



RAPIX
LIGHTING
CONTROL SYSTEM

System Overview

RAPIX DALI-2 Lighting Control System

LIGHTING CONTROL OF BRILLIANT SIMPLICITY

Technical Overview Guide

February 2024

Engineered by
ozuno

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 www.ozuno.com

“With RAPIX, the possibilities are endless



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Benefits of RAPIX Lighting Control



Reduce design, installation and commissioning times.



Based on Ethernet and DALI-2, the RAPIX Lighting Control System was designed and built from the ground up to meet the requirement of modern buildings.



Effective lighting control systems can greatly assist with Building Regulations compliance.



Lighting can be responsible for up to 40% of a building's total power usage. Well designed lighting control can save up to 60%* of lighting energy, without compromising light quality, user comfort or safety.



To encourage organisations to reduce energy usage during peak hours, utility companies increasingly employ 'time of day' and 'maximum demand' energy tariffs.



In house support available for troubleshooting and installation advice.

*Source: Green Building Council Australia





Resilience is the key to RAPIX.



Purpose built for small, medium and large commercial applications.



DALI-2 Compliant and ready for the future of lighting control cyber security requirements.



Commercially savvy system due to less complexity, uncertainty and cost at every stage of the process.



Brilliant Simplicity: Easy commissioning for the Systems Integrator to get projects commissioned better and faster.



Our Story



Ozuno was created in 2017 when the Engineering Development team at Gerard Lighting purchased the engineering & intellectual property for DALI products and the RAPIX Lighting Control System.

A further transaction in 2021 transferred complete operational control and market access.

Ozuno now continues establishing sales and Systems Integrator relationships in Australia and Globally.



Introduction

The RAPIX DALI-2 Lighting Control system was purpose built to communicate using DALI and Ethernet, stripping away the need to use any additional bus systems as a form of communication.

The Ethernet backbone is encrypted and the open protocol of DALI has been utilised to allow operation with DALI compliant and DALI-2 certified devices.

This brochure provides an overview of the system and its capabilities.



History

The management and team at Ozuno have extensive experience in the lighting control industry. Collectively, the development team brings over 150 years of lighting control expertise.

We have in-depth knowledge with dimming, lamps, loads, and electronics, and we pride ourselves on developing high quality energy management products.



Ethernet Mesh

In a RAPIX DALI-2 system, the RAPIX Zone Controllers do not act as a central point of control: there is no central controller, and no single point of failure.

Any failure in the Ethernet infrastructure might split a RAPIX system into several parts that cannot communicate with each other. In that case, each part carries on working independently. When the Ethernet failure is repaired, the parts self-heal automatically.

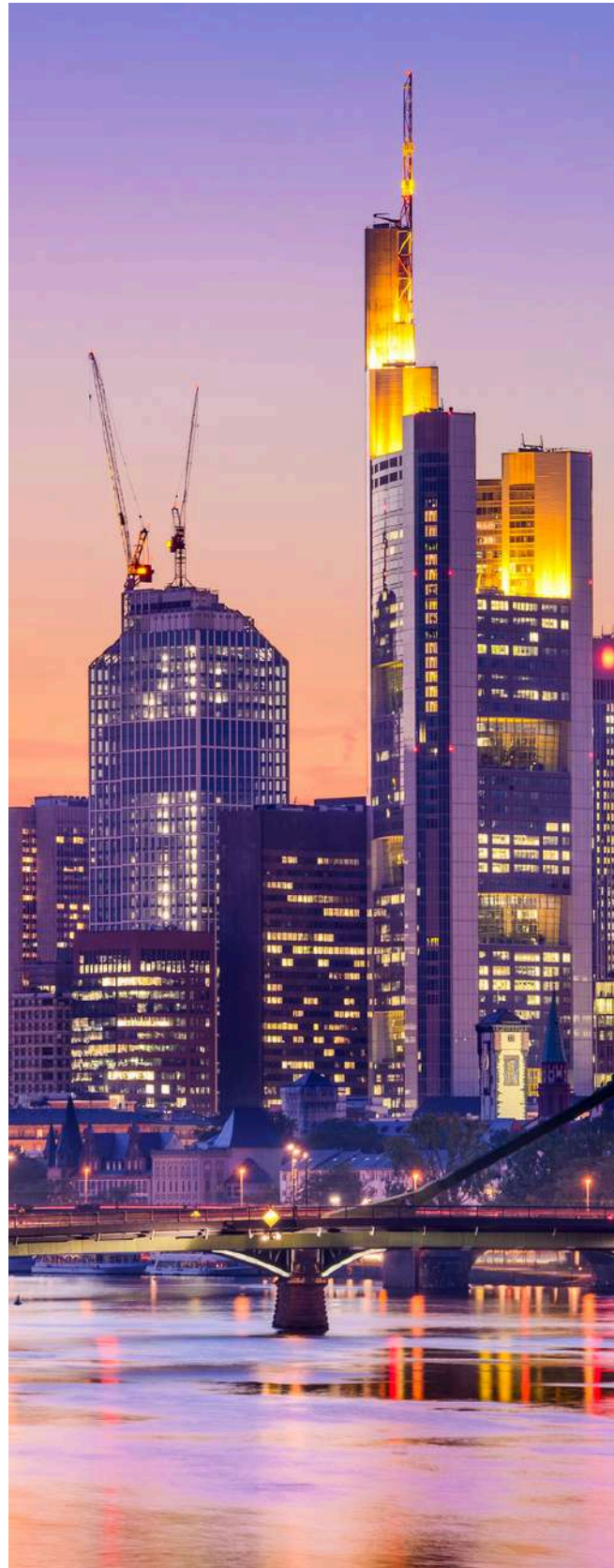
DALI-2

All RAPIX products are DALI-2 tested and certified. This includes all controllers, gateways, relays, dimmers, switches and sensors.

DALI-2 certification ensures interoperability. RAPIX switches, sensors, relays and dimmers are all DALI-2 certified and can be used in any DALI-2 compliant system.

Proudly Australian

All firmware, software and hardware is designed and developed in Adelaide Australia.



DALI and DALI-2

RAPIX from its first design meeting was built with simplicity in mind. This begins with the idea of DALI for the lighting bus and Ethernet to make up the backbone of a solution and to allow communication between DALI lines. There is no requirement for any additional bus systems for communication between devices, unlike systems of the past.

With DALI being at the forefront of the lighting world and becoming widely adopted globally, Ozuno has integrated the latest DALI-2 standard into the RAPIX Lighting Control System.

This latest standard has set the new benchmark for DALI and has remedied many of the nuances and gaps of the original DALI Version 1 standard.



Benefits of DALI-2

- Official DALI-2 compliance and certification with the DALI Alliance for DALI Power Supplies.
- Additional DALI commands including increased fade rates and times for greater user benefit.
- Certification of DALI movement sensors, light level sensors, switches and input devices to ensure manufacturer interoperability.
- Certification of DALI application controllers to ensure communication to DALI-2 control gear and control devices.

Key features of DALI-2

01

A new IEC standard. Open protocol. Revised specifications. Tighter tolerances. Better performance.

02

A bus system for all your lighting system requirements including sensors, switches, light fittings, emergencies, relays and dimmers.

03

Manufacturer interoperability. Talk the same language across multiple vendors and manufacturers.



DALI-2 Movement and Light Level Sensors

Movement detection and Daylight harvesting

The RAPIX Movement and Light Level Sensor can act as a miniature application controller for its own built-in sensing functions, with passive infrared movement sensing, light level sensing, and a voltage-free input.

The RAPIX Movement Sensor allows all common movement operations as well as light level sensing and light level maintenance. Switching and control functions are available using the voltage-free input.

This sensor can act as a miniature DALI Application Controller. Multiple sensors can easily be used to expand coverage to larger areas.

RAPIX sensors can operate with no other controllers, or with RAPIX Zone Controllers, or as part of any DALI-2 lighting control system.

Voltage free contact input for switches and sensors

LED indicator for easy identification during commissioning

Light level sensor 0-65000 lux

Transparent wiring cover for easy inspection of the cable connection

57-67mm cutout
*Optional surface mount adaptor available

DALI Loop in / out; generous sized terminals suited to 2.5mm cabling

8-10m diameter detection range @ 2.7m ceiling

“Every RAPIX sensor can be a DALI-2 application controller.



Security

In the modern world, encryption and security are integral parts of a safe and secure digital building infrastructure.

The RAPIX DALI-2 Lighting Control System was designed with security and encryption as core principles for Ethernet connected devices.

RAPIX security and encryption is built-in, with no need for additional hardware or software.



AES Encryption

Out of the box, RAPIX Zone Controllers have 128 bit AES encryption and authentication built-in. No external components or internet connection is needed to use best in class security and encryption protocols.



Security features of RAPIX

01

No internet or cloud services required for operation at any point.

02

128 Bit Authentication and Encryption out of the box.

03

Future Proof - Upgradeable technology and operating system as the worlds security needs change.





System Resilience

RAPIX is a decentralised system. Distributed application controllers are far more complex than a single point controller - but in the case of failures, a distributed system is far more resilient.

RAPIX switches, sensors and interfaces include a small DALI-2 Application Controller. These controllers cooperate to create a software model of the DALI system. This model includes load levels, group memberships and scene settings.

When input units know the load state on the DALI line, lighting operations become straightforward, and watching the DALI commands allows the software model to always stay up to date.

Input units also include a dedicated programming language specifically designed for lighting. Operations performed by sensors and switches are code segments that get loaded into the product.

The software DALI model, along with the programming language and code segments allows new functions to be added to input units quickly, easily and with no requirement for firmware updates.

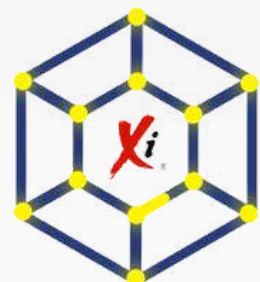
The RAPIX DALI-2 Zone Controller links DALI lines to allow an action or operation on one line to perform a required function on other DALI lines. Zone Controllers communicate with each other over Ethernet, allowing the ability to scale up the number of DALI lines in a site with practically no limit.

“The biggest single RAPIX installation has 90 Zone Controllers, 350 DALI lines and around 12,000 devices installed. It works as a single system.



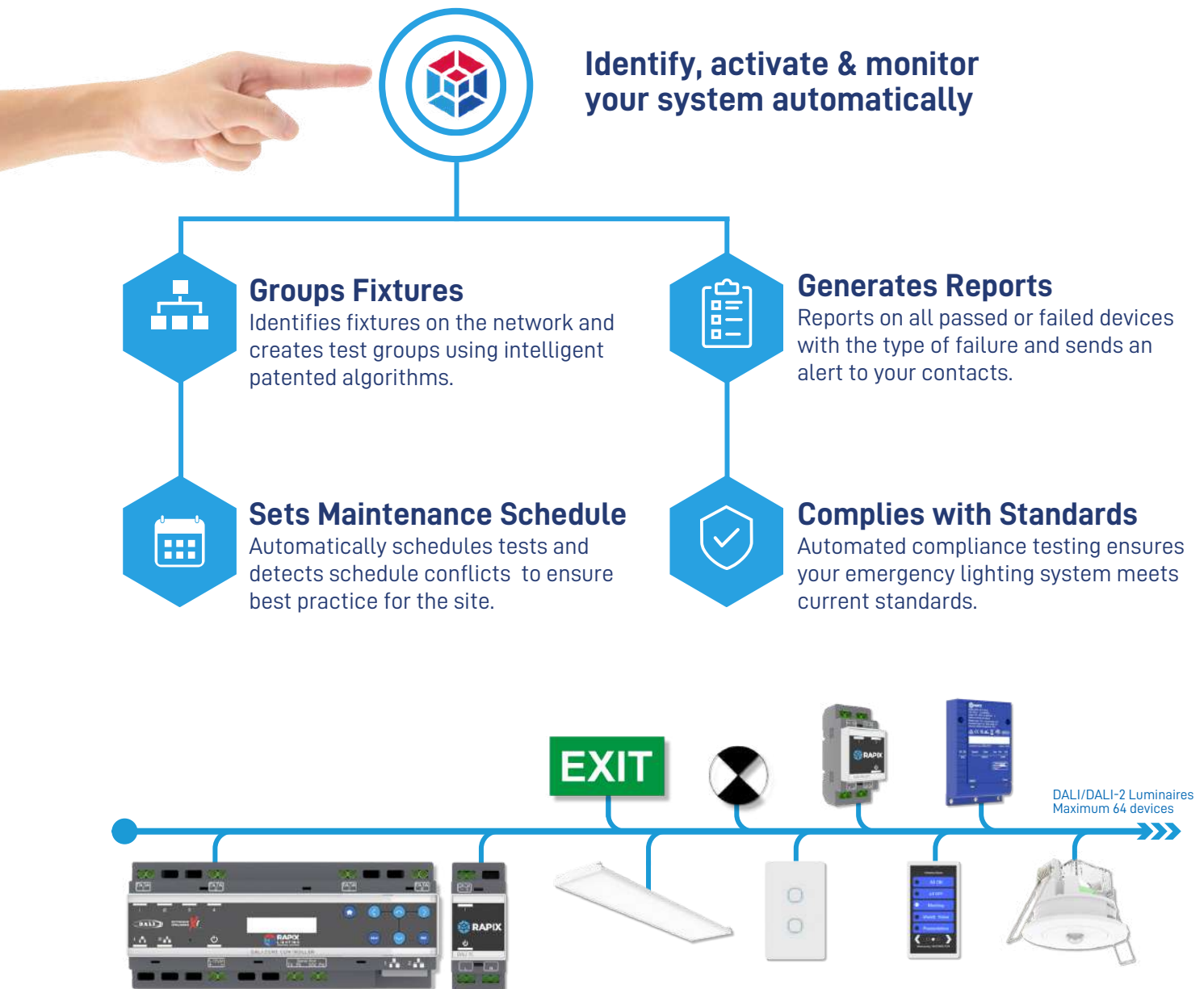
RAPIX provides resilience in the case of failures. Switches and sensors are Application Controllers that operate in their local environment - they control their local DALI line. Zone Controllers monitor switches and sensors, and push anything required to any other required DALI lines. This needs a sophisticated combination of messaging, firmware and software. The end result is a system that can tolerate and operate (albeit with reduced function) in the case of different kinds of system failures.

“Robustness is a key focus for the RAPIX Lighting Control System.



One solution for all your general lighting
and emergency lighting requirements

RAPIX software can monitor and report on the exit and emergency lighting installation.



RAPIX Zero-Commissioning

RAPIX products work straight out of the box

Many RAPIX DALI-2 switches and sensors support RAPIX Zero-Commissioning. If there is no setup or commissioning by DALI-2 or RAPIX Software, then:

- The switch input transmits DALI Broadcast On/Off/Fade; and
- If desired, the movement sensor can be enabled to operate as a 15 minute occupancy function, which transmits DALI broadcast On/Off. When used for this function, the OFF operation of the switch input allows an exit delay.



Features of RAPIX Zero-Commissioning:

LED Modular Switch Range:

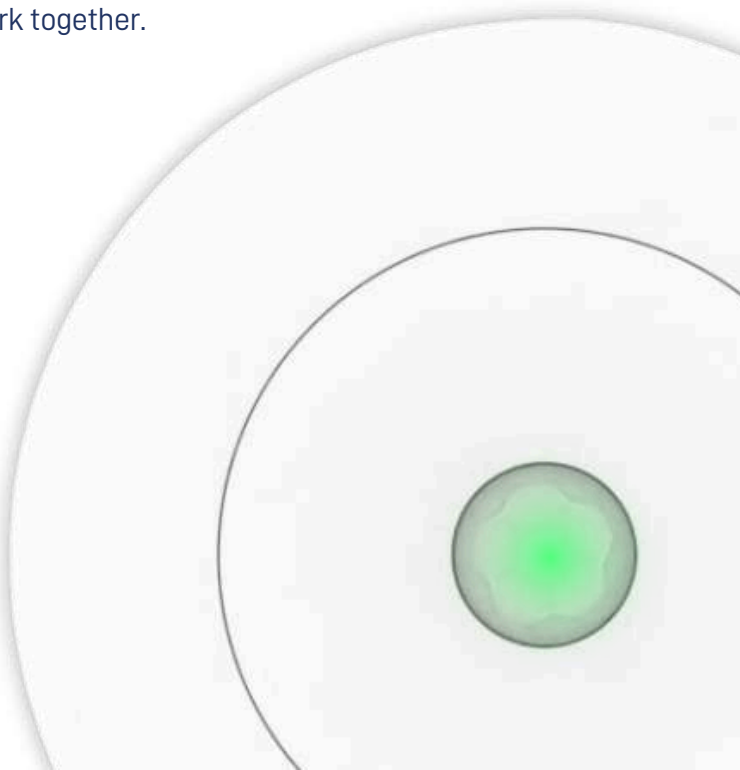
- Push / release to transmit Broadcast ON/OFF. Push and hold to DIM UP/DOWN. Release to terminate the dimming. (Rotaries) Rotate the dial to DIM UP/DOWN, push/release to switch off or to maximum.

LED Movement Sensor Range:

- Unprogrammed sensors are easily located: A green indicator behind the lens is illuminated when the movement sensor has no setup, and RAPIX Zero-Commissioning has not been activated.
- Out of Box movement detection can be enabled using a bright light. When enabled, movement will transmit Broadcast ON, with a 15 minute timeout.
- Multiple sensors can work together.



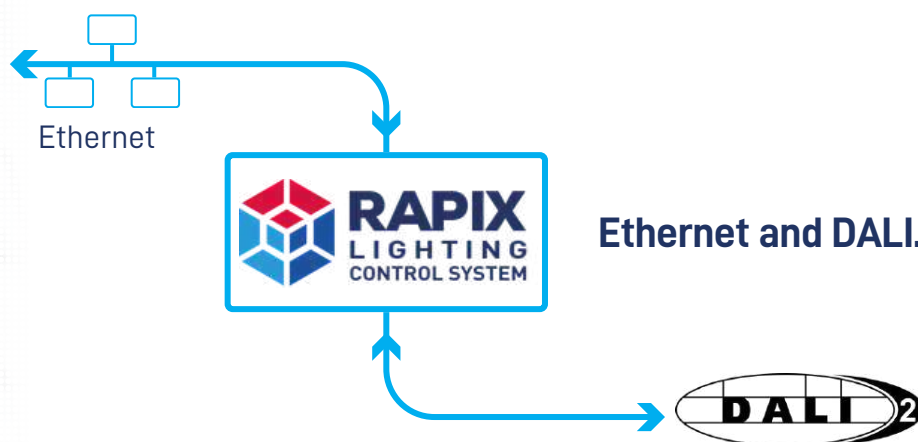
**Lighting Control of
Brilliant Simplicity**





Lighting Control of Brilliant Simplicity

SIMPLE - FAST - SECURE



No additional Bus Systems or Gateways required.

For The Installer

- All lighting, emergencies, sensors and switches connected direct to DALI.
- Low cabling requirements with no need for any other control system.
- Simple and easy-to-install guidelines to reduce potential wiring faults.
- Significant cost savings in cable use by using DALI Relays and Phase Dimmers where required rather than located in the distribution board.
- Ethernet Backbone. No mixing and matching of different bus systems.



THINK DALI-2 THINK RAPIX

For The Building Owner

- One Lighting System for all your general lighting and emergency needs.
- Open Standard for the replacement of fittings from any suitable DALI lighting Manufacturer.
- Preventative Maintenance reports to ensure your tenants satisfaction.
- Scalable and easy to make changes for fit-outs and refurbishments.
- Safe, Secure and Encrypted.



Contact Us Today



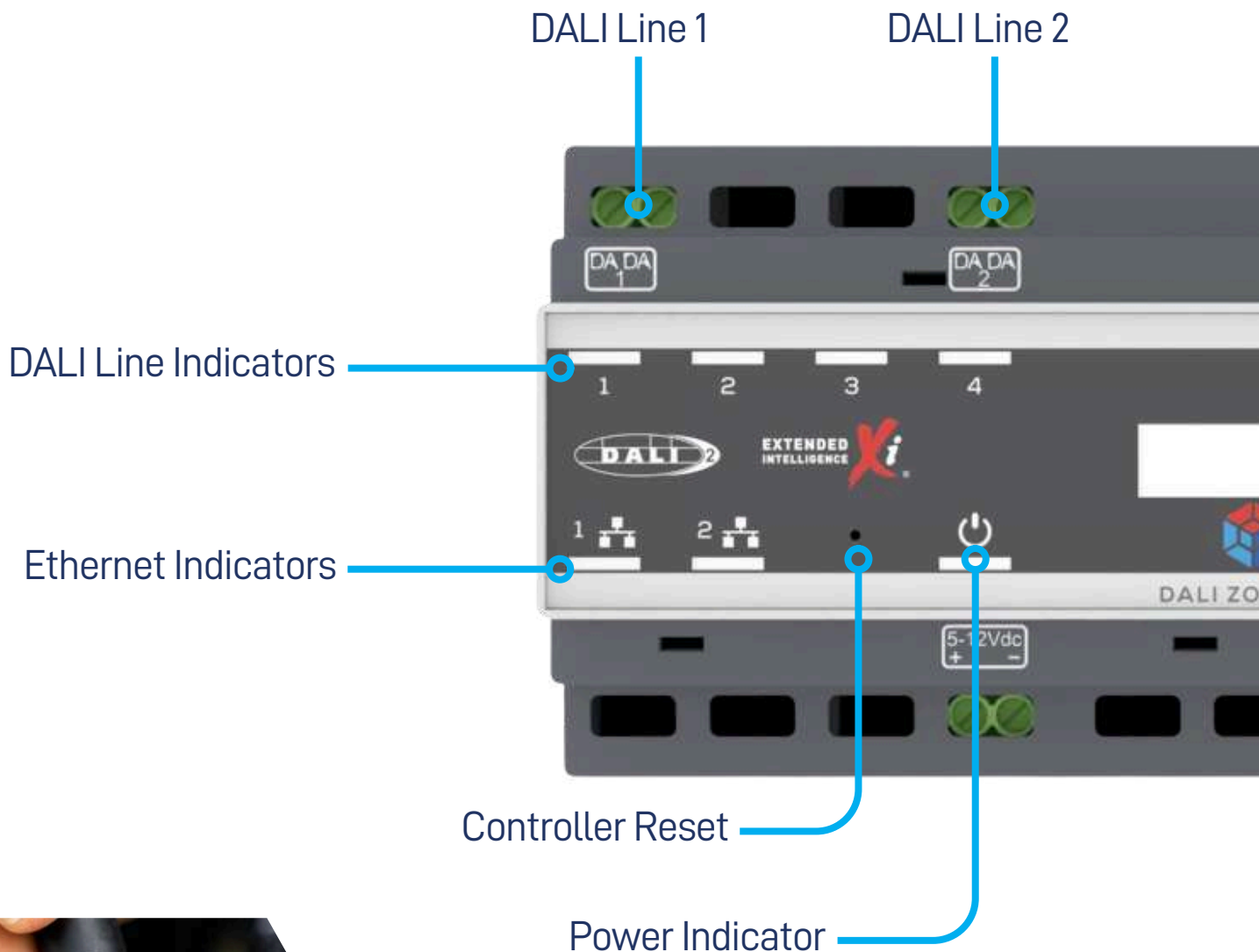
 sales@ozuno.com

 www.ozuno.com

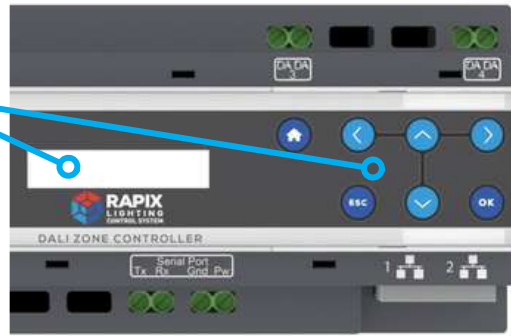
RAPIX DALI-2 Zone Controller

The brilliant simplicity of the RAPIX Lighting Control System helps eliminate the time and money-wasting patchwork of complex integration and post-installation troubleshooting that's often needed to make lighting systems perform as expected.

We provide industry-standard protocols for integration with other systems: Control4, MQTT, Modbus and BACnet. A built in logic engine is available at no additional charge, and a JSON based API over TCP/IP allows seamless integration of third-party systems. Embedded or PC based integration can be quickly and easily achieved while preserving unrivalled information systems security.

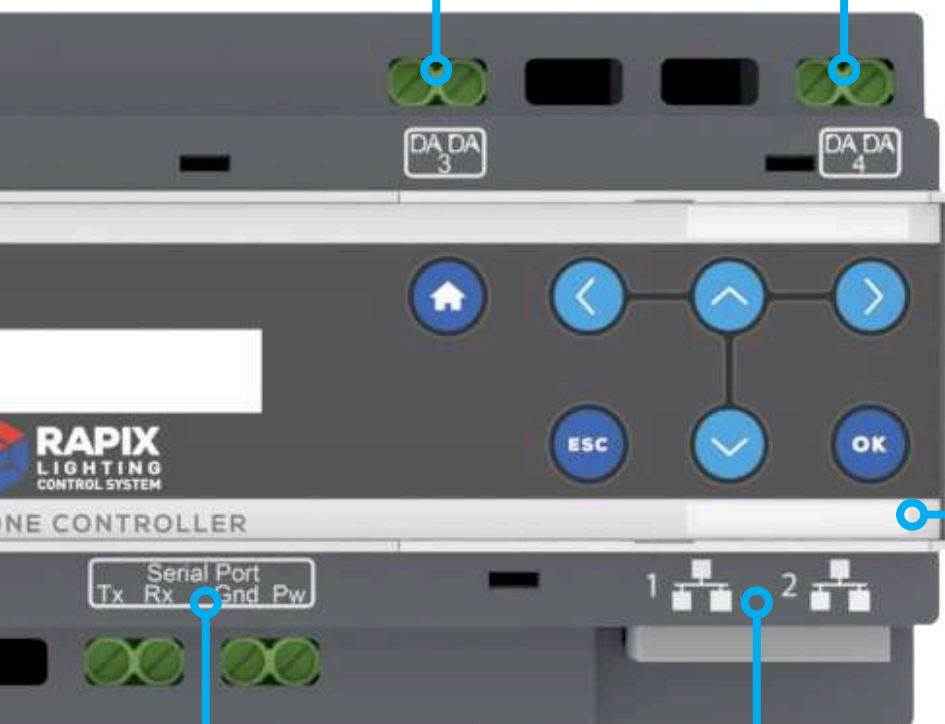


LCD Screen with integrated control buttons provide on-site access with no equipment. No fuss!



DALI Line 3

DALI Line 4



Native Integration built in:

RS232
COMM

json:api

Control4

Modbus
TCP/IP

MQTT

BACnet

Built-in logic engine

Serial RS232 Port

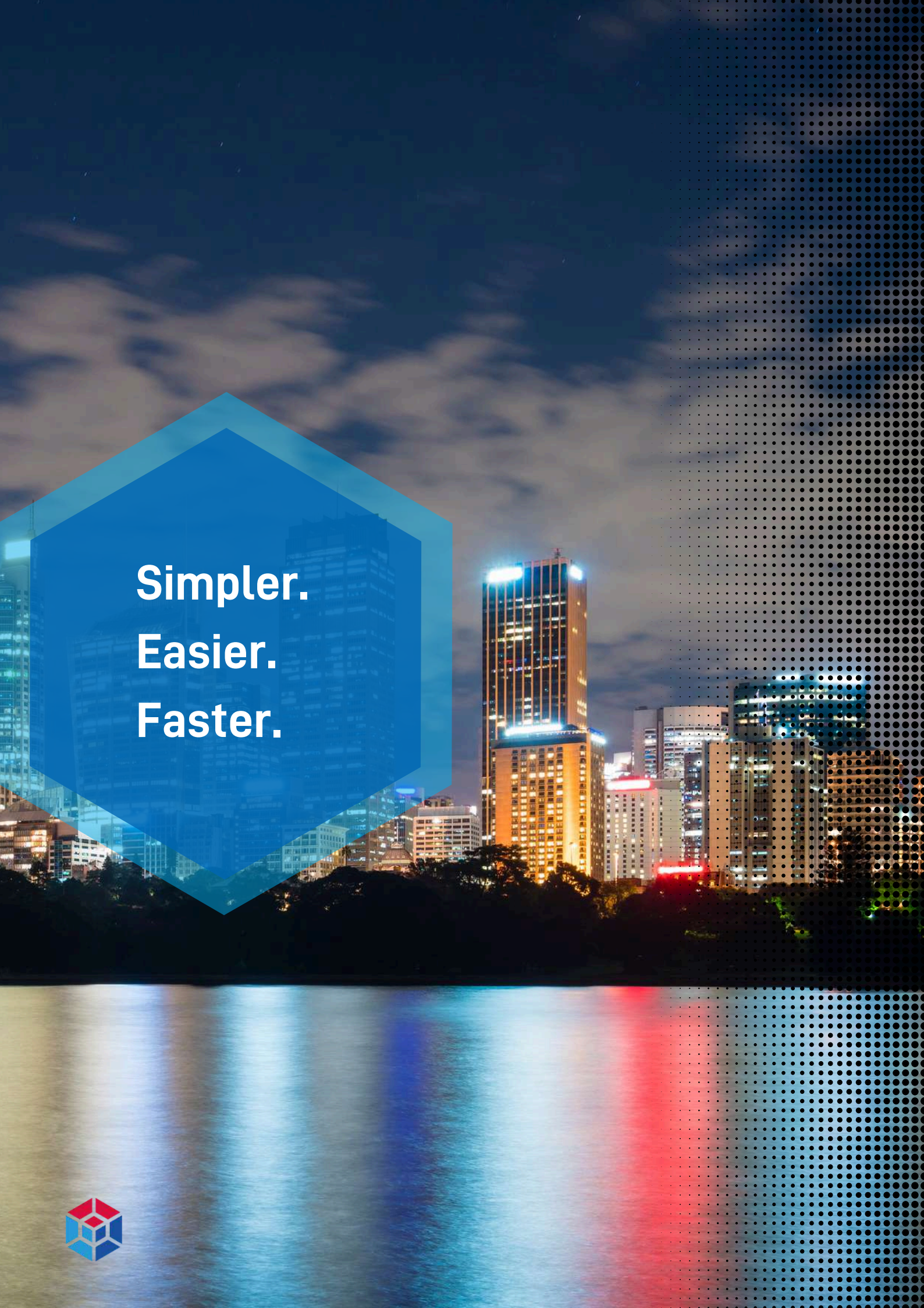
2 x Ethernet Ports



A nighttime photograph of a city skyline, likely Toronto, with the CN Tower visible. The city lights are reflected in a body of water in the foreground. A large blue hexagonal graphic is overlaid on the right side of the image, containing the title and logo.

RAPIX Lighting Control



A nighttime photograph of a city skyline, likely New York City, with the Chrysler Building prominently featured. The city lights are reflected in the water in the foreground. A large, semi-transparent blue hexagon is overlaid on the left side of the image, containing the text 'Simpler. Easier. Faster.' in white. The right side of the image has a black background with a white dot grid pattern.

**Simpler.
Easier.
Faster.**



RAPIX DALI-2 Remote Relays

RAPIX DALI remote relays are designed for on/off switching of up to 16 AX load using DALI commands. The on-board 240 V ac rated relay is capable of switching a full 16 A of LED, fluorescent, incandescent and HID lighting loads at 220-240 V ac, making it suitable for a wide range of commercial and industrial building applications.

The most reliable DALI-2 Relay available

1 and 2 channel versions.

Capable of switching 16 AX @ 240 Vac.

High Inrush current: 500 A (2 ms).

Fits through a 90 mm downlight hole.



Easy wiring terminations
Terminals designed for
2 x 2.5mm² cable size.



RAPIX DALI-2 One & Two Channel Din Mount Relay

RAPIX DALI-2 DIN mount relays are available in one and two channel models and are designed for on/off switching of up to 12 Amps of lighting load.

To maximise contact life, RAPIX DALI-2 relay products include zero cross switching to ensure that for switch-on, the relay contacts are closed at the ac voltage zero-crossing point.

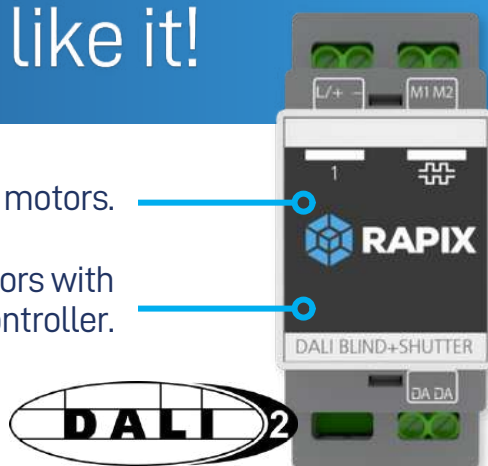
Blind and Shutter Relay

This DIN mounted relay is suitable for the control of ac and dc motors commonly used for curtains, blinds, shutters and tilting shade systems. This relay can be used in any DALI system. Operations include manual control – UP/OPEN, DOWN/CLOSE and STOP. Commissioning options allow proportional control, for example setting the open amount or tilt angle.

The only DALI-2 product like it!

Suitable for blind / shutter / curtain / tilt motors.

Used for garage panel / roller doors with appropriate connection to a door controller.



DALI-2 Phase Dimmer



Trailing Edge phase dimming of lighting loads from received DALI commands.

1 W minimum load.

Two wire dimming device: no Neutral required, only the ac Line (Active) and Load is connected.

Worlds best performing Phase Dimmer for LED lighting loads

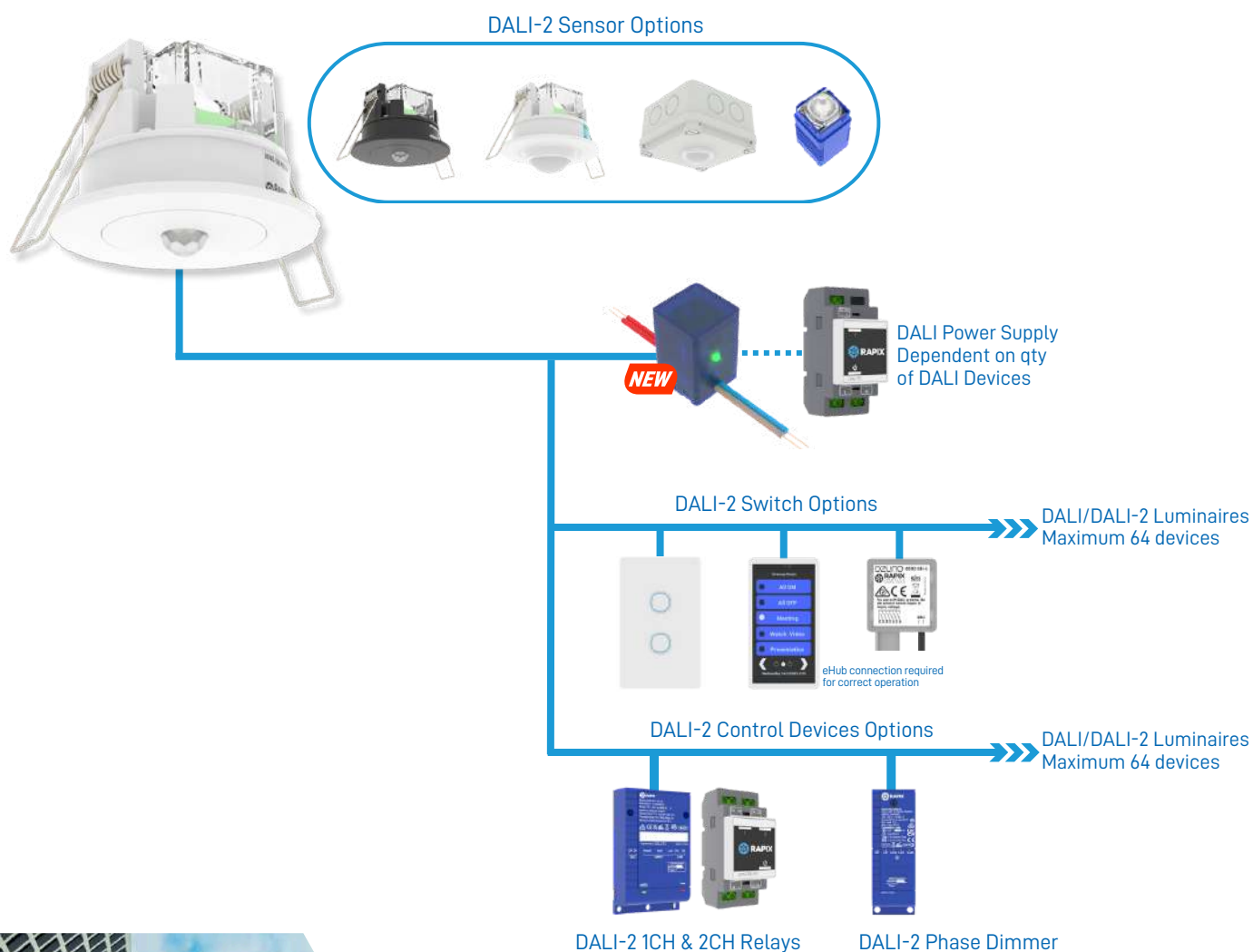


Scalability

Large and small - RAPIX can do it all

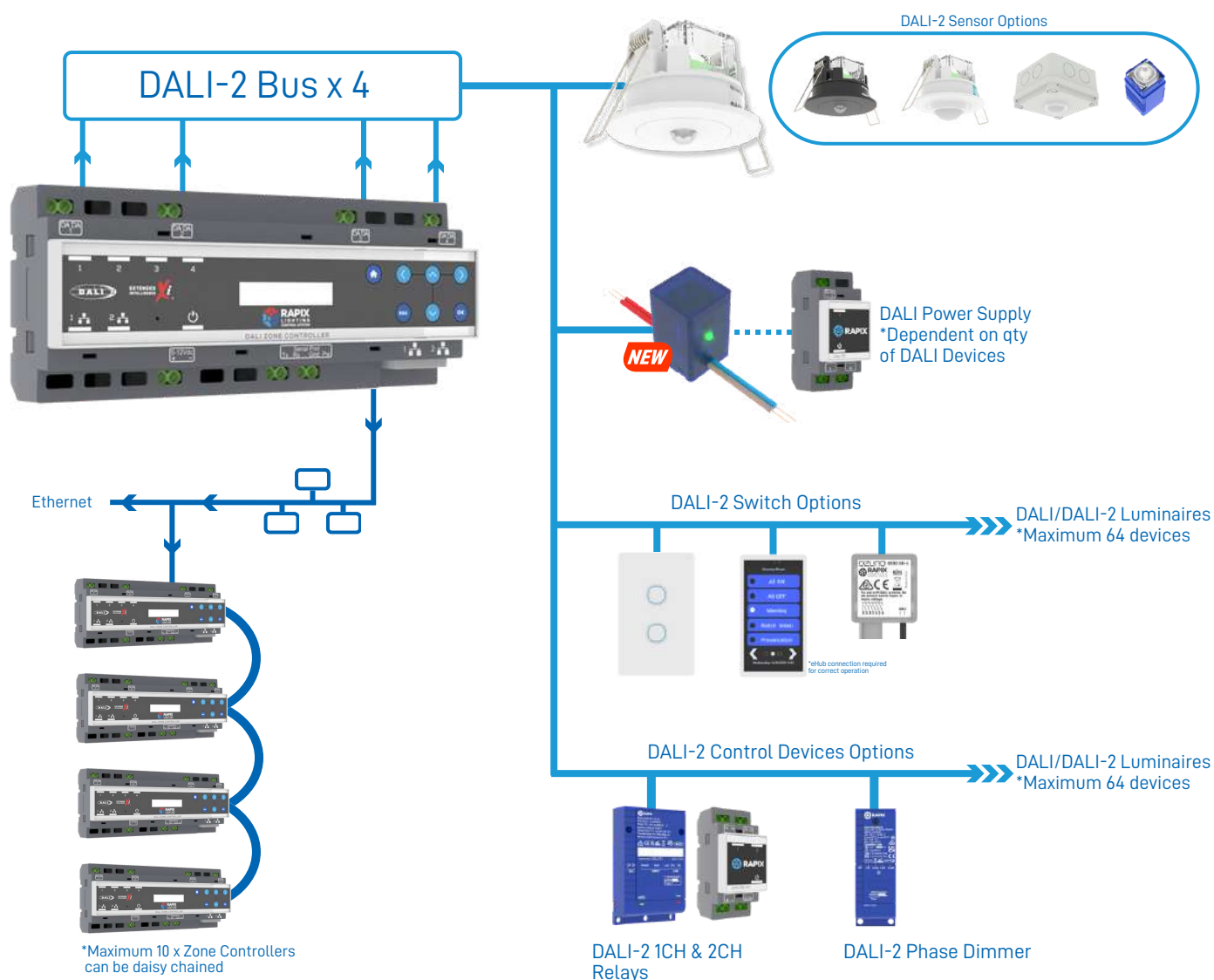
Small sized project

All RAPIX DALI Sensors and Switches have a DALI application controller built in, and can control all DALI and DALI-2 control gear including DALI Type 8. RAPIX DALI-2 switches and sensors are powered from the DALI line and have the lowest power consumption of any products on the market.



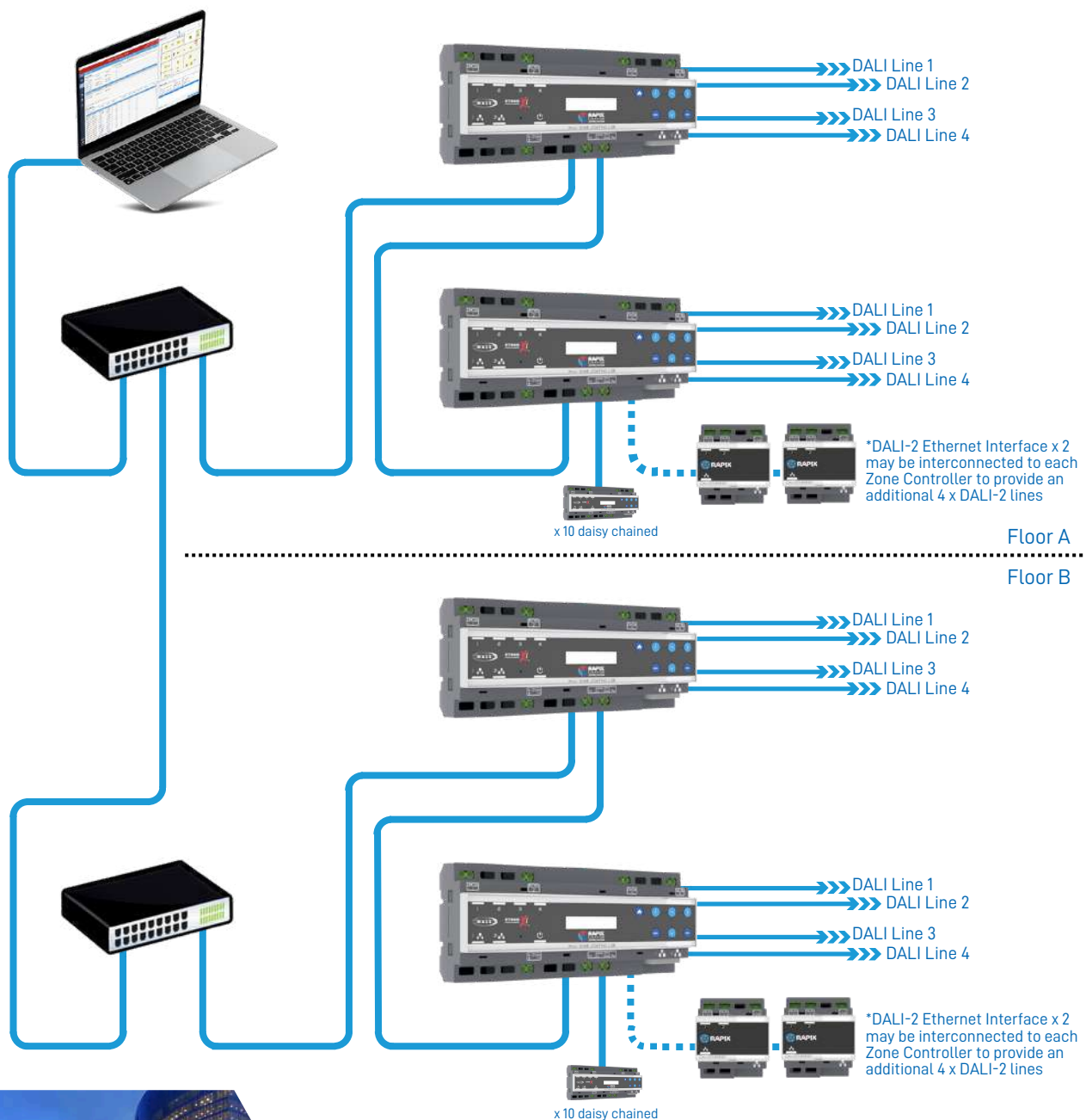
Mid sized project

RAPIX DALI-2 Zone Controllers allow creating a DALI installation that spans multiple DALI lines. Linking by Ethernet then allows a system to expand beyond 4 lines.



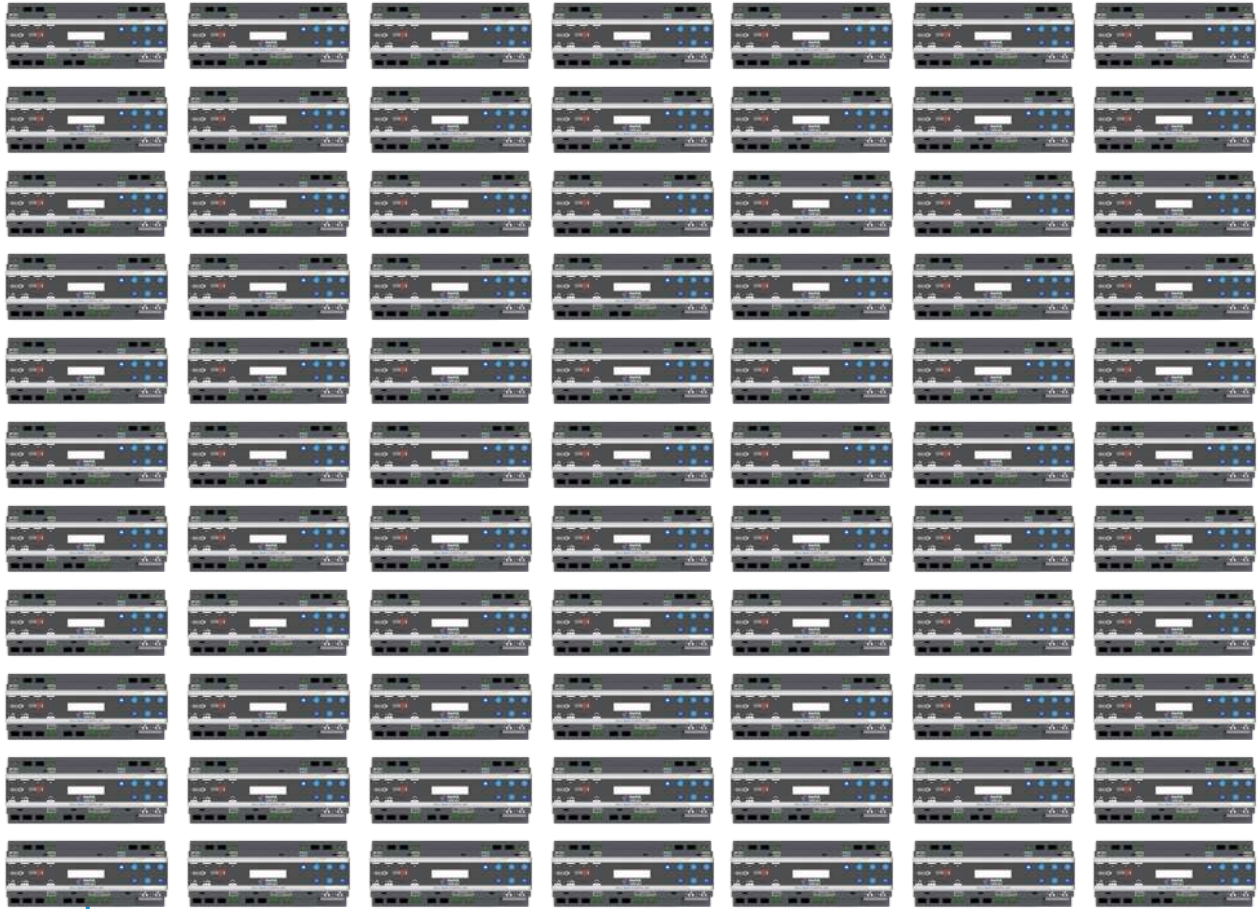
Large sized project

Whether it be an office tower, school, university, hospital, airport or building campus - RAPIX is fully scalable and secure.



Very large sized project

RAPIX can scale up, from large to very large. Simply keep adding Zone Controllers and DALI lines.



RAPIX DALI-2 Modular LED Switch Range

The new Ozuno range of DALI-2 light switches connect directly to the DALI line and include built-in LED indicators. This new range of light switches are available in two push button styles and a rotary, with optional accessories for small and large dials.

Secondary slave push buttons and rotaries can be added allowing up to 2 gangs per master switch unit. These push button and rotary styles can be mixed and matched without limitations. Both push buttons and rotary are compatible with a wide range of switch plates from most major Australia and New Zealand suppliers.

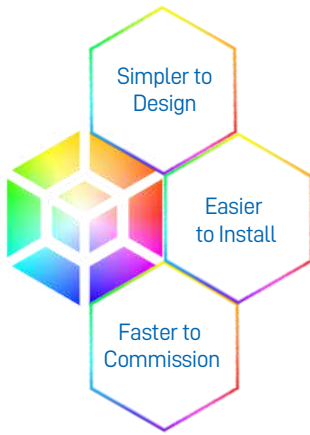
Connects directly to the DALI line



Key Features:

- DALI-2 Certified, can be used with any DALI-2 controller.
- ON / OFF / Dim Up / Dim Down.
- Control both Tuneable White and RGBW Colour .
- Scene Setting / Timers.
- DALI Broadcast out of the box when connected to a DALI power supply.
- LED Backlight and Nightlight Function.
- Fits most Australian and New Zealand Wall Plates.
- Only 4 mA nominal DALI Power Consumption.





RAPIX DALI-2 Switch for **Colour Control**

Looking to add a splash of colour? The RAPIX DALI-2 Modular LED Switch range has your solution covered.

Using the RAPIX Addressing software or the RAPIX Integrator software, you have the ability to customise an RGBW colour solution exactly to your requirements.

RGBW and Tuneable White Control

Powerful **Tuneable White Control** with RAPIX DALI-2 Rotary Switch

Tune into your circadian rhythm with the RAPIX DALI-2 Modular LED Switch Range.

The new RAPIX DALI-2 switch range includes powerful DALI Type 8 Tuneable White control, allowing easy change of colour temperature with push of a button or the spin of a dial.

The adjustment features of these new switches can work stand-alone, or hand in hand with RAPIX DALI Zone Controllers. A Zone Controller can add further features, such as scheduled colour temperature change during each day.



RAPIX Software

A complete suite of products

RAPIX Addressing

One tool for your DALI addressing needs.



RAPIX Integrator

A professional tool for commissioning a RAPIX Lighting Control System.



RAPIX Facilities

One software for all your facility lighting requirements.



RAPIX Emergency

Intelligent DALI Emergency Lighting Monitoring System with 'One Click' commissioning.



RAPIX Desktop

Take control of your lighting from the desktop.



RAPIX Touch

Convert a mobile tablet device into a programmable touch panel.





Simple, Fast and Mobile

RAPIX Addressing is the one tool you need for all your DALI addressing. This tool will allow you to set addresses, groups and scenes for all DALI and DALI-2 devices.

Key features

- DALI-2 address assignment including DALI-2 Control Devices.
- Set Groups and Scenes.
- Go Mobile for faster commissioning.
- Set up a team with multiple addressing tools on a project.
- Address relays, phase dimmers, switches and sensors.
- Can be used to asset addresses for DALI components from any DALI-2 certified manufacturer
- Can be used to address and program single line DALI installations.

Devices required:



DGLMIFU01



FREE software
download



Define lighting Zones across DALI lines

RAPIX Integrator brings you all the features of RAPIX Addressing and then adds the power and functionality to bring the entire installation to life through RAPIX DALI-2 Zone Controllers.

Key features

- Create Zones across DALI lines and Zone Controllers.
- Set Scenes across DALI lines and Zone Controllers.
- Program schedules for time of day use.
- Create enable and disable settings for sensors and switches utilising flags and operating properties.
- Utilise the Logic engine for those requirements that might be a little different.
- 3rd Party Integration built in- JSON API, MODBUS TCP, Control4, MQTT and BACNET IP
- Use the RAPIX template programming system with switches and sensors from any DALI-2 certified manufacturer.



DGOZ-ZONEC-4DA



FREE software
download

Devices required:

A close-up, angled view of a code editor window showing Ruby code. The code includes require statements for 'rspec/rails' and 'capybara/rspec', followed by configuration for Capybara, including setting the driver to :webkit, deleting all categories, and configuring matchers and the test framework. Line numbers 11 through 26 are visible on the left margin.

```
11 require 'rspec/rails'
12 require 'capybara/rspec'
13 require 'capybara/rails'
14
15 Capybara.javascript_driver = :webkit
16 Category.delete_all; Category.create
17 Shoulda::Matchers.configure do |config|
18   config.integrate do |value|
19     with.test_framework :rspec
20     with.library :rails
21   end
22 end
23
24 # Add additional requires below this
25 # Requires supporting rails
26 # spec/support/ and its
27 # run as spec files
28 # in _spec.rb with
29 # run twice.
```



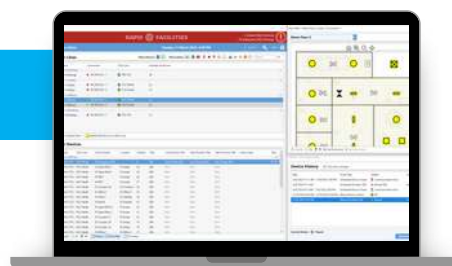
Complete Lighting Maintenance

RAPIX Facilities is your complete lighting control facilities maintenance software. Designed for the building owner and building manager, this software provides all the features required to maintain your entire lighting installation.

Key features

- View the status of all DALI and DALI-2 Devices.
- Click on a device to pull up the location directly on the floor plan view.
- View the location and history of all devices.
- Visualise the entire project with floor plans.
- View all test schedules, including device checks and all exit and emergency tests.
- Edit and make changes to lighting schedules throughout the building.
- Edit and make changes to scenes.
- View all test and repair reports.

Devices required:



DGOZ-ZONEC-4DA



Software licence
required



One Click Commissioning

RAPIX Emergency is the intelligent DALI Emergency Lighting System with One Click commissioning and is a complete monitoring and reporting solution for your emergency lighting installation.

Key features

- Connect & auto-scan DALI lines.
- Auto-addresses DALI devices.
- Identify all Emergency DALI devices.
- Groups fixtures.
- Set maintenance schedule.
- Generates automated reports.
- Auto-emails reports.
- Password protected access control.
- Scalable solution.
- Import project from other RAPIX software tools.
- FREE SOFTWARE.



DGOZ-ZONEC-4DA

OR



DGLMIFE02



Devices required:



FREE software
download



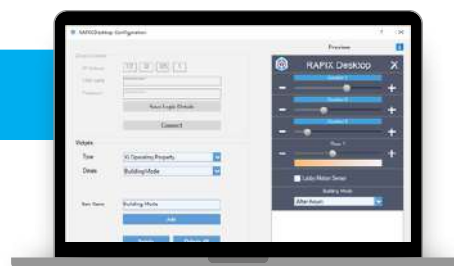
Control your lights from the desktop

RAPIX Desktop gives you and your team to control the lights directly from their computer. This might be just to dim the light above or to turn off a group of lights around them. Give users the ultimate flexibility to ensure they are comfortable in their environment.

Key features

- Set lighting levels.
- Turn on or off groups and zones.
- Set scenes.
- Set colour temperature of the lighting.
- Set RGBW lighting.
- Set system modes; eg after hours.
- Enable or disable sensors and switches.

Devices required:



DGOZ-ZONEC-4DA



FREE software
download





Conveniently control with a simple touch

RAPIX Touch - the modern touch screen solution for commercial environments. Utilising the windows operating system, RAPIX touch creates a simple but intelligent touch screen application for all your lighting control requirements.

Key features

- Control and monitor many aspects of a RAPIX Lighting Control System.
- Adjust lighting levels.
- Change colour temperature.
- Set RGB or RGBW colour.
- Shutter, curtain and blind control.
- Activate scenes.
- Change building system modes.
- Enable / Disable features, such as sensors.
- Edit schedules and scenes.
- Many theme colours and style options.
- Multi-page, including lock screen.
- Widget based user experience.



DG0Z-ZONEC-4DA



Devices required:



Software licence
required



RAPIX PRODUCTS



DALI USB Interface



DALI Interfaces



DALI Relays & Dimmers



RAPIX Sensors



DALI Switches



Learn more



DALI-2 USB Addressing Tool

■ DGLMIFU01

Key Features:

- RAPIX Addressing allows simple and fast DALI Short Address commissioning from a PC and mobile device.
- RAPIX Addressing allows assignment and change of DALI Short Addresses for DALI Lighting & Emergency Control Gear, as well as DALI-2 switches and sensors.
- Allows fast and easy connectivity and basic operation testing for units on a DALI line without a PC.
- Buttons allow all units on a DALI line to be manually toggled ON and OFF, faded UP and DOWN (if the control gear allows) and cycled ON / OFF.
- Connects directly to a PC with the supplied USB lead.
- Separate LED indicators for DALI communications, DALI line power, USB connectivity, DALI device cycle.
- Rugged, hand held device housed in a protective silicon case.
- Designed and manufactured in Australia.



Leave the switchboard behind.
Go mobile with RAPIX Addressing.



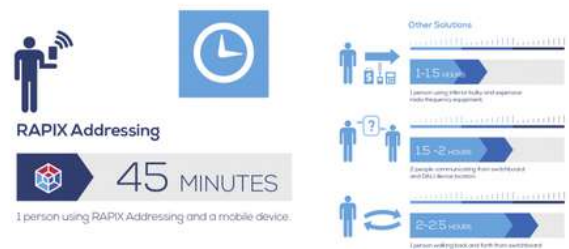
- STEP 1 RAPIX DALI USB INTERFACE DEVICE**
The intelligent hardware required for connection between a computer and DALI network.
- STEP 2 RAPIX ADDRESSING SOFTWARE**
A simple and intuitive interface for quick and easy addressing of DALI devices on a network.
- STEP 3 GO MOBILE WITH WI-FI**
The RAPIX software works directly on the mobile device's web browser without the need to download an app.



Simply scan the QR code from the PC screen to connect your mobile device.



The typical time taken to address a DALI line with RAPIX Addressing



Interfaces



Learn more



DALI-2 Zone Controller

Certified to DALI standards IEC 62386-101 Ed 2 and IEC 62386-102 (DALI-2)

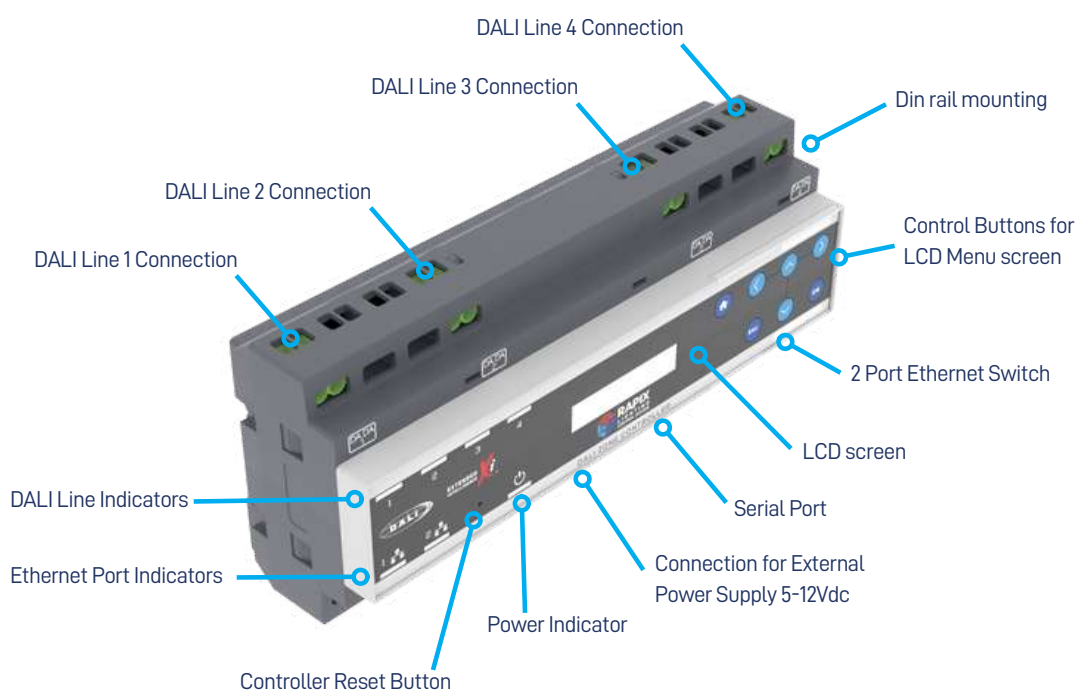
Available in both 2 channel and 4 channel models

■ DGOZ-ZONEC-4DA
4 Channel

■ DGOZ-ZONEC-2DA
2 Channel

Key Features:

- 12M wide DIN rail mounted embedded controller.
- Direct connect for up to four (4) DALI lines (two DALI lines on DGOZ-ZONEC-2DA).
- Two Ethernet ports with in-built Ethernet switch for daisy chain connections.
- Zone creation – Zones being collections of DALI lines and / or DALI Groups and / or DALI Short Addresses.
- Scene control across all connected Zone Controllers and DALI lines.
- Includes embedded Logic Engine using C# programming language.
- External connectivity using REST API, JSON API, Modbus and MQTT.
- Configured using the FREE RAPIX Integrator software tool.
- Generous terminals allow terminating 3 x 1.5 mm² or 2 x 2.5 mm² conductors (solid or stranded).



Native Integration in-built:



json:api

Control4



MQTT





Learn more



DALI-2 Two Channel Ethernet Interface

Certified to DALI-2 standards IEC 62386-101 Ed 2 and IEC 62386-103 (DALI-2)

■ DGLMIFE02

Key Features:

- Supports two DALI lines, each line can have up to 64 DALI addressable units such as LED drivers, Emergency Lighting Drivers, Phase Dimmers, Relays and more.
- Up to two of these Ethernet Interfaces can be used with a Zone Controller to add 1 to 4 extra DALI lines to each Zone Controller.
- 2 mA current draw on each DALI line.
- Operates with 10 / 100 / 1000 Mbits / sec twisted pair network types.
- Generous terminals allow terminating 3 x 1.5 mm² or 2 x 2.5 mm² conductors (solid or stranded).



Learn more



RAPIX DALI eHub Application Controller

Complies with DALI standards IEC 62386-101 and IEC 62386-102

■ DGOZ-EHUB-4G-2S

Key Features:

- Powered via external 12 V dc SELV power supply (Australia pinout version included).
- Sockets for quick and easy input peripheral connection.
- Stores all logical operations and processing for peripherals.
- Allows plug-and-play for peripherals of the same type (sensor or human interface).
- Segregated terminal block for DALI line connections.
- LED indicators for power, DALI and Ethernet.
- Supports the RAPIX LCD Switch.
- Up to 8 Schedules, each supporting 1 or more days per week.

DALI Power Supplies



Learn more



RAPIX DALI-2 Power Supply

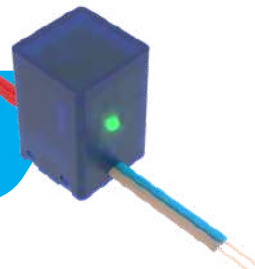
■ DGLMPS01

Key Features:

- Delivers the largest possible DALI line current, ensuring limits are not exceeded.
- Indicators show the state of the mains supply and the DALI line.
- Nominal rated load current for the DALI Power Supply is 238 mA; and guaranteed minimum current 225 mA.
- Robust design and suitable for high temperature environments.
- DIN rail mounted.
- Certified to DALI-2 standard IEC 62386-101 (Ed 2).



Learn more



RAPIX DALI-2 Miniature Power Supply

■ DGOZ-DPSM

Key Features:

- A DALI-2 compliant power supply for small installations.
- Transparent case design to aid displaying indicators show the state of the mains supply and the DALI line.
- Nominal rated load current for the DALI Power Supply is 50 mA.
- Robust design and suitable for high temperature environments.
- Suitable for mounting in wall cavities or ceiling voids.
- Complies with DALI-2 standard IEC 62386-101 (Ed 2).

Relays and Dimmers



Learn more



*Max 16A load

RAPIX DALI-2 One & Two Channel Relay

■ DGOZ-RLY-16A-01
1 Channel

■ DGOZ-RLY-10A-02
2 Channel

Key Features:

- General purpose load switching (ON and OFF) using received DALI commands.
- Capable of switching 16 AX @ 100-240 V ac (2 Channel version: 10 AX).
- High Inrush current: 500A (2 ms).
- Large Neutral and Earth termination bars.
- Suitable for mounting in a ceiling void, or can be DIN rail mounted using optional bracket.
- Zero crossing detection to maximise relay contact life.
- Fits through a 90 mm downlight hole.
- LED indicators (DALI and Power connections).
- Can be included in up to 16 DALI Group Addresses and/or up to 16 DALI Scenes.
- DALI Short Address, Group Addresses and DALI Scenes are configured using RAPIX Addressing or RAPIX Integrator software.
- Can also be commissioned using other DALI commissioning software that supports DALI Device Type 7.



Available Soon: Two channel, 16A, DALI-2 version. Order code: DGOZ-RLY-16A-02



Learn more



*Max 12A load

RAPIX DALI-2 One & Two Channel Relay - Din Mount

■ DGOZ-DINRLY-12A-01
1 Channel

■ DGOZ-DINRLY-12A-02
2 Channel

Key Features:

- General purpose load switching (ON and OFF) using received DALI commands.
- Capable of switching 12 AX @ 240 V ac per channel.
- High Inrush current: 500A (2 ms).
- Zero crossing detection to maximise relay contact life.
- LED indicators (DALI and Power connections).
- Can be included in up to 16 DALI Group Addresses and/or up to 16 DALI Scenes.
- DALI Short Address, Group Addresses and DALI Scenes are configured using RAPIX Addressing or RAPIX Integrator software.
- Can also be commissioned using other DALI commissioning software that supports DALI Device Type 7.

Relays and Dimmers



Learn more



DALI-2 Blind and Shutter Relay - Din Mount

■ DGOZ-DINBSR-01

Key Features:

- Suitable for blind / shutter / curtain / tilt motors.
- May also be used for garage panel and roller doors with appropriate connection to a door controller.
- Can be used with both ac and dc motors *see ratings on datasheet.
- LED indicators (DALI and Output On).
- Button control UP/OPEN, DOWN/CLOSE and STOP.
- Proportional control for amount open or tilt angle in increments of 1% (when commissioned using RAPIX Addressing or RAPIX Integrator software).



Learn more



DALI-2 DALI-2 Adaptive Phase Dimmer

■ DGOZ-DM-400W-01

Key Features:

- Trailing Edge Phase dimming from received DALI commands.
- Optimised for dimmable LED lighting loads.
- Suited to lighting loads up to 500 W (at 40 °C ambient) and 400 W (at 50°C ambient).
- 1 W minimum load.
- Two wire dimming device: no Neutral required, only the ac Line (Active) and Load is connected.
- Nominal mains voltage 220 – 240 V ac, 47 – 53 Hz.
- Uses a single DALI Short Address, and can be included in up to 16 DALI Group Addresses and/or up to 16 DALI Scenes.
- DALI Short Address, Group Addresses and DALI Scenes are configured using RAPIX Addressing, Integrator or any other DALI commissioning software.



Learn more



DALI-2 One Channel Voltage Free Relay

■ DGOZ-LPVFR-11

Key Features:

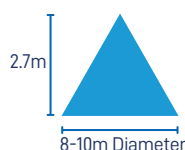
- General purpose load switching (ON and OFF) using received DALI commands.
- Suitable for ac and dc loads up to 1 A, including all lighting load types and lower power motors such as exhaust and ceiling fans.
- For ac loads, performs zero-crossing switching to minimise stresses in the load and reduce inrush currents.
- Can be used with SELV and dc loads up to 24 V dc.
- Suitable for low power / low current voltage-free interface functions wherever an isolated relay contact is required.
- Includes over-temperature, overload and short circuit protection.
- Uses a single DALI Short Address; can be including in up to 16 DALI Group Addresses and/or up to 16 DALI Scenes.
- Configured using RAPIX Addressing or RAPIX Integrator software, or any software that supports DALI Device Type 7.



Learn more



Max Mounting Height - 2.7m
Max Detection Diameter - 8-10m



Available in Black. Order code: DGOZ-SEN-PRLLSW-BK
(4 mA current draw)

DALI-2 8m Movement and Light Level Sensor

■ DGOZ-SEN-PRLLSW

Key Features:

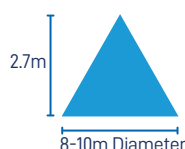
- Only 2 mA current drawn from DALI.
- Light Level measurement 0 – 65000 lux.
- 55 mm diameter, suits hole saws 57 – 67 mm.
- External voltage free input suits all switch types and voltage free motion sensors.
- Generous terminal sizes for easy DALI connection, allowing loop-in / loop-out.
- Large cable strain relief for easy installation.
- Transparent wiring cover for easy inspection of the cable connection while preserving safety isolation.
- Surface mount adaptor available, suited to 50 mm and 60 mm screw mounting centres.



Learn more



Max Mounting Height - 2.7m
Max Detection Diameter - 8-10m



DALI-2 8m Movement Sensor

■ DGOZ-SEN-PRSW

Key Features:

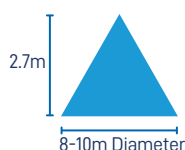
- Only 2 mA current drawn from DALI.
- 55 mm diameter, suits hole saws 57 – 67 mm.
- External voltage free input suits all switch types and voltage free motion sensors.
- Generous terminal sizes for easy DALI connection, allowing loop-in / loop-out.
- Large cable strain relief for easy installation.
- Transparent wiring cover for easy inspection of the cable connection while preserving safety isolation.
- Surface mount adaptor available, suited to 50 mm and 60 mm screw mounting centres.



Learn more



Max Mounting Height - 2.7m
Max Detection Diameter - 8-10m



DALI-2 Miniature Movement and Light Level Sensor

■ DGOZ-SEN30-PRLLSW

Key Features:

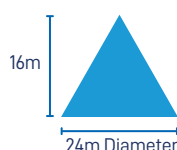
- Miniature form factor for fitment in wall plates or luminaires.
- Only 4 mA current drawn from DALI.
- A RAPIX DGOZ-DSW30S-Px push button slave switch can be connected.
- Requires strain relief for cable terminations.
- Designed in conjunction with miniature DALI-2 power supply launching 2024.



Learn more



Max Mounting Height - <16m
Max Detection Diameter - 24m



DALI-2 Long Range Movement and Light Level Sensor

■ DGOZ-LRS-PRLLSW

Key Features:

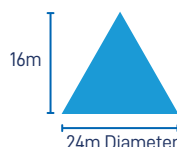
- Suited to warehouses and industrial applications for indoor use .
- Only 4 mA current drawn from DALI.
- 55 mm diameter, suits hole saws 57 – 67 mm.
- External voltage free input suits all switch types and voltage free motion sensors.
- Generous terminal sizes for easy DALI connection, allowing loop-in / loop-out.
- Large cable strain relief for easy installation.
- Transparent wiring cover for easy inspection of the cable connection while preserving safety isolation.
- Surface mount adaptor available, suited to 50 mm and 60 mm screw mounting centres.



Learn more



Max Mounting Height - <16m
Max Detection Diameter - 24m



DALI-2 IP65 Long Range Movement and Light Level Sensor

■ DGOZ-SEN-PRLLSW-IP

Key Features:

- IP65 rated for water ingress and impact protection.
- Only 4 mA current drawn from DALI.
- External voltage free input suits all switch types and voltage free motion sensors.
- Generous terminal sizes for easy DALI connection, allowing loop-in / loop-out.
- Large cable strain relief for easy installation.
- Transparent wiring cover for easy inspection of the cable connection while preserving safety isolation.



Learn more



DALI-2 Outdoor Light Level Sensor

■ DGOZ-SEN-LL65

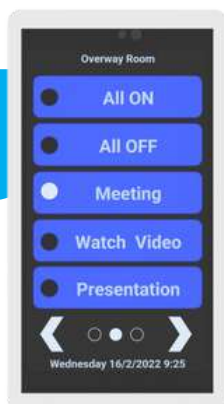
Key Features:

- DALI-2 certified outdoor light level measurement.
- IP65 rating.
- DALI sunset switch or other exterior light level control functions.

Touch Screens



Learn more



■ DGOZ-TCSW-LR50-WH



LCD 5" Capacitive Touchscreen - White trim

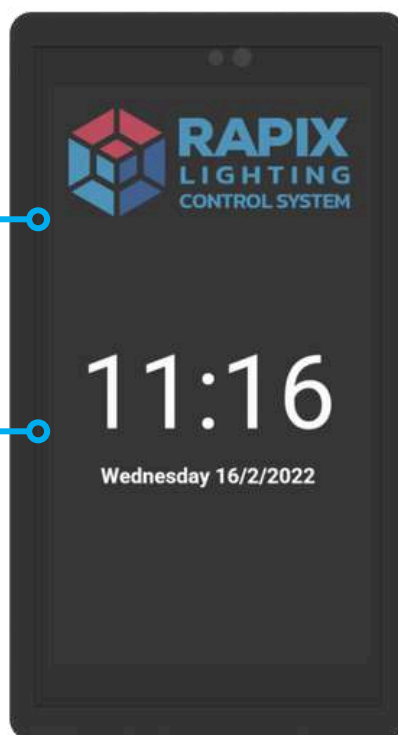
Key Features:

- 5" colour LCD with capacitive touch.
- Up to 20 software configurable control buttons.
- Optional date and time display.
- Lock screen, including DALI-system wide lock by flag with optional PIN code.
- Optional beep when touched.
- Customisable button text with Unicode support.
- Can show progress of fading operations (up, down) and timer operations.
- Optional fall-back page which can be configured to show a blank page, date and time, or a user-defined logo.
- Configurable screen brightness and automatic brightness control based on timeout after a touch.
- Proximity sensing for automatic brightness control and change from the fallback page to showing buttons.

Black trim available. Order code: DGOZ-TCSW-LR50-BK.

Optional fall-back page can be configured with user-defined logo.

Up to 20 configurable buttons.



Capacitive Touch Technology



Configurable and Customisable

Switches



Learn more



■ DGOZ-DSW30M-PC

DALI-2 LED Classic Push Button - Master

Key Features:

- Software configurable white LED. (Optional – Orange, Blue, Green, Clear bezels available).
- Fits common wall switch apertures.
- Master RAPIX modular switches connect directly to the DALI Line.



Learn more



■ DGOZ-DSW30S-PC

DALI-2 LED Classic Push Button - Slave

Key Features:

- Software configurable white LED. (Optional – Orange, Blue, Green, Clear bezels available).
- Fits common wall switch apertures.
- Slave RAPIX modular switches connect to a Master and are powered from the Master.



Learn more



■ DGOZ-DSW30M-PD

DALI-2 LED Diva Push Button - Master

Key Features:

- Software configurable white LED. (Optional – Orange, Blue, Green, Clear bezels available).
- Fits common wall switch apertures.
- Master RAPIX modular switches connect directly to the DALI Line.



Learn more



■ DGOZ-DSW30S-PD

DALI-2 LED Diva Push Button - Slave

Key Features:

- Software configurable white LED. (Optional – Orange, Blue, Green, Clear bezels available).
- Fits common wall switch apertures.
- Slave RAPIX modular switches connect to a Master and are powered from the Master.



Learn more



DALI-2 LED Modular Switches Accessories

Key Features:

- Easy switch out / exchange of the standard white / clear / small dial options allowing use of colour options if desired.

Black Push Button Dolly – Classic Style
Green Push Button Bezel
Orange Push Button Bezel
Blue Push Button Bezel
Large White Dial with Clear Ring
Large Black Dial with Clear Ring
Large Green Rotary Grip Ring
Large Orange Rotary Grip Ring
Large Blue Rotary Grip Ring
Small Black Dial with Clear Ring
Small Green Rotary Grip Ring
Small Orange Rotary Grip Ring
Small Blue Rotary Grip Ring

DGOZ-DSW30ACC-PBB
DGOZ-DSW30ACC-GB
DGOZ-DSW30ACC-OB
DGOZ-DSW30ACC-BB
DGOZ-DSW30ACC-LDW
DGOZ-DSW30ACC-LDB
DGOZ-DSW30ACC-GRL
DGOZ-DSW30ACC-ORL
DGOZ-DSW30ACC-BRL
DGOZ-DSW30ACC-SDB
DGOZ-DSW30ACC-GRS
DGOZ-DSW30ACC-ORS
DGOZ-DSW30ACC-BRS

Switches



Learn more



■ DGOZ-DSW30M-RT

DALI-2 LED Rotary - Master

Key Features:

- Software configurable white LED. (Optional – Orange, Blue, Green, Clear bezels and grip rings available).
- Supplied with Clear Grip Ring.
- Fits common wall switch apertures.
- Master RAPIX modular switches connect directly to the DALI Line.



Learn more



■ DGOZ-DSW30S-RT

DALI-2 LED Rotary - Slave

Key Features:

- Software configurable white LED. (Optional – Orange, Blue, Green, Clear bezels and rings available).
- Supplied with Clear Grip Ring.
- Fits common wall switch apertures.
- Slave RAPIX modular switches connect to a Master and are powered from the Master.



Learn more



■ DGOZ-USI-6

DALI-2 Universal Switch Input

Key Features:

- 6 inputs for switches or voltage free contacts.
- Easily visible DALI indicator and identification indicator to allow locating the device during installation.
- Only 4 mA current drawn from DALI.



Learn more



■ DGOZ-DINUSI-6

DALI-2 DIN mount Universal Switch Input

Key Features:

- 6 inputs for switches or voltage free contacts.
- Easily visible DALI indicator and identification indicator to allow locating the device during installation.
- Only 4 mA current drawn from DALI.



RAPIX

LIGHTING CONTROL SYSTEM

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Version 1 February 2024

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