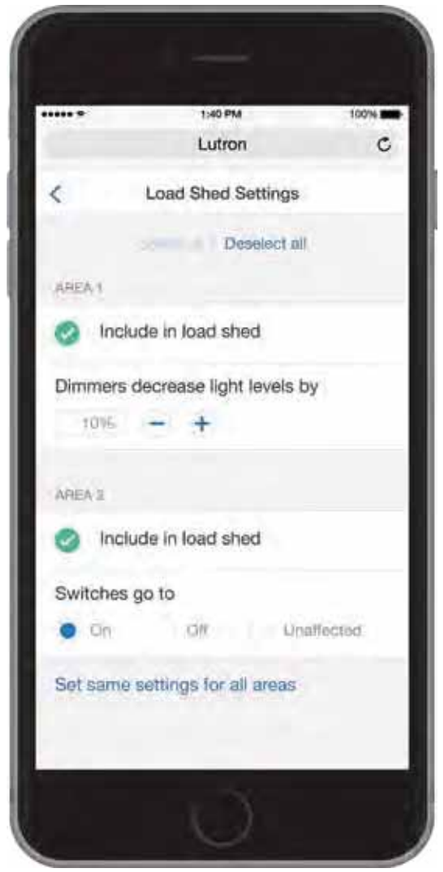
Use a weekly calendar to automatically adjust lights based on time of day.

Light Control

Directly adjust the light levels.

Load Shed

Easily set lighting reduction levels that automatically respond during peak electricity usage times.



Seamlessly integrate with your building system

The BACnet/IP protocol is the primary means of integration. BACnet is embedded or native in the Vive wireless hub, which means no external interfaces or gateways are required in order to communicate with other systems.

ASHRAE BACnet™

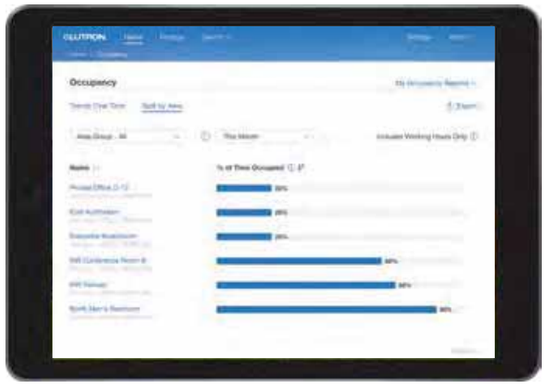
- **Building/Energy Management Systems (BMS/EMS)**
- **Energy Dashboards and Analytics Packages**
- **HVAC**
- **Audio & Video**
- **IT**

Vive Vue software

Vive Vue software provides the ability to link multiple Vive hubs together in one software interface. Built with the simple, scalable, wireless building blocks of the Vive Wireless system, Vive Vue software delivers the advanced intelligence necessary for today's smart buildings and the IoT. A smart building is now easier than ever to achieve.

Intuitive control

View status, control lights, and optimise your building quickly and efficiently with a graphical floorplan.



Optimise your space

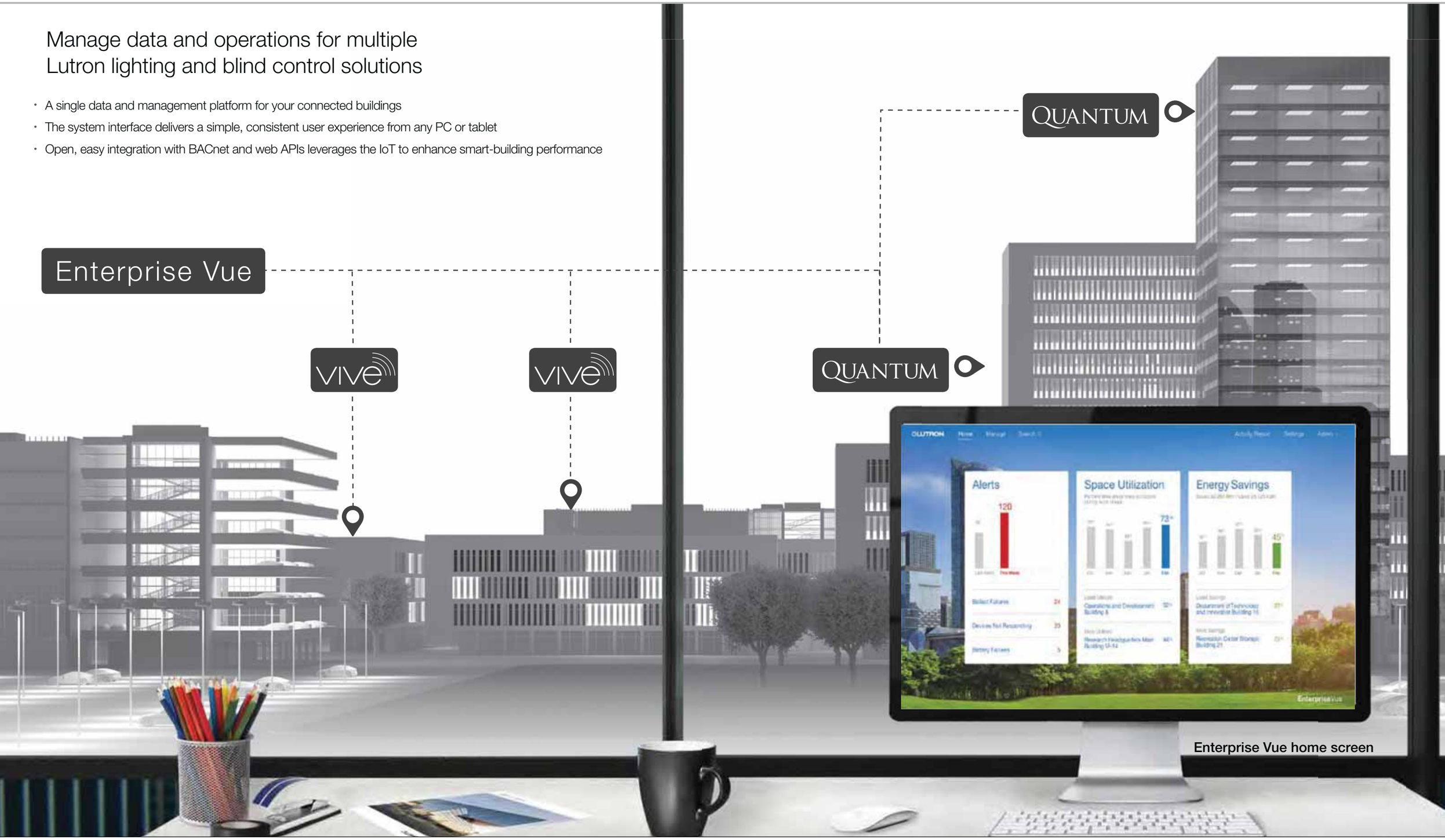
Improve building layout based on actual occupancy and usage information. With space utilisation reports, you can quickly identify over-used and under-used spaces to improve building efficiency without expanding the building footprint.

Save energy purposefully

Energy reports allow you to view and monitor your energy savings. With trending energy information over time, and easily customisable reports, Vive Vue software helps you demonstrate the energy-saving advantages of wireless lighting control.

Manage data and operations for multiple Lutron lighting and blind control solutions

- A single data and management platform for your connected buildings
- The system interface delivers a simple, consistent user experience from any PC or tablet
- Open, easy integration with BACnet and web APIs leverages the IoT to enhance smart-building performance



Enterprise Vue home screen

Lutron security

We build security into the product and the process from conception to installation, and through the lifetime of the system.

Everything we do is backed by Lutron's first, and guiding, principle — Take Care of the Customer with Superior Goods and Services. Every product, every system, and every solution is designed, manufactured and tested to work as expected.

Security by Design

When building any new system, Lutron utilises a dedicated security team to ensure best practices are implemented. Security is built-in. It is not an afterthought or add on.

Examples of security features designed into Vive include:

1. Isolated wired and wireless architecture which strictly limits the possibility of the Vive Wi-Fi or Clear Connect being used to access the corporate network to gain confidential information
2. A distributed security architecture — each hub has its own unique keys
3. Best practices for securing passwords, including salting and use of SCrypt recommended by the International Standards Organization (ISO)
4. AES 128-bit encryption for network communications
5. HTTPS (TLS 1.2) protocol for securing connections to the hub over the wired network
6. WPA2 technology for securing connections to the hub over the Wi-Fi network

3rd-Party Validation

Security is complicated. Lutron has a dedicated team of internal experts, but we also leverage external experts to double- and triple-check our work.

1. Multiple external experts engaged during design process
2. 3rd-Party penetration testing to identify and fix potential vulnerabilities before they reach the field

Continuous Monitoring and Improvements

Security is a constantly moving target. Lutron uses a dedicated security team to continuously monitor the market for potential threats and, when needed, send out security patches to update installed systems.

Ongoing Support

Lutron has the resources you need to answer questions about security when they arise.

1. IT deployment guides
2. Guidance from our world class 24/7 technical support organisation with IT expertise throughout the product lifecycle

Lutron reliability

Clear **Connect** wireless technology

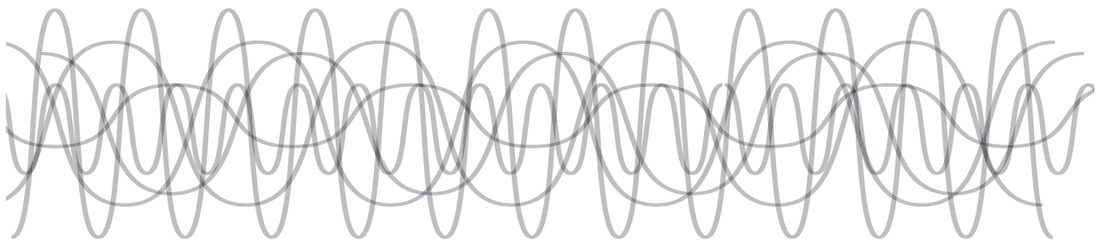
All Lutron wireless products utilise Lutron patented Clear Connect wireless technology which operates in an uncongested radio frequency band. The result is ultra-reliable communication and smooth dimming performance with no flicker or delay. Other devices will not interfere with the Lutron lighting control system.

Clear **Connect**

868 MHz: Lutron Clear Connect wireless technology

Lutron devices operate in an uncongested frequency band, providing ultra-reliable operation.

"Other" frequency bands



2.4 GHz: Cordless phones | Bluetooth devices | Wireless security cameras

Other devices operate in congested frequency bands, creating a high potential for wireless interference.

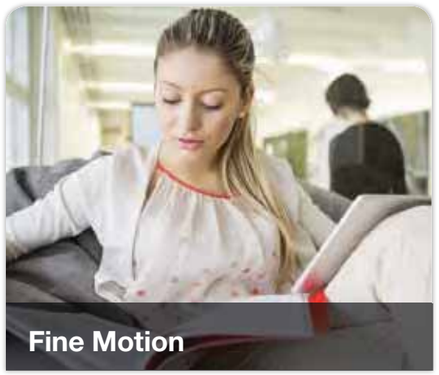
XCT sensing technology

Lutron's occupancy sensing will not leave occupants in the dark and eliminates callbacks

- Lutron sensors provide exceptional prevention of false-ons and false-offs
- Superior sensitivity — recognises the difference between fine human motion and background noise

Person walking 1 metre (3 feet)

Movements like extending our arms



Small movements like
flipping pages of a book

Lights stay off when room is unoccupied

Setup the system yourself, or choose the right mix of support services.

Lutron offers a variety of flexible, scalable support options to meet the needs of your project and your budget.

Vive is designed to make installation and setup easy. Instructions are included with the product, and comprehensive, online help is available 24/7.

Simple-to-follow videos and product guides are just a click away.

If you're looking for some extra peace of mind, Lutron Services can be purchased in flexible blocks of time to provide just the right amount of support.

The Services Team can provide training, walk you through setup for a specific project area, answer any other questions you have, or help finish setup by closing punch-list items.

If you prefer, the Lutron Services Team can execute the full system setup.

Onsite setup — a Lutron-certified service technician will perform the complete system setup at your project site.

If you are not sure what kind of support you need, Lutron can help.

Contact your local Lutron sales representative to discuss your project, or Lutron Customer Assistance
tel: +44 (0)20 7680 4481 | eatechnicalsupport@lutron.com | lutron.com/help (24/7 Technical Support)

Access to tools and resources at your fingertips.

Exclusive access and quick answers keep your project moving.

Designer+ for Vive

Lutron Designer+ for Vive is an intuitive, easy-to-use software tool that allows you to design a Lutron Vive lighting control system with visual “drag and drop” layout and connections. It also allows you to generate comprehensive system design documentation, including bills of materials, one-line diagrams, and sequence of operations. For **free** access please contact **myLutronsupport@lutron.com.**

Vive videos

Get access to Lutron Vive videos 24/7. Step-by-step setup, installation, and programming help whenever you need it.
YouTube — Lutron Vive Wireless

Vive training

Visit **Lutron.com/LCIOnline —** Sign up for free, online training modules with practice exercises that walk you through the Vive system.

Create flexible designs

Use these simple documents to specify and design Vive wireless systems for common applications.

Application guide for typical installations

Simple room based graphical layouts demonstrate how to apply Vive components to different spaces in your building

Available online at **lutron.com/vive-europe**

Vive wireless specification typicals

Specifying wireless lighting control reduces design time and allows flexibility for changes during the project without the need to redesign. Vive Wireless Specification Typicals allow for quick and easy design of many applications. Simply copy and paste the typicals into drawing packages for complete design, layout, and BOM information.

Available online at **lutron.com/vive-europe**

For a list of sources please visit lutron.com/references.

Vive wireless hub

Dimensions

W: 165 mm (6.5")
H: 38 mm (1.5")
D: 71 mm (2.8")

Vive hub power supply

Dimensions

W: 102 mm (4.0")
H: 43 mm (1.7")
D: 71 mm (2.8")

Features and benefits

- Communicates with controls on a floor using Lutron wireless Clear Connect technology (range radius of 22 m [71 ft])
- Distributed system architecture
  - Pico remote controls and sensors communicate directly with the load devices they control and must be located within 9 m (30 ft) of the device with which they are associated
- Supports timeclock events based on both sunrise and sunset or fixed time-of-day
- Integrated multi-colour LED provides feedback on what mode the hub is in
- Two contact closure Inputs for integration with devices by others
- Each hub provides an individual dashboard for its coverage area and allows you to link to other hub dashboards from the mobile application

Product options

Vive wireless hub models

Starter (up to 75 devices)

HKS-0-FM	Flush mount

Standard (up to 700 devices)

HKS-1-FM	Flush mount
HKS-1-SM	Surface mount

Premium with BACnet (up to 700 devices)

HKS-2-FM	Flush mount
HKS-2-SM	Surface mount

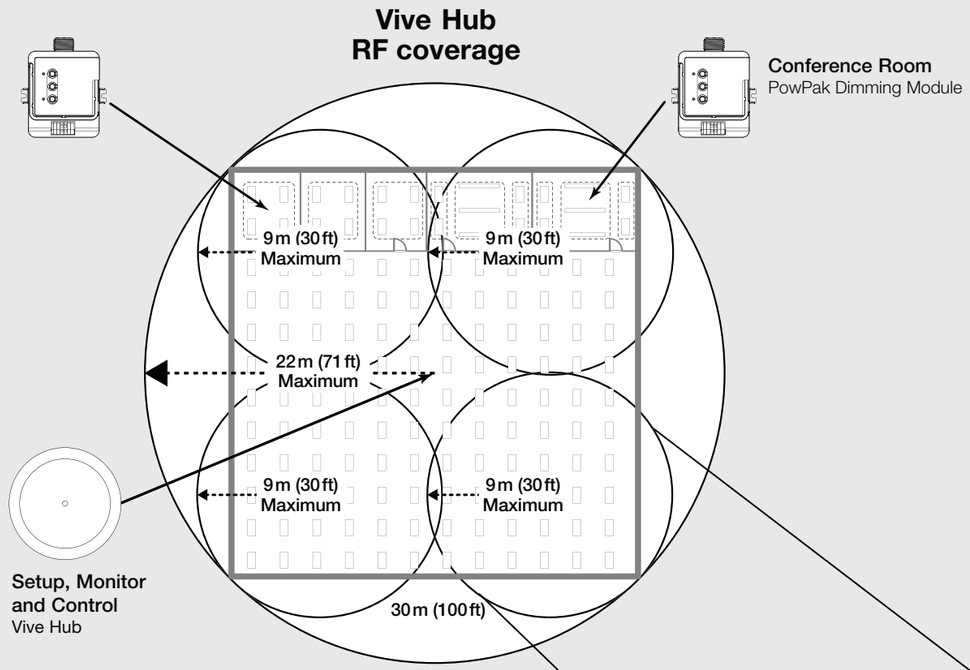
Note: A minimum distance of 3 m (10 ft) between Vive wireless hubs on the same floor is required.

Note: A corporate Wi-Fi network can interfere with the Wi-Fi on the Vive wireless hub. Where a corporate Wi-Fi network exists, it is recommended to do one of the following: 1) Connect to the Vive wireless hub and change the Wi-Fi channel to one that is not used by the corporate network or 2) Connect the Vive wireless hub to the corporate network using the Ethernet connection on the hub, and disable the hub's Wi-Fi.

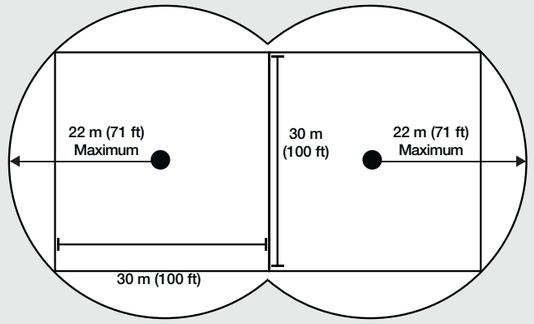
Note: Vive wireless hub must be mounted a minimum of 3 m (10 ft) from a Wi-Fi router or access point.

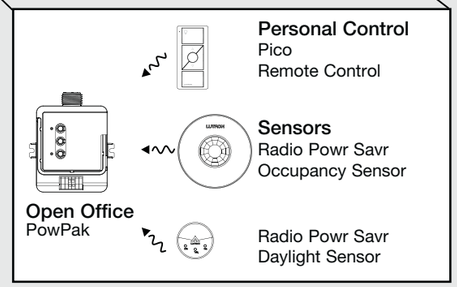
How it works

All wireless devices to be associated to the Vive wireless hub must be within 22 m (71 ft) of the Vive wireless hub and must be on the same floor as the Vive wireless hub.



Range with multiple Vive hubs





Note: Pico remote controls and sensors must be within 9 m (30 ft) of the load device they are controlling

PowPak relay module

Dimensions

W: 72 mm (2.89")
H: 87 mm (3.44")
D: 32 mm (1.25")

How to design and specify

- **One relay module**
  For each controlled lighting zone in the space
- **Control**
  Select appropriate model based on the size of the connected load

  16 A: 3840 W or 6 A Motor

  5 A: 1200 W
- **Contact closure output**
  For sending occupancy information to third-party equipment such as HVAC systems
- **Input** 220/240 V

Product options

16 A models

RMKS-16R-DV-B

5 A models

RMKS-5R-DV-B

PowPak dimming module with 0–10 V control

Dimensions

W: 72 mm (2.89")
H: 87 mm (3.44")
D: 32 mm (1.25")

How to design and specify

- **One dimming module with 0–10 V control**
  For each controlled 0–10 V lighting zone in the space
- **Control**

  8 A: 0–10 V controlled fixtures and switches compatible with third-party 0–10 V fluorescent ballasts, LED drivers, and fixtures

  220–240 V 8 AX switching and 60 mA of 0–10 V LED
- **Input** 220–240 V
- **0–10 V Link**
  Communicates with up to 60 mA of fixtures

Product options

8 A models with 0–10 V control

RMKS-8T-DV-B

PowPak dimming module with DALI control

Dimensions

W: 72 mm (2.89")
H: 87 mm (3.44")
D: 32 mm (1.25")

How to design and specify

- **One control module with DALI**
  For each controlled DALI lighting zone in the space
- **Control**
  Select appropriate model based on the number of connected drivers/ballasts
- **Input** 220–240 V 50/60 Hz
- **DALI Link**
  Guaranteed Supply Current: 8 mA (4-driver/ballast model)
  64 mA (32-driver/ballast model)
  Maximum Supply Current: 250 mA
  DALI-2 Certified

Product options

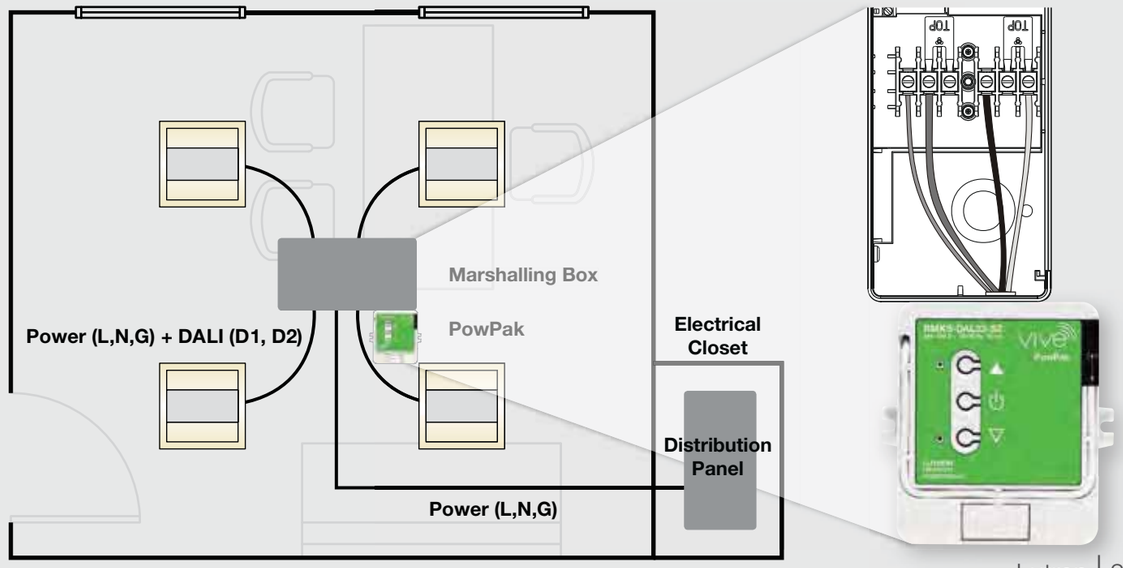
4-driver/ballast model

RMKS-DAL4-SZ

32-driver/ballast model

RMKS-DAL32-SZ

Using PowPak load controllers, switches, and dimmers with marshalling boxes



PowPak contact closure output module

Dimensions

W: 72 mm (2.89")
H: 87 mm (3.44")
D: 32 mm (1.25")

How to design and specify

- **One contact closure output module**
  For each additional contact closure output you require

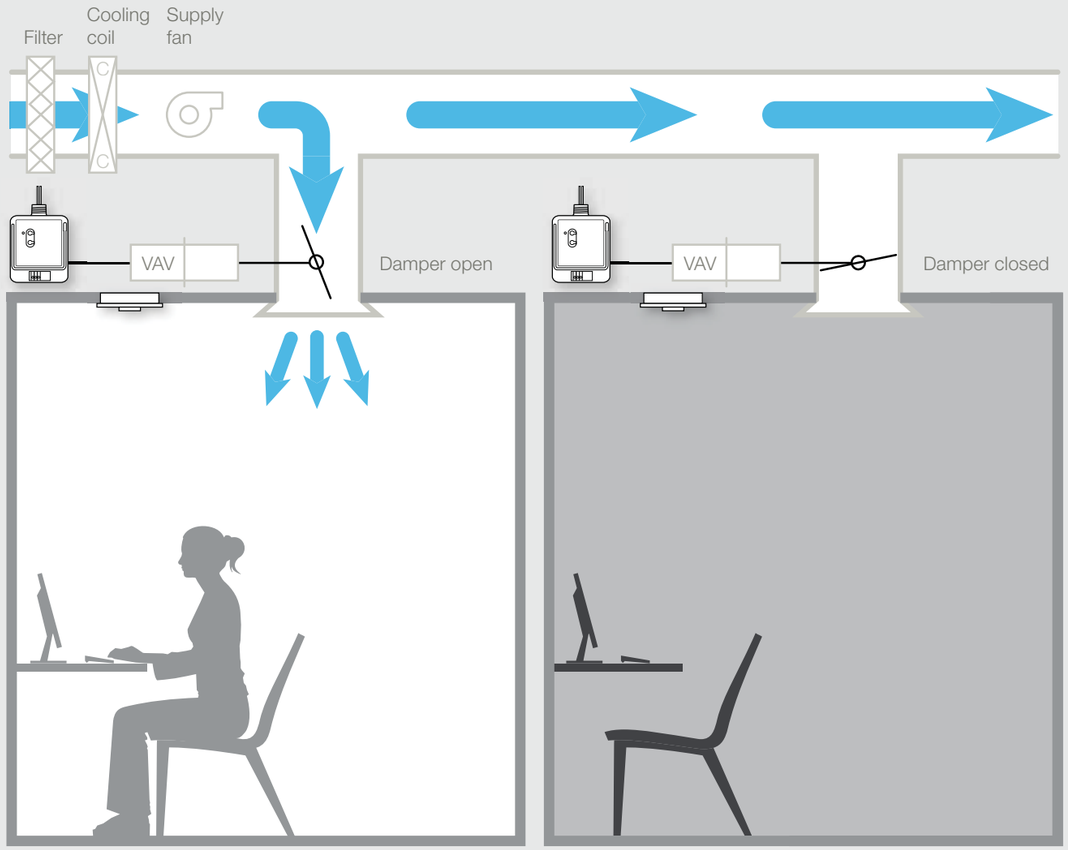
Product options

Standard

RMKS-CCO1-24-B	Contact closure output

How it works

In response to information received from a Radio Powr Savr occupancy/vacancy sensor, the PowPak contact closure output module communicates room occupancy to the VAV terminal unit. By not heating or cooling an unoccupied room, the electricity consumed by the HVAC system can be reduced.



Occupied **Unoccupied**

Radio Powr Savr occupancy/vacancy sensor (ceiling mount)

PowPak contact closure output module

Pico wireless remotes

3-button with raise/lower

3-button

2-button with raise/lower

2-button

Dimensions

W: 33 mm (1.28")
H: 66 mm (2.60")
D: 8 mm (0.33")

How to design and specify

- Select one 2-button Pico wireless remote to add a location with ON/OFF control
- Select one 3-button Pico wireless remote to add a location with ON/OFF control and one preset
- Select one 2-button with raise/lower Pico wireless remote to add a location with ON/OFF and BRIGHTEN/DIM control
- Select one 3-button with raise/lower Pico wireless remote to add a location with ON/OFF, BRIGHTEN/DIM control and one preset

Note: Spaces with a PowPak relay or dimming module will not have a local control in the room unless a Pico is added

Product options

2-button remotes

PK2-2BRL-TXX-L01	2-button with raise/lower wireless remote
PK2-2B-TXX-L01	2-button wireless remote

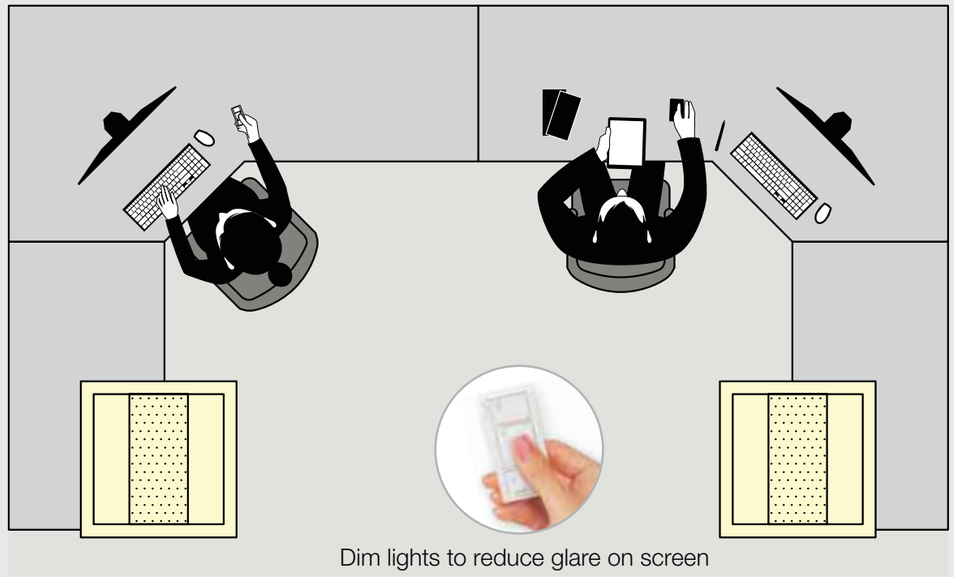
3-button remotes

PK2-3BRL-TXX-L01	3-button with raise/lower wireless remote
PK2-3B-TXX-L01	3-button wireless remote

(XX in the model number represents colour/finish code)

How it works

- No wires—put it where it's most accessible
- Pedestal mount for tabletop use
- Surface mount anywhere with a wallplate
- 10-year battery life



Dim lights to reduce glare on screen

Pico wall mounted (in a wallplate) — Add a new point of control anywhere with absolutely no wires

Raise lights for reading visibility

Pico wireless remotes

4-button 2-group control

4-button zone control

4-button scene control

Dimensions

W: 33 mm (1.28")
H: 66 mm (2.60")
D: 8 mm (0.33")

How to design and specify

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

Product options

4-button remotes

PK2-4B-TXX-L21P	2-group control
PK2-4B-TXX-L01	Zone control
PK2-4B-TXX-L31	Scene control

- Custom-engraved models for Zone control keypads (-L01, -S01) and Scene control keypads (-L31, -S31) are available but require a different set of button marking codes when ordering

  Note: 2-Group (-L21, -S21, -LS21) and 4-Group Toggle (-L41) controls are not offered with the custom engraving option).

Button Marking Codes	Standard Engraving	Custom Engraving
Zone Control		
Lights	-L01	-EL1
Blinds	-S01	-ES1
Scene Control		
Lights	-L31	-EL2
Blinds	-S31	-ES2

Tabletop accessories

Wall-mount accessories

Pico wallplate adapter and wallplate

Dimensions

W: 89 mm (3.50")
H: 89 mm (3.50")
D: 10 mm (0.38")

How to design and specify

- Select one Pico pedestal for each tabletop location based on the number of Pico remotes at each location

Product options

Tabletop accessories

L-PED1-XX	pedestal for one Pico remote
L-PED2-XX	pedestal for two Pico remotes
L-PED3-XX	pedestal for three Pico remotes

How to design and specify

- Select one Pico wallbox adapter for each Pico that you would like wall mounted with a wallplate

Product options

Wall-mount accessories

LPFP-S1-TXX	International Pico 1 column wallplate
LPFP-S2-TXX	International Pico 2 column wallplate

Wireless occupancy/ vacancy sensors

Dimensions

W: 91 mm (3.57")
H: 91 mm (3.57")
D: 29 mm (1.13")

How to design and specify

- A single occupancy sensor can communicate to all control devices in the room
- Use in small rooms or areas with medium to high partitions
- For 2.4 m (8 ft) ceilings: 44.9 m² (484 ft²)
- For 3.7 m (12 ft) ceilings: 62.4 m² (676 ft²)
- Settings adjustable to change behaviour including occupancy to vacancy sensing, occupied and unoccupied levels
- Timeout options include: 30 min, 15 min (default), 5 min

Product options

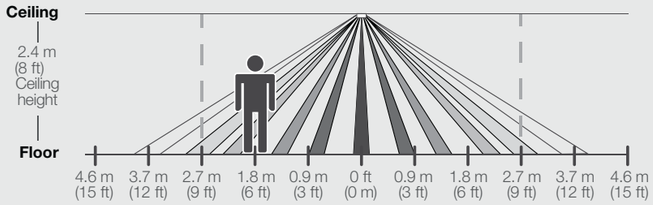
Ceiling-mount sensors

LRF3-OCR2B-P-WH	Occupancy/vacancy

Sensor coverage diagrams

Ceiling mount, 360°

Floor view

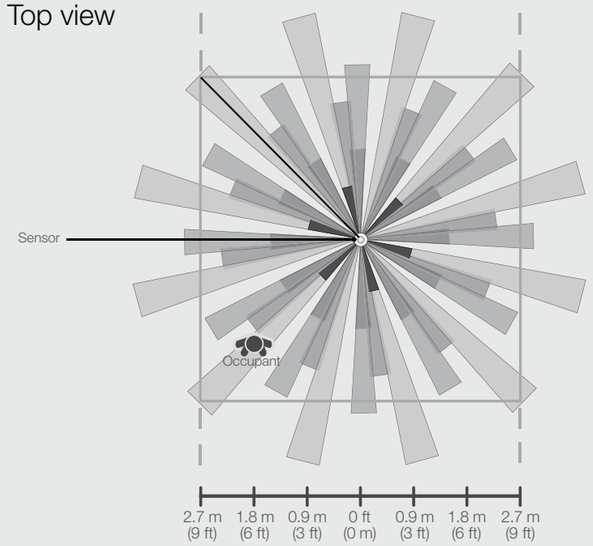


Coverage varies by ceiling height

Key:

- Minor motion
- Major motion

Top view



Ceiling-mount sensor coverage chart (for sensor mounted in centre of room)

Ceiling height	Maximum room dimensions for complete floor coverage		Radius of coverage at floor
2.4 m (8 ft)	5.5 x 5.5 m (18 x 18 ft)	30.2 m² (324 ft²)	4.0 m (13 ft)
2.7 m (9 ft)	6.1 x 6.1 m (20 x 20 ft)	37.2 m² (400 ft²)	4.4 m (14.5 ft)
3.0 m (10 ft)	6.7 x 6.7 m (22 x 22 ft)	44.9 m² (484 ft²)	4.9 m (16 ft)
3.7 m (12 ft)**	7.9 x 7.9 m (26 x 26 ft)	62.4 m² (676 ft²)	5.8 m (19 ft)

* Sensor mounting shown at 2.1 m (7 ft). Mounting height should be between 1.6 and 2.4 m (6 and 8 ft).
** 3.7 m (12 ft) is the maximum mounting height allowed.

Radio Powr Savr Wireless sensors

Dimensions

W: 46 mm (1.8")
H: 110 mm (4.35")
D: 34 mm (1.35")

Flexible armature mounting kit

Dimensions

W: 92 mm (3.62")
H: 55 mm (2.18")

How to design and specify

- A single occupancy sensor can communicate to all control devices in the room

Product options

Wall-mount sensors

- Use in large open rooms with few tall obstructions
- Coverage: 278.7 m² (3,000 ft²)

LRF3-OWLB-P-WH Occupancy/vacancy

Corner-mount sensors

- Use in medium to large open rooms with few tall obstructions
- Coverage: 232 m² (2,500 ft²)

LRF3-OKLB-P-WH Occupancy/vacancy

Hallway sensors

- For a 1.82 m (6 ft) wide hallway: 15.24 m (50 ft) coverage
- For a 3.0 m (10 ft) wide hallway: 45.72 m (150 ft) coverage

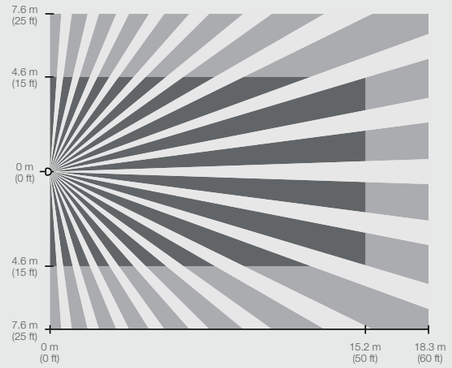
LRF3-OHLB-P-WH Occupancy/vacancy

Sensor coverage diagrams

Wall mount*, 180°

139.4 m² (1,500 ft²)—minor motion
278.7 m² (3,000 ft²)—major motion

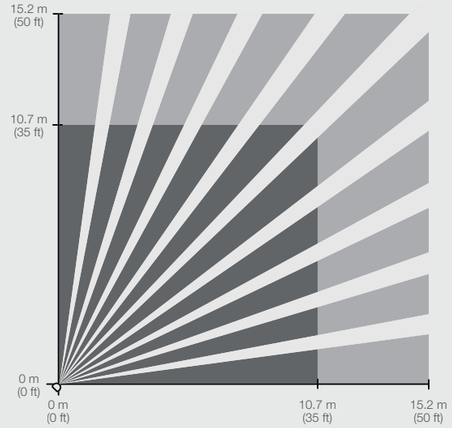
Top view



Corner mount*, 90°

113.8 m² (1,225 ft²)—minor motion
232.3 m² (2,500 ft²)—major motion

Top view



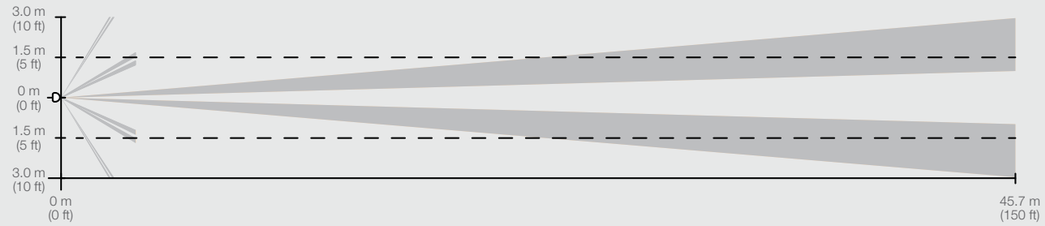
Key:

- Minor motion
- Major motion

Hallway*, long narrow field of view

Coverage varies by hallway width and length

Top view



Hallway sensor maximum recommended length chart
(sensor centered within hallway)

Width of hallway	Length of hallway
1.8 m (6 ft) or less	15.2 m (50 ft)
2.4 m (8 ft)	30.5 m (100 ft)
3.0 m (10 ft) or more	45.7 m (150 ft)

* Sensor mounting shown at 2.1 m (7 ft). Mounting height should be between 1.6 and 2.4 m (6 and 8 ft).
** 3.7 m (12 ft) is the maximum mounting height allowed.

Wireless daylight sensors

Dimensions

W: 41 mm (1.6")
H: 41 mm (1.6")
D: 17 mm (0.7")

How to design and specify

- A single daylight sensor is capable of controlling:
  - All PowPak switching zones
  - All PowPak dimming modules with DALI or 0–10 V control

Product options

Daylight sensor

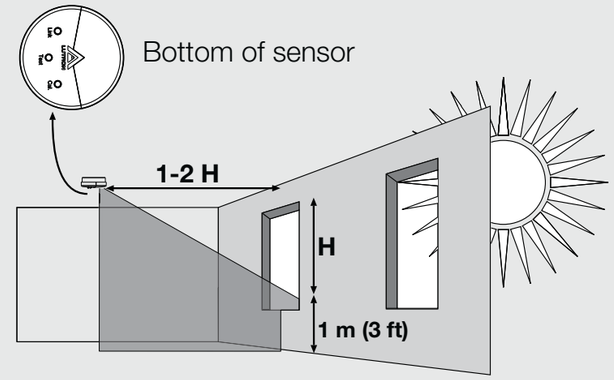
LRF3-DCRB-WH	Daylight sensor

* Sensor mounting shown at 7 ft (2.1 m). Mounting height should be between 6 and 8 ft (1.6 and 2.4 m).
** 12 ft (3.7 m) is the maximum mounting height allowed.

Sensor coverage diagrams

Location for average size areas

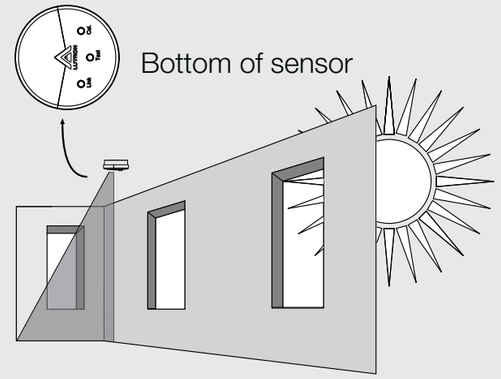
Arrow points towards the area viewed by the sensor (towards windows).



H = Effective Window Height

Location for narrow areas (corridors, private offices)

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



Setup support services

4- & 8-Hour onsite blocks

Additional setup support services

Available setup support services

Blocks of setup support time

- Lutron Services Representatives can support the installation team in setting up the system
- Utilise the technician's time in the way that best suits your needs: training, punch list items, or complete programming independently
- Mix and match onsite blocks of time and use them when you need them during the construction timeline
- Choose the amount of time you need

Product options

Blocks of setup support time

LSC-OS-PROG8-SP	8 hours of onsite setup support
LSC-OS-PROG4-SP	4 hours of onsite setup support

Additional setup support services

available with blocks and startup

LSC-PREWIRE	Prewire visit
LSC-TRAINING	Customer-site solution training
LSC-AF-VISIT	Onsite scene and level tuning
LSC-WALK	Onsite performance—verification walk-through

Full-scope startup

Onsite

Remote

Available startup services

Onsite full-scope startup

- Lutron Service Representative onsite to ensure proper system startup and configuration
- Train facilities staff to best utilise and maintain the lighting control assets
- Reduce risk and keep your Installation team small by having Lutron do the setup for you.
- Includes a Commercial System Limited Warranty
- Onsite startup enhancements available

Product options

Setup service models

Full scope startup	
LSC-OS-SU-VIVE	Onsite full-scope startup

Startup enhancements (Available with onsite full-scope startup)

LSC-AH-SU	Startup performed at night or weekends (weekend work available in certain locations)
LSC-SENS-LT	Sensor layout & tuning
LSC-SPV-DOC	System performance—verification documentation

Operational services

Solution training
System optimisation
Onsite reconfiguration

Available Operational Services

- Support from Lutron to maximise system potential
- Reprogram the system as space needs change over time
- Support retro-commissioning requirements
- Pre-purchase with the system to capture costs in capital budget

Product options

Operational service models

Operational services	
LSC-TRAINING	Customer-site solution training
LSC-SYSOPT	System optimisation service
LSC-OS-PROG8-EN	8 hours of onsite reconfiguration support
LSC-OS-PROG4-EN	4 hours of onsite reconfiguration support

Onsite services are also available for purchase after the system is in operation at hourly, half-day and full-day rates; contact Lutron at **lscwarranty@lutron.com** for more information.

Commercial System Limited Warranty

The commercial system limited warranty offers 5 years of parts coverage, 2 years of first-available onsite/remote response time for system issues, and 24/7 technical support. *Warranty included with onsite full-scope startup & available with remote full-scope startup*

Product options

Vive Limited Warranty

LSC-B2	Commercial System 2-Year Limited

Technology Support Plans (TSPs)

All Lutron Technology Support Plans provide 100% parts and diagnostic labour coverage for up to 10 years. Optional response-time guarantees and preventive maintenance visits enable the coverage to be customized to meet the facility's needs. TSPs are available for any Vive system; a warranty audit visit will be included with the purchase of a TSP when full-scope startup is not purchased.

Product options

Vive Technology Support Plans

LSC-SILV-IW	Silver Level Technology Support Plan
LSC-GOLD-IW	Gold Level Technology Support Plan
LSC-PLAT-IW	Platinum Level Technology Support Plan
LSC-WARR-AUD	Warranty Audit Visit

Note: For detailed warranty and technology support plan descriptions see **lutron.com/services**

Vive Warranty information

Vive wireless solutions are all covered by a 5-year parts warranty with registration of the product. Additional technology support options are available to meet your project needs. See the options below.

Support Options	Commercial System Limited Warranty	Silver (TSP)	Gold (TSP)	Platinum (TSP)
Duration up to 10 years of coverage		•	•	•
100% Replacement Parts	• (5 yrs)	•	•	•
Diagnostic Labour — First Available Response	• (2 yrs)	•		
Diagnostic Labour — 72-Hour Response			•	
Diagnostic Labour — 24-Hour Response				•
Annual Preventive Maintenance Visit			•	•

Model Number	Description
Vive wireless hub	
HKS-0-FM	Starter Vive wireless hub, flush mount
HKS-1-FM	Standard Vive wireless hub, flush mount
HKS-1-SM	Standard Vive wireless hub, surface mount
HKS-2-FM	Premium Vive wireless hub, flush mount
HKS-2-SM	Premium Vive wireless hub, surface mount
H-MOUNT-SM	Surface Mounting kit for hub
H-MOUNT-FM	Flush mounting kit for hub
VIVE-VUE	Vive Vue license (1 per hub)

PowPak relay module	
RMKS-5R-DV-B	5 A relay
RMKS-16R-DV-B	16 A relay

PowPak dimming module with 0–10 V control	
RMKS-8T-DV-B	Controls up to 30, 0–10 V controlled fixtures

PowPak dimming module with DALI control	
RMKS-DAL4-SZ	Controls up to 4 DALI fixtures
RMKS-DAL32-SZ	Controls up to 32 DALI fixtures

PowPak contact closure output module	
RMKS-CCO1-24-B	One contact closure output

Model Number	Description
Pico wireless remotes	
PK2-2BRL-TXX-L01	2-button with raise/lower
PK2-2B-TXX-L01	2-button
PK2-3BRL-TXX-L01	3-button with raise/lower
PK2-3B-TXX-L01	3-button
PK2-4B-TXX-L21	4-button with 2 group control
PK2-4B-TXX-L01	4-button with zone control
PK2-4B-TXX-L31	4-button with scene control

(XX in the model number represents colour/finish code)

Pico accessories	
L-PED1-XX	Pico wireless remote single pedestal
L-PED2-XX	Pico wireless remote double pedestal
L-PED3-XX	Pico wireless remote triple pedestal

(XX in the model number represents colour/finish code)

Pico Colours

Colours

- White (AW)
- Black (BL)

Ordering Information

Model Number	Description
Radio Powr Savr occupancy/vacancy sensors*	
LRF3-OCR2B-P-WH	Ceiling-mount, 360° field-of-view, occupancy/vacancy sensor
LRF3-OWLB-P-WH	Wall-mount, 180° field-of-view, occupancy/vacancy sensor
LRF3-OKLB-P-WH	Corner-mount, 90° field-of-view, occupancy/vacancy sensor
LRF3-OHLB-P-WH	Hallway, occupancy/vacancy sensor

Radio Powr Savr daylight sensor	
LRF3-DCRB-WH	Ceiling-mount daylight sensor

Wallplates*	
LPFP-S1-TXX	Pico 1 column wallplate
LPFP-S1-TXX	Pico 2 column wallplate

* (XX in the model number represents colour/finish code)

Model number	Description
Vive Startup Services	
LSC-OS-SU-VIVE	Onsite full-scope startup
LSC-AH-SU	After hours startup
LSC-SENS-LT	Sensor layout & tuning
LSC-SPV-DOC	System performance-verification documentation
Vive Setup Support Services	
LSC-OS-PROG8-SP	Onsite programming — 8-hour block
LSC-OS-PROG4-SP	Onsite programming —4-hour block
LSC-PREWIRE	Prewire visit
LSC-TRAINING	Customer-site solution training
LSC-AF-VISIT	Onsite scene and level tuning
LSC-WALK	Onsite performance-verification walkthrough
Vive Operational Services	
LSC-TRAINING	Customer-site solution training
LSC-SYSOPT	System optimisation service
LSC-OS-PROG8-EN	8 hours of onsite reconfiguration support
LSC-OS-PROG4-EN	4 hours of onsite reconfiguration support
Vive Limited Warranty and Technology Support Plans	
LSC-B2	Commercial system limited warranty
LSC-SILV-IW	Silver level technology support plan
LSC-GOLD-IW	Gold level technology support plan
LSC-PLAT-IW	Platinum level technology support plan
LSC-WARR-AUD	Warranty audit visit

Notes

For a list of all Vive wireless solutions product model numbers
lutron.com/vive-europe

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