# zencontrol



# Wireless lighting control

The only complete wireless solution for fully functioning lighting, reporting, and control

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

#### **Featuring:**

- → Simple to deploy
- → Built on <a href="#">IEC62386 / DALI</a> standards
- → Standardised Lighting Control (IEC 62386-104)
- → Full bandwidth lighting control with no compromises
- → Built on the best mesh network
- → Simple to understand and design for
- → Full functioning lighting control





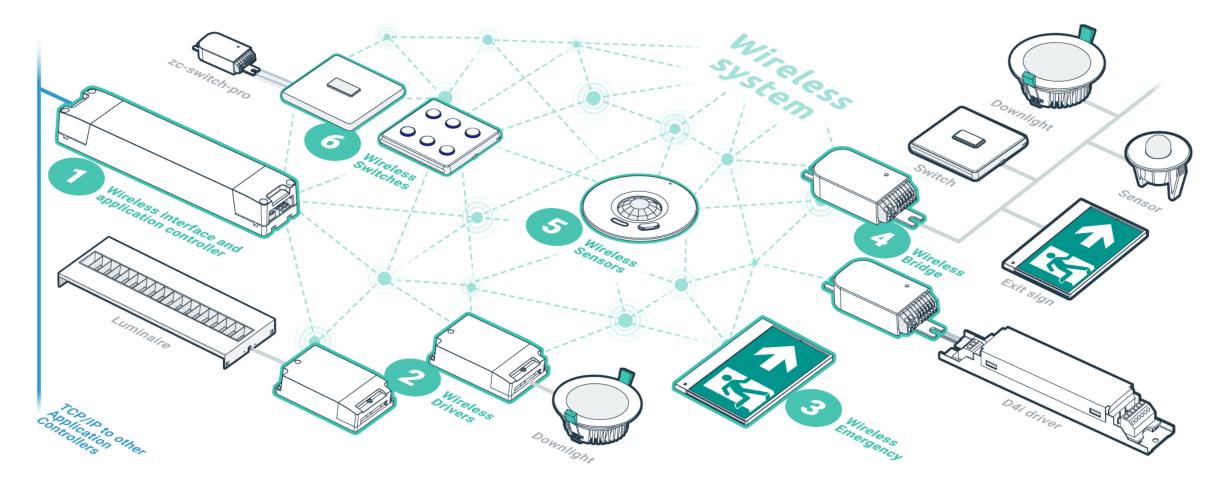
# **System components**

- 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 over wireless infrastructure.
- → Allows for interoperability with devices from other manufacturers
- → Helps to reduce risk and increase competition.



### What is 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. Connect multiple networks together to scale across a building.

zencontrol Pty Ltd is a registered Thread Group member.



#### **Hybrid solutions**

# Not all buildings are the same and customer's requirements can differ

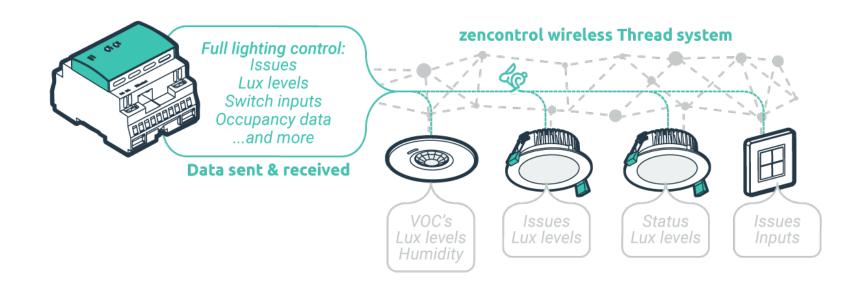
- → With a zencontrol system, wired and wireless systems work together seamlessly.
- → Creates a fully functioning building with no compromises





#### With IEC62386-104 over Thread

# We can provide a **fully functioning**, **no compromise lighting control system**, which provides full bandwidth control



## Full bandwidth lighting control



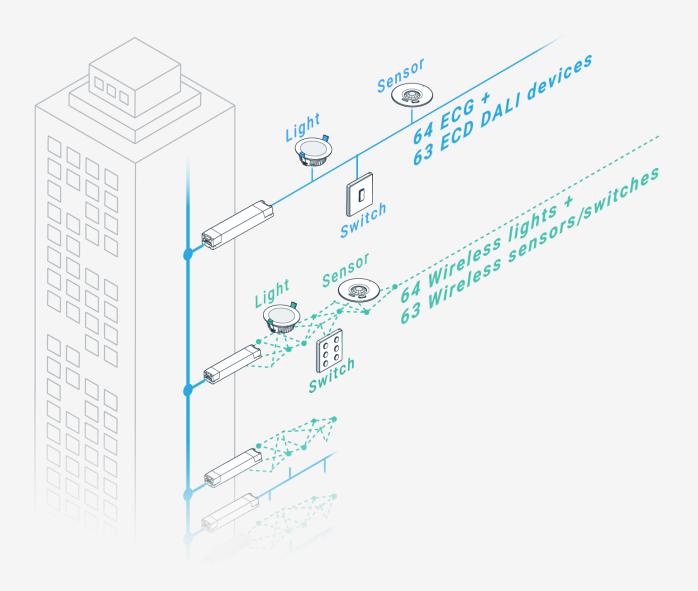
Other wireless networks today struggle to provide this benchmark and rely on tricks and workarounds to achieve basic lighting control.



zencontrol offers the same features, ability and reporting as is commonly found on traditional wired DALI networks without limitations.



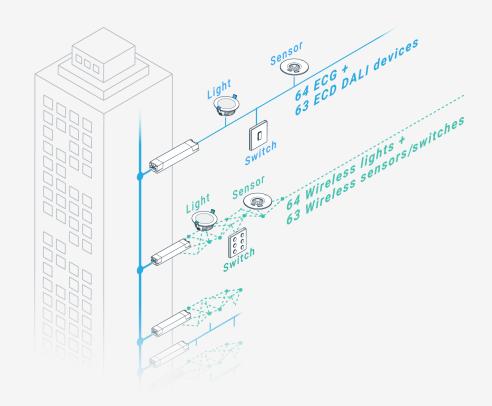
IEC62386-104 over
Thread allows zencontrol
to deliver an experience
that matches traditional
wired networks





### Manageable networks

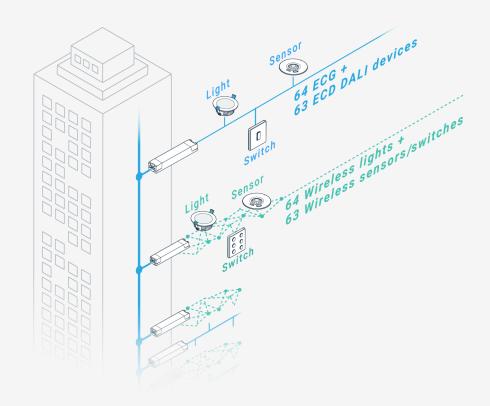
- → Deployed the same as DALI with 64 ECGS (lights / relays) and 64 ECDs(switches / sensors) per network.
- → Each network is connected to an IP gateway which provides an Ethernet backbone between all wireless networks.





### 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 on an Ethernet backbone.

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



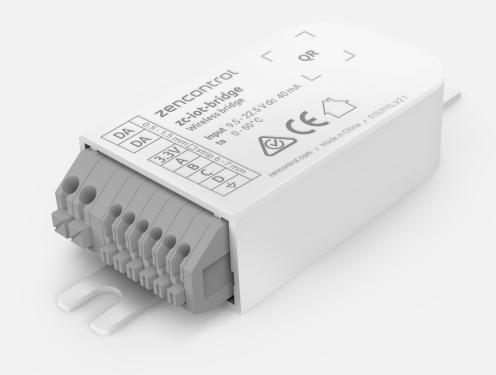




### Works with D4i

- → 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?

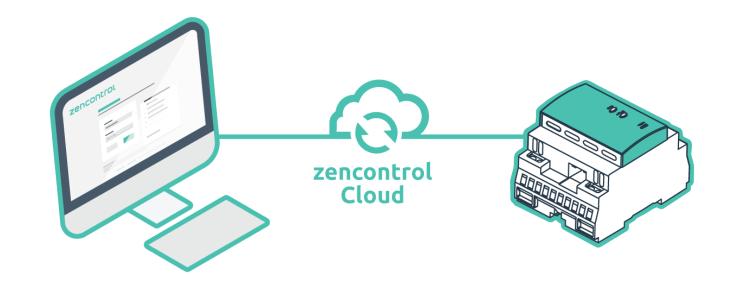
  Use a DALI-2 driver with zencontrols' DALI-2 PSU and Wireless bridge.



### **Updateable**

# All zencontrol wireless devices are updateable through our <u>Cloud</u> 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.



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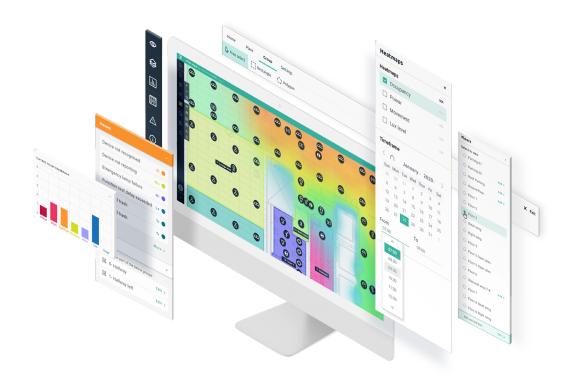
Our commissioning app for android supports wireless and wired lighting and can be used to commission compatible devices from any manufacturer

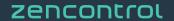


### **Full functionality**

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	<i>Q</i> Wireless sensors
€ Wireless driver	(2) Wireless Application controller	₽ Smart sensors
(2) Wireless Emergency converter	€ The Cloud	Download everything at zencontrol.com/downloads/