

zencontrol

Wireless lighting control

Wireless solutions for commercial building control

The perfect companion to upgrade luminaires, switches, sensors and other devices for use on a wireless Thread® network.

Featuring:

- Simple to deploy
- Built on [IEC62386 / DALI](#) standards
- Standardised Lighting Control ([IEC 62386-104](#))
- Full bandwidth lighting control with no compromises
- Built on the best mesh network ([Thread®](#))
- Simple to understand and design for
- Full functioning lighting control

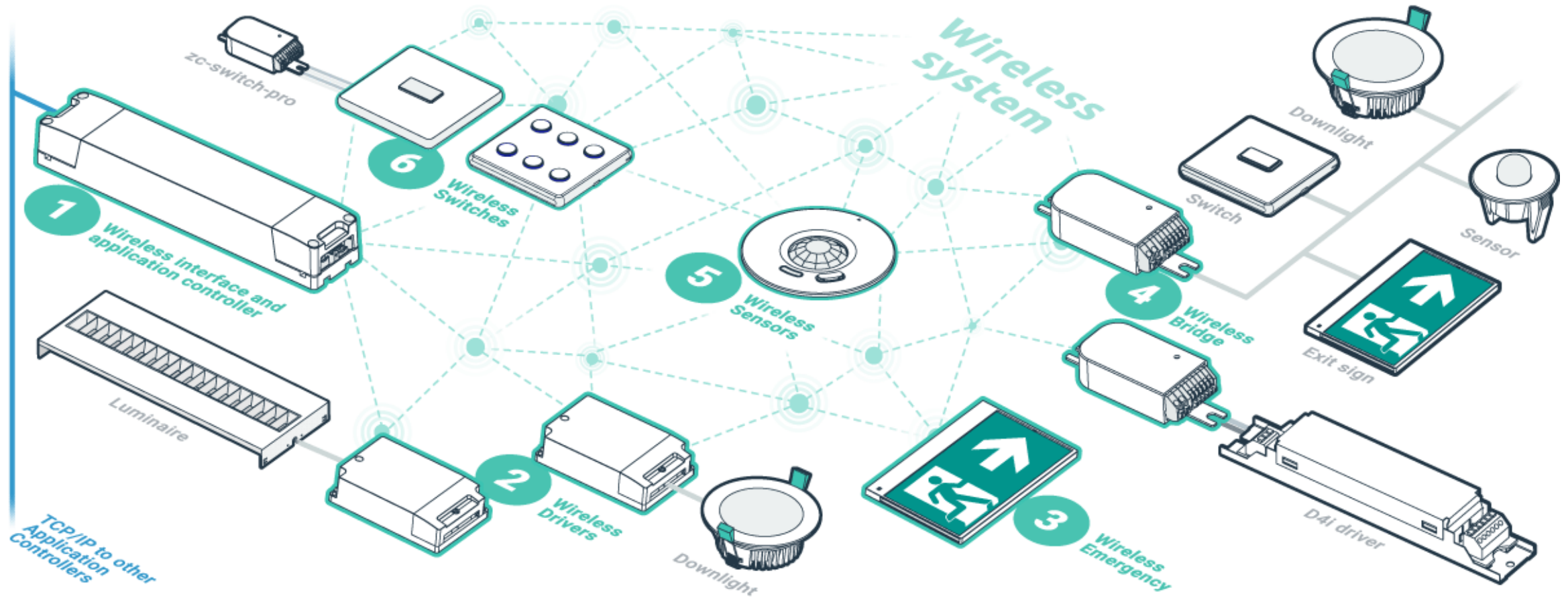


System components

1. Wireless Application controller
2. Wireless Driver

3. Wireless Emergency
4. Wireless Bridge

5. Wireless Sensors
6. Wireless Switches



Standardised Lighting Control

The zencontrol range of wireless lighting control products are **built using the only IEC standard for wireless lighting control, IEC62386-104.**

- Allows for standard DALI protocols to be transported over wireless infrastructure.
- Allows for interoperability with devices from other manufacturers
- Helps to reduce risk and increase competition.



Built on Thread®

[Thread®](#) provides the foundation for a wireless mesh network built on IEEE 802.15.4 and delivers the following benefits:

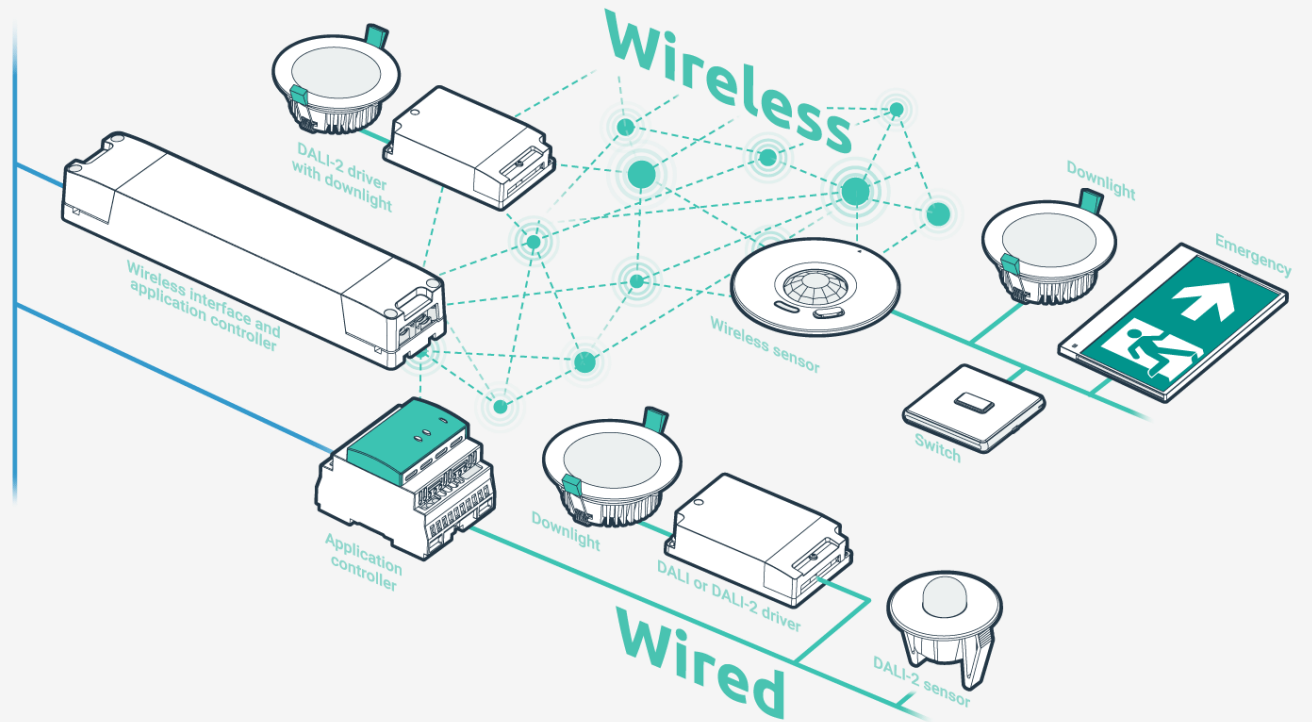
- ✓ **Simplicity:** Simple installation, start-up, and operation
- ✓ **Security:** All devices in a Thread® network are authenticated and all communications are encrypted
- ✓ **Reliability:** Self-healing mesh networking, with no single point of failure, and spread-spectrum techniques to provide immunity to interference
- ✓ **Efficiency:** Low power Thread® devices can sleep and operate on battery power for years
- ✓ **Scalability:** Thread® networks can scale up to hundreds of devices

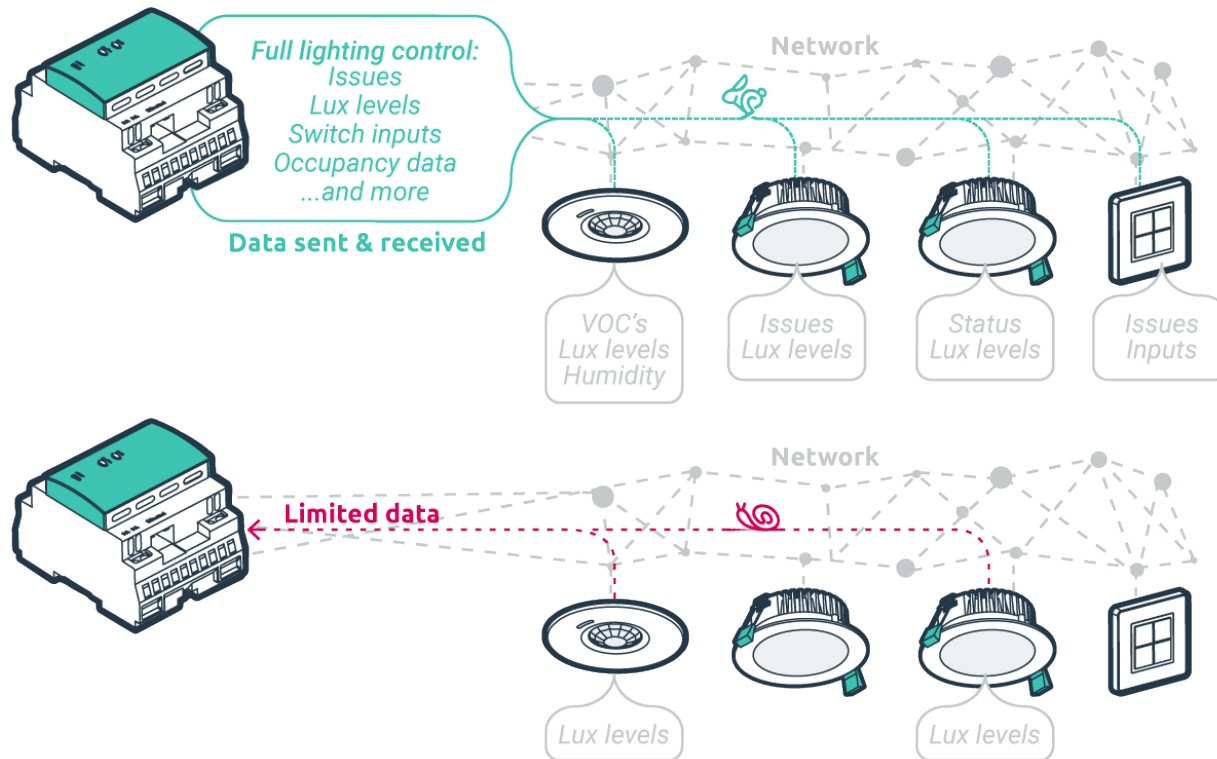
Thread is a registered trademark of [Thread Group Inc.](#)
zencontrol Pty Ltd is a registered [Thread Group member.](#)

Hybrid solutions

Not all buildings are the same and customer's requirements are different.

- With a zencontrol system both, wired and wireless systems can work together seamlessly.
- Creates a fully functioning building with no compromises





With IEC62386-104 over Thread®, we can provide a **fully functioning, no compromise lighting control system**, which **allows full bandwidth control**.

Full bandwidth lighting control

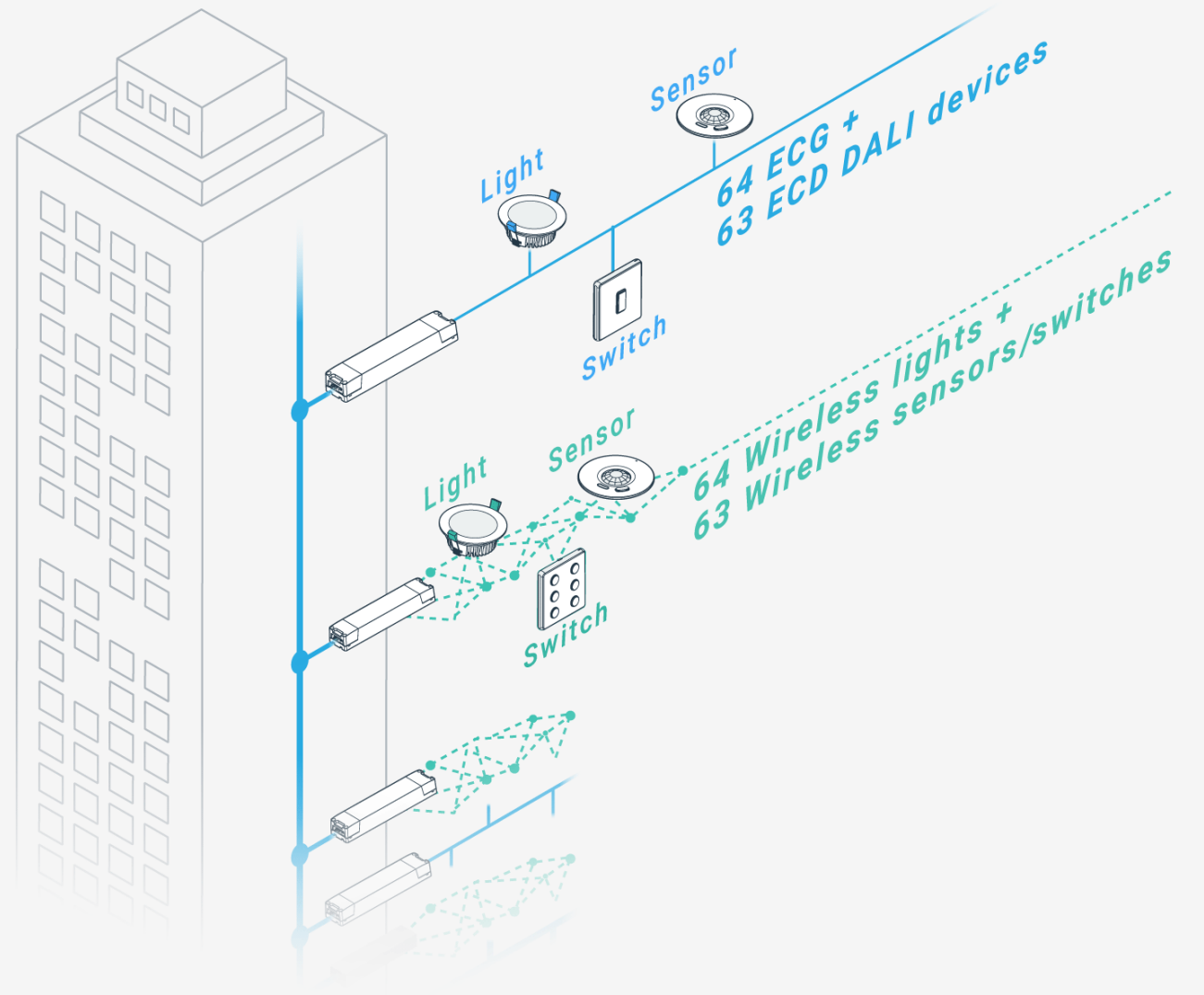


Other wireless networks today struggle to provide this benchmark and rely on tricks and workarounds to achieve basic lighting control.



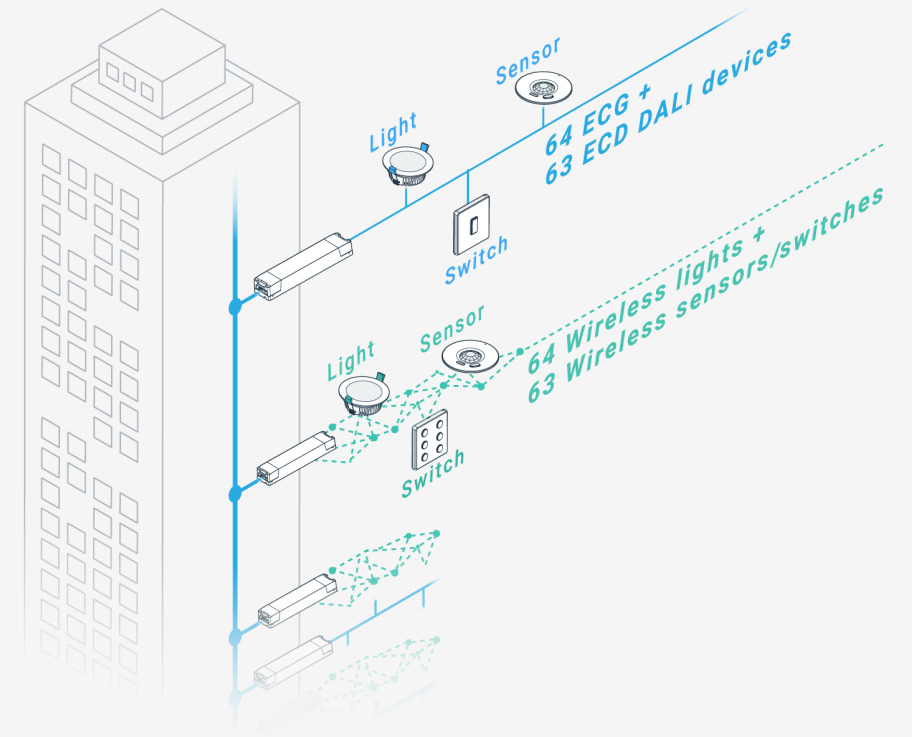
zencontrol can provide the same features, ability and reporting as is commonly found on fully functioning DALI networks **without limitations.**

**IEC62386-104 over
Thread®** allows zencontrol
to deliver an experience
that closely **matches**
traditional wired networks



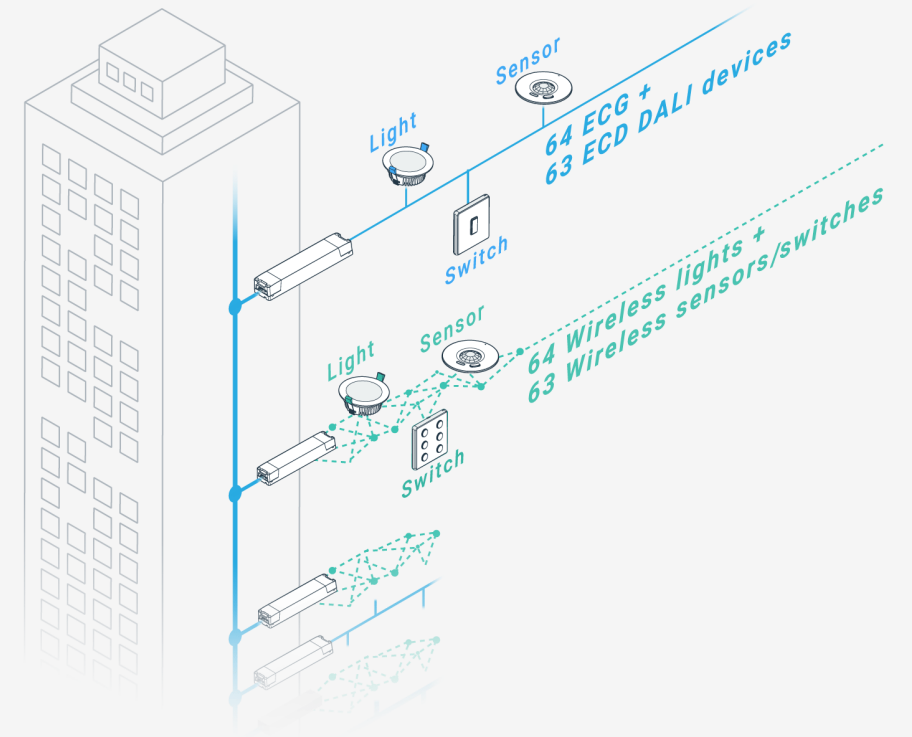
Manageable networks

- Deployed the same as DALI with 64 ECGS and 64 ECDs per network.
- Each network is connected to an IP gateway which provides an Ethernet backbone between all wireless networks.



This approach allows for

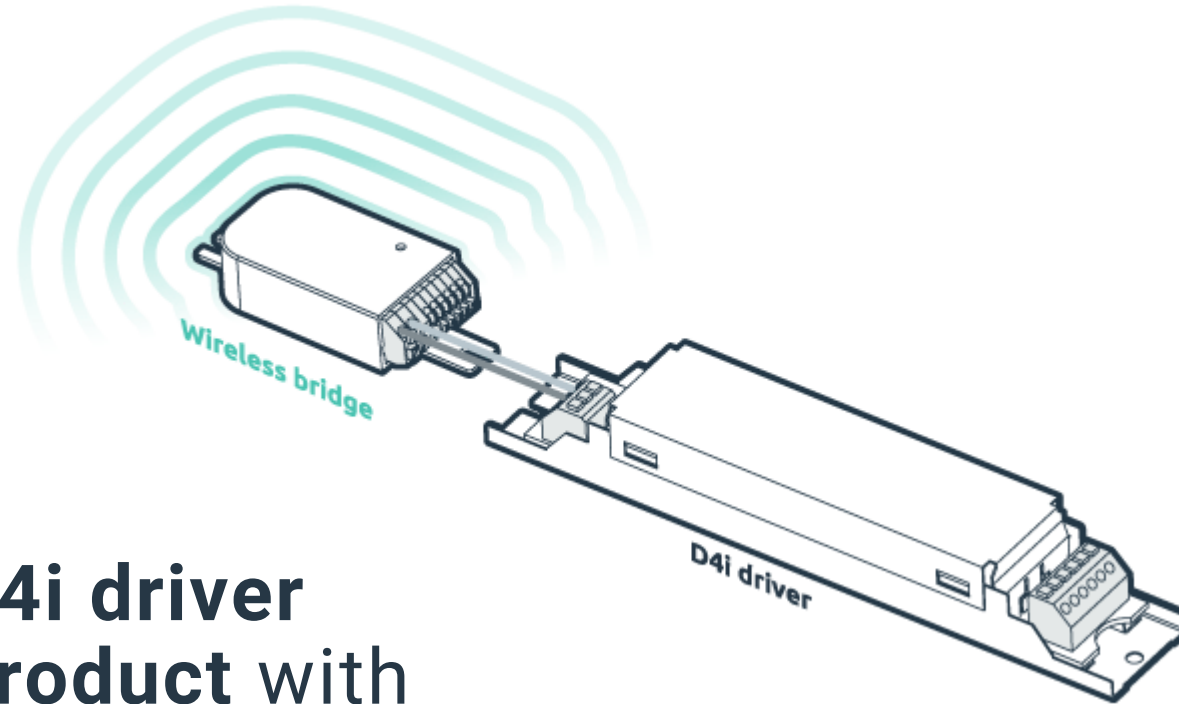
- ✓ Standardised deployment and design, as the systems have the same building blocks
- ✓ Easy fault management, installers only concentrate on small networks
- ✓ Easy quoting and specification, design follows that of DALI
- ✓ Better security, each network is firewalled



Expandable

Support for up to 128 devices per wireless network. Expand a building by connecting multiple wireless networks together through an Ethernet backbone

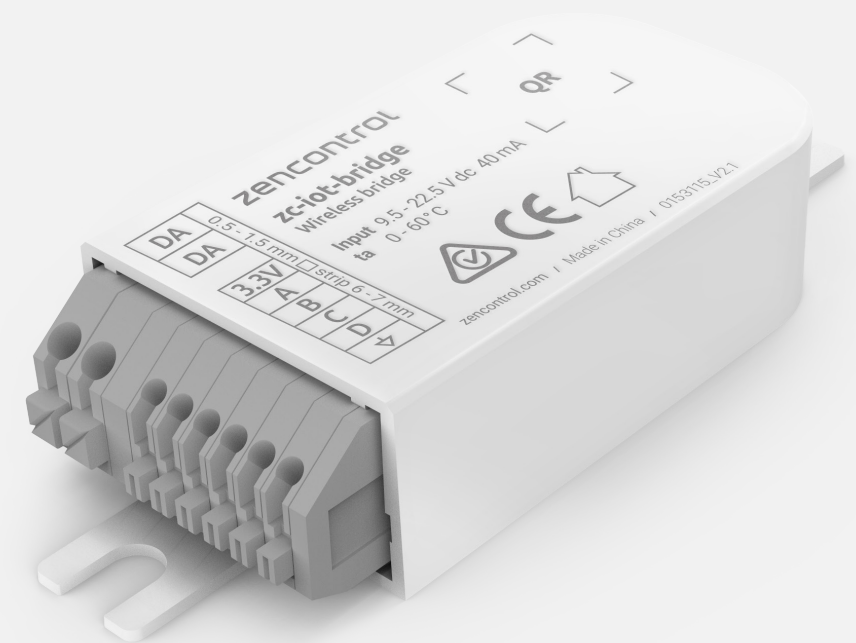
Number of	Single wireless network	Building
ECGs (drivers, etc)	64	Unlimited
ECDs (switches, sensors, controllers, etc)	64	Unlimited



Transform **any D4i driver**
into a wireless product with
zencontrol's **Wireless bridge**.

Works with D4i

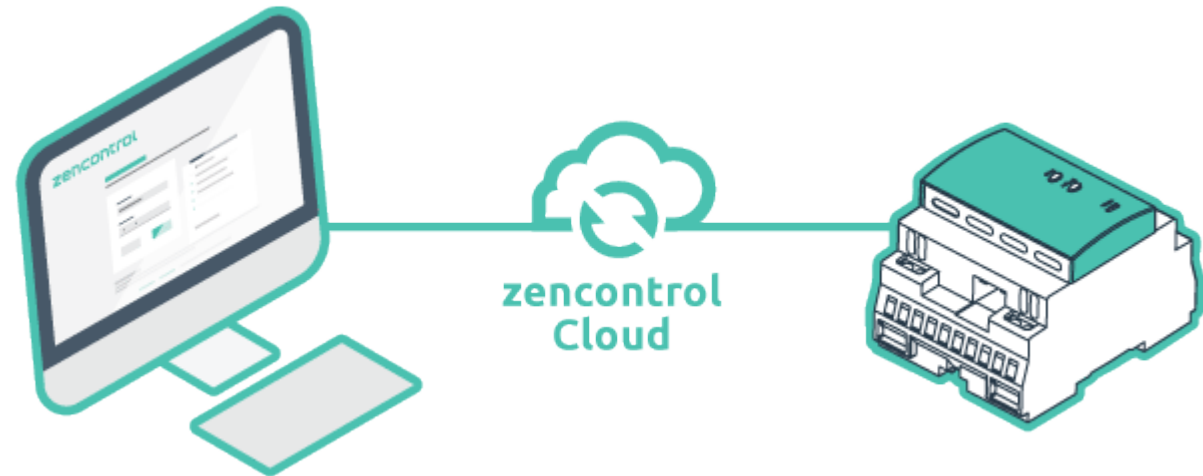
- The Bridge can plug directly into [D4i](#) drivers.
- Provides a wireless connection point allowing OEM and lighting manufacturers the ability to make any light wireless.
- **Don't have a D4i driver?**
Use a [DALI-2](#) driver with zencontrols' [DALI-2 PSU](#) and [Wireless bridge](#).



Updateable

All zencontrol wireless devices are updateable through our Cloud infrastructure

- Allows the products to become **forwards compatible** with new updates or additions to the standards.
- Ability to securely update zencontrol wireless devices allows for **security patches** to be deployed
- Increasing **future security** of the network.



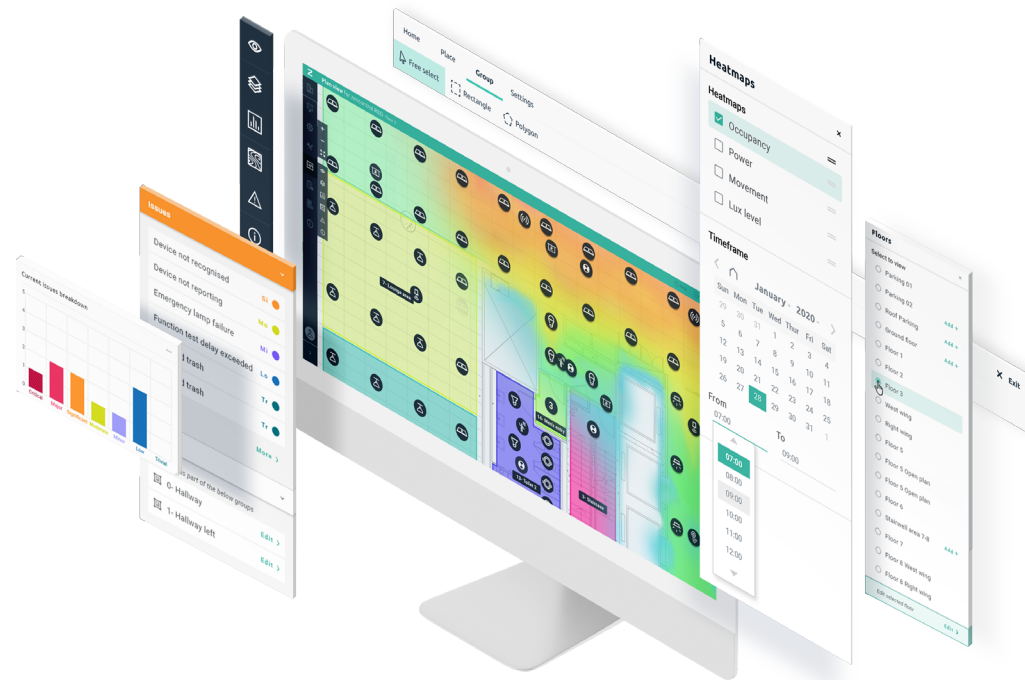


Our **commissioning app** for android supports wireless and wired lighting and can be used to commission compatible devices from any manufacturer









Full functionality

All the features of a zencontrol wired system work and operate in the same manner with IEC62386-104 over Thread:

- ✓ BACnet
- ✓ Power
- ✓ Analytics
- ✓ Third-party interfaces
- ✓ Advanced commissioning



Go online to learn more

 Wireless bridge	 Wireless emergency	 Wireless sensors
 Wireless driver	 Wireless Application controller	 Smart sensors
 Wireless Emergency converter	 The Cloud	Download everything at zencontrol.com/downloads/