

# XPoint™ Wireless Specification FAQs



# What components do I need to have a complete XPoint Wireless system?

A minimum XPoint Wireless system consists of XPoint Wireless Enabled Luminaires and a Wireless Bridge (XPA BRG). One Wireless Bridge can support up to 250 wireless devices (additional Bridges are purchased as necessary). These are the basic required components. If the fixtures have integrated sensors then this system can be programmed to function autonomously based on sensor activity. Commonly used (optional) system components include:

- Remote mounted wireless occupancy and daylight sensors (e.g., XPA CMRB6) that can be used to detect occupancy or motion at specific areas and grouped with wireless luminaires
- Wireless wall controls (e.g., XPA SIAC2 L2 and RS CCS BWH) to provide manual dimming control
- nLight Gateway (nGWY2), which enables system-wide control functions such as Schedules and Profiles, global channels, BMS integration, and demand response load shedding
- nBACnet Appliance to provide BACnet/IP integration with other systems
- nLight scene input devices (e.g., nPODM 4S, nIO 1S) to activate scene presets
- SensorView Software for configuration and management of the system (installed on Windows PC/Server provided by others)

## Which Acuity luminaires are capable of supporting XPoint Wireless?

- Holophane Indoor (Industrial): PHZ, PHS, VL, PLED2, EVT4, EMW
- Lithonia Industrial: IBL, IBH, JHBL, FHE, VAP
- Parking Garage: Lithonia PGX, Lithonia DSXPG, Hydrel 4760 LED
- Some luminaires are also available for commercial indoor applications, please consult with the factory



## What are the capabilities of the software?

SensorView is a web-based configuration and monitoring software tool that perform the following functions:

- Device configuration of settings via Tree or nFloorplan view
- Device monitoring of live status and sensor readings
- Scheduling and configuration of System Profiles
- Historical reporting and energy monitoring through GreenScreen. SensorView can track device history, including energy use, and provide graphical and tabular reports using the GreenScreen plug-in
- Mobile app support through Virtual Wallpods. SensorView can configure Virtual Wallpods for control of XPoint Wireless lighting groups, whether through the Windows PC or iPhone / iPad Virtual Wallpod applications

### Is XPoint Wireless compatible with other Acuity Controls systems?

XPoint Wireless is compatible with nLight. XPoint Wireless uses nLight as its system backbone, so nLight and XPoint Wireless share timeclock, system integration interfaces, global controls and SensorView software interface.

## Does XPoint Wireless require software to operate?

Software is optional with XPoint Wireless; sensors, manual controls, time clocks and wireless groupings continue to operate once they are configured.

#### Does XPoint Wireless require a wireless controller or access point to operate?

XPoint Wireless Bridge devices are required to support XPoint Wireless installations. The XPoint Wireless Bridge is used to configure, support, and update a system, in addition to providing a connection to wired backbone devices such as nLight scene controls, system timeclock (nGWY2), and software controls. An advantage of XPoint Wireless is that local wireless controls, such as wireless switches and sensors, use distributed intelligence and continue to function if the XPoint Wireless Bridge is disconnected or fails. XPoint Wireless Bridges do not participate in local wireless control, but they are required to support installations.

## What are the capabilities of XPoint Wireless, and why is that valuable?

XPoint Wireless can implement advanced, energy-saving lighting control strategies while eliminating the need for control system wiring between luminaires. Example strategies include: occupancy sensing groups, daylight responsive dimming, manual dimming, scheduling of light levels, BMS integration, automated demand response dimming, software control, and flexible configuration of control groups and settings. These capabilities combine to provide the deepest level of energy savings while providing a reliably controlled lighting environment tuned to meet the needs of the space. In addition, self-monitoring capabilities of XPoint Wireless, such as individual luminaire power measurement, allows performance to be measured and monitored to ensure that the lighting system continues to operate as originally intended.



## How long does it take start up an XPoint Wireless Installation?

System startup times by a factory technician or representative will depend on the sequence of operations and system configuration, but projects typically take one day per Wireless Bridge for configuration and setup. Additional days will be required for large systems (>4 Wireless Bridges) and if advanced software configuration features such as GreenScreen or nFloorplan are required.

## What is the typical payback for XPoint Wireless Systems?

The payback period for an XPoint Wireless solution depends on the scenario, but payback periods of around two years is possible. See the Solutions Guides regarding <u>Warehouse</u>, <u>Manufacturing</u> and <u>Parking Garage</u> applications posted at <u>AcuityBrands.com</u>

# What literature is available to understand the value and capabilities of XPoint Wireless?

The following materials are available at <u>AcuityBrands.com</u>:

- <u>Solutions Guides</u> such as Warehousing & Logistics, Manufacturing, and Covered Parking (available under *Solutions > Featured Spaces*)
- <u>XPoint Wireless Sell Sheet</u> (available under Products > Controls > XPoint Wireless > Resources)
- Application <u>Typical</u> drawings (available under Resources > Typicals)

## How many wireless luminaires can I put on a Wireless Bridge?

A Wireless Bridge can support up to 250 wireless devices and up to 50 wireless groups.

## Is everything I need to procure on one spec sheet?

Acuity's Design Application Support (DAS) teams support our sellers to review project requirements and create a supporting project design and bill of materials. Application <u>typical drawings</u> are available at <u>AcuityBrands.com</u> under *Resources > Typicals*. Individual component datasheets are available at <u>AcuityControls.com</u>.

## Can end users configure XPoint Wireless?

Acuity provides initial startup configuration for XPoint Wireless through onsite Field Service. On-going configuration updates are available to the end user through the SensorView software interface.

# What is the ambient rating for XPoint Wireless?

Ambient temperature ratings will vary by luminaire, but we have luminaires with up to 60C support for XPoint Wireless.

## Can I field-install XPoint Wireless components?

XPoint Wireless controllers are UL-listed for field installation. If installing controls inside of a luminaire, please verify that field installation does not alter the warranty conditions of the luminaire. Additionally, full interoperability may not have been factory-tested or verified when devices are field-installed to other manufacturer's luminaires.



#### What is the maximum distance between wireless luminaires?

XPoint Wireless devices that are installed inside of fixtures are recommended for use at 30' spacings. XPoint Wireless devices installed externally, such as XPA SBOR, are recommended for use at 60' spacings. XPoint Wireless components can theoretically communicate up to 1000' unobstructed line of sight, but our recommended layouts are based on verified real world performance for reliable lighting control operation.

# Are there any voltage restrictions?

All XPoint Wireless enabled luminaires support 120-277VAC applications, and a limited number of luminaires are available for 347VAC and 480VAC applications via stepdown transformer. Please consult with your local representative to see which luminaires are available with stepdown transformer for higher voltages.

#### Can XPoint Wireless be used in all environments?

XPoint Wireless offers luminaires, sensors and gateway housings for damp location and wet location applications.

## Does XPoint Wireless require an nLight Gateway?

The nLight backbone, using nGWY2, is only required if using any of the following control strategies:

- Scheduling / Profiles
- Global override controls (across multiple gateways)
- BMS integration
- Demand Response

## Is there any value in having XPoint Wireless if I am already using occupancy sensors?

XPoint Wireless provides incremental energy savings and system capabilities beyond standalone integrated sensing solutions, including the following capabilities: grouped response to occupancy sensing, manual dimming control, scheduling of light levels, demand response dimming, tuning of light levels and control settings, software control.

## What switches are compatible with XPoint Wireless?

XPoint Wireless offers two types of switches:

- Wireless manual controls with a Rocker Switch (XPA SIAC2 L2 with RS CCS)
- nLight multi-button scene switches (nPODM xS family)
- Other momentary contact switches may be used with our wireless sensor interface device. nLight scene switches are also used for global overrides, when desiring manual control across multiple wireless bridges



## Why would I use the original, wired, version of XPoint?

## What is the monitoring and reporting capability of XPoint Wireless?

SensorView can monitor the live status of individual XPoint Wireless fixtures, including dim level, measured power consumption, and sensor readings. The energy and device history is aggregated in SensorView GreenScreen reports that report historical use information. This data can be exported to CSV files for further analysis.

# What is a mesh network?

A mesh network is created by wireless nodes that each act as a repeater. Each node listens and repeats or routes the message to its neighbor. Unlike a WiFi system, you do not need to install access point infrastructure to provide a large coverage area; every node simply needs to be within communication range of its nearest neighbor. The result is a wireless network that covers a large area, such as a building floor, with multiple message paths and very robust network communication.

## What applications is XPoint Wireless ideally suited for?

Indoor lighting where a large coverage area is needed, such as parking garage, high bay, or corridors. XPoint Wireless makes sense where wireless control of individual fixtures is important because of wiring complications and circuit layouts. "Standard" environments include most indoor environments such as parking garage, warehouse, manufacturing, commercial interior, corridors and stairs.

## What software is available for XPoint Wireless?

SensorView Software is available for XPoint Wireless.

## Is there any value in having XPoint Wireless if I am already using Blue Box?

XPoint Wireless provides incremental energy savings and system capabilities beyond panel-based control solutions, including the following capabilities: flexible configuration of control zones without restrictions based on circuit layout, large number of dimming control groups (up to 50 groups per Wireless Gateway), capability for a high number of occupancy and photosensors, and elimination of dimming wiring between panel and luminaire.

## Is this using Zigbee protocol?

XPoint Wireless uses Adura wireless technology, a proven 2.4 GHz wireless mesh networking technology that was developed specifically with commercial and industrial lighting control applications in mind. Adura is based on Zigbee networking standards, but adds unique enhancements to support reliable operation and distributed intelligence.



# What is Zigbee? Is everyone using Zigbee?

Zigbee is an industry alliance of manufacturers that have defined a number of wireless standards for a variety of applications, including residential energy management, automated metering, and residential lighting control. Zigbee can refer to a networking standard that defines how a mesh network shares data and secures communication. However, Zigbee can also refer to application standard that defines application-specific commands, such as the "Zigbee Light Link" standard for residential lighting control. Because there are multiple types of Zigbee standards and implementations, not all systems using Zigbee are interoperable. Not all wireless lighting control manufacturers are using Zigbee.

# What are the amperage ratings for XPoint Wireless?

XPoint Wireless devices have a 5A relay and use zero crossing detection to provide inrush protection of the relays.

## Are the 2.4 GHz frequencies getting too crowded?

No. These frequencies are divided into multiple channels with good separation between channels.