EELECTRON HIGHLIGHTS 2024

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IN JUST 30 MINUTES

DEC 10th 2024 SESSION

Welcome!

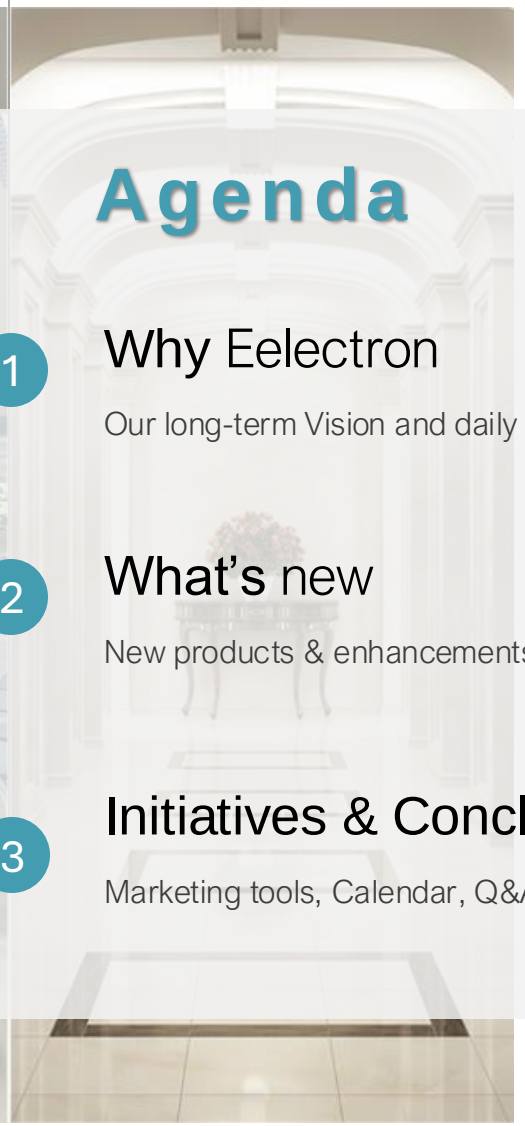
Legnano & Bangkok, Dec 10th 2024

Jamel Nacef

TECHNICAL MANAGER APAC

Andrea Pontoglio

PRODUCT SPECIALIST



Agenda

1. **Why** Eelectron
   Our long-term Vision and daily Committment
2. **What's** new
   New products & enhancements
3. **Initiatives & Conclusions**
   Marketing tools, Calendar, Q&A - Feedback

TO OUR PARTNERS AND CUSTOMERS

2024 COMPANY SUMMARY PROFILE

eelectron

BUILDING **AND HOME** EVOLUTION

The growing interconnection among individuals creates a future where technology is not just a tool but an integral part of daily life.

.... SINCE 1995

A team for Design & Tech Company

People: 70 across 5 locations

2 R&D Production Eelectron Italy and IPAS Germany

ISO 9001 since **2006**, ISO14001 Sept **2024**

Selling In **90+** Countries

Evolving portfolio for continue contribution to

UX for Occupants| 9 Design awards across 5 switch & sensors lines, all customizable

Energy & Green | 350+ intelligent connected devices, **100%** tested in production

Smart Buildings | 2 secure global standards for building applications KNX & DALI

Enabling Applications | Since **2016** products with 2 Mobile & Digital standards MQTT & BLE

CONTRIBUTING TO SMART BUILDING BY TYPE :

Hotels, Student Houses, ...

Offices, Business Centres,...

Schools, Campuses, ...

Residential, Mixed Use,.

Hospitals, Residential Homes, ...

Logistics Centres, Data Centres

Other Buildings

eelectron®

OCCUPANT USER EXPERIENCE

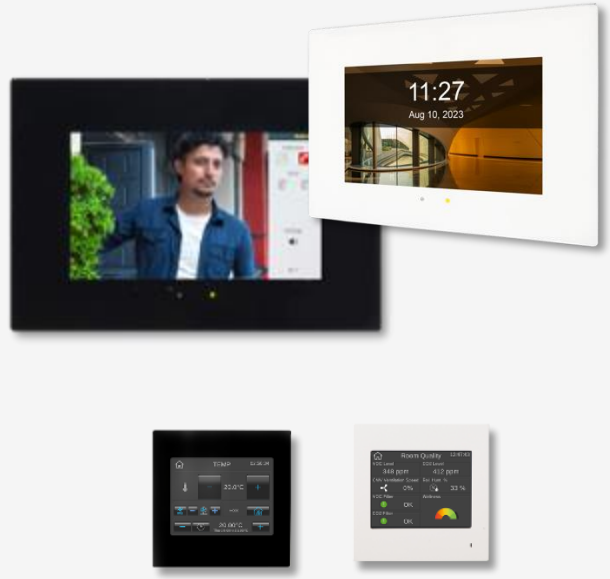
UX HIGHLIGHT

2024

Portfolio: continuous UX evolution for occupants and owners

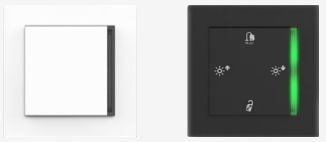
eelecta

Custom Touch UX



Customizable Switches & Multi functions T, H, Co_2 Sensors, Guest Access Control,…

3025



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DESIGN PLUS
powered by light+building

OLU

BETTER LIVING FOR ALL
BETTER LIVING FOR ALL
BETTER LIVING FOR ALL
BETTER LIVING FOR ALL
BETTER LIVING FOR ALL
BETTER LIVING FOR ALL
BETTER LIVING FOR ALL
BETTER LIVING FOR ALL

eelectron®

Why OL-U

TRANSVERSALITY

OL-U is a state-of-the-art product naturally designed for KNX, the secure and connected international standard.

Engineered for cross-functional solutions, it can meet a wide range of demands, from private residential to contract applications. All this is made possible through various models, configurations, finishes, materials, installation standards, and sockets.

STYLE

The Italian design is always well noted. Ideation, R&D and production are key elements for distinctive solutions, demonstrating a native distinctive style.

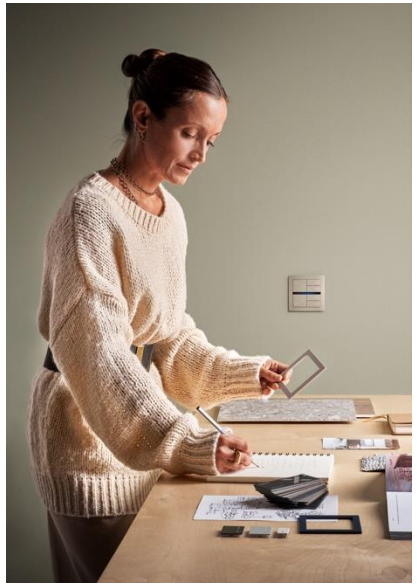
FLEXIBILITY

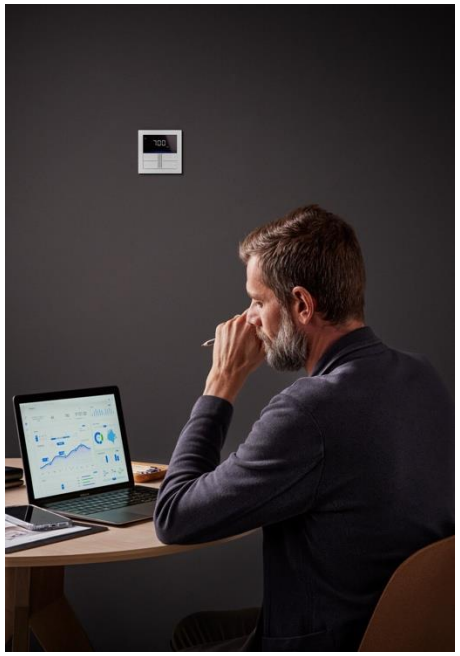
OL-U can be easily adapted to a variety of projects thanks to the customization features as icons and features. This enables a solution that can be tailored in wide range of environment and even adaptable over the time.

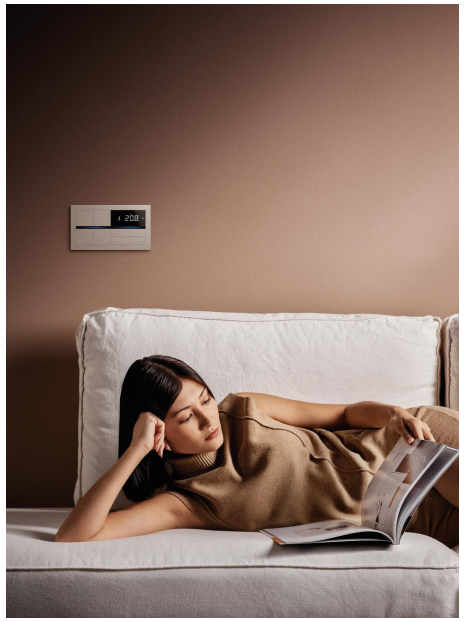
EASY AND SIMPLE

OL-U has been designed having in mind the idea to contribute to simplify a day in life in a building or house. Human centric vision with technology servicing people as occupants, as programmers, as installers each one with the most closest UX.

OL-U 4 U







DESIGN

OL-U is a reliable solution, characterized by a design that easily integrates into pre-defined projects.

PROJECT

OL-U comes with a line for Building & Home Evolution that is highly adaptable, suitable for large-scale projects, with the assurance of continuous support both in the preparation of production plans and during the project execution and subsequent maintenance.

INTEGRATION

OL-U simplifies the design process as a reliable solution with easy installation, adaptability over time, and constant updates on features and product range availability providing various options for the end customer.

LIVING

OL-U enhances comfort and quality of well-being for the end user.

OL–U features at the glance

- up to 8 mechanical buttons (up to 16 channels)
- one **2-stage thermostats (2 for the thermostat)** for the control of two distinct areas, both with integrated PI controller for piloting heating, cooling, valves, 6-way valves, fan coils 2 and 4 pipes.
- **capacitive bar** with **swipe function** for the implementation of programmable functions via ETS
- KNX Data Secure
- 32 **logic blocks**
- Virtual Holder **logic**
- »Wake Up» Touch Function
- Temp sensor

Switches overview

OL – U range

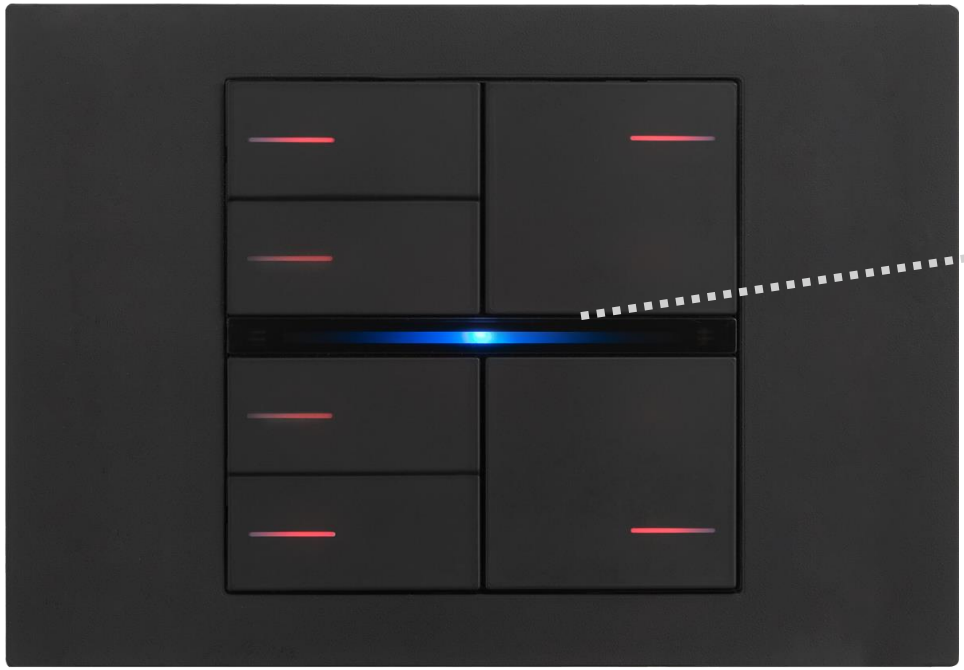
- **Mechanical** buttons
- 4 buttons | 6 buttons (left/right) | 8 buttons
- RGB signalling **Leds on buttons**
- **RGB Led bar** with **Capacitive Swiper**

REGULAR | FENIX | METAL

2 & 3 MODULES VERSION

RGB LD BAR with Swiper function

OL – U range



Multifunctional Capacitive Bar
able to manage:

Gestures (fast R, L) → scenarios (Welcome, IN, ...)

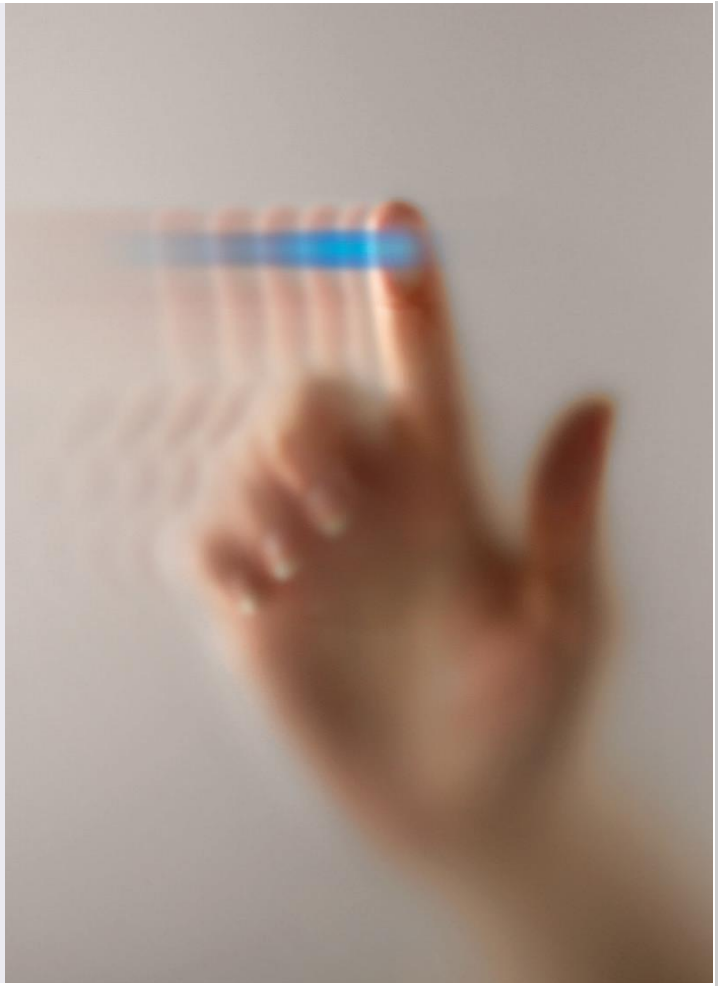
Low Swipe → dimming, temperature, set-point, colour

A unique touch interface.
Enhance environmental control trough the central bar that serves as a guide for effortless adjustment

More than a gesture

OL – U range

- Single tap (L/R)
- Double tap (L/R)
- Slow swipe
- Fast swipe (L/R)



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Thermostat overview

OL – U range

- **Mechanical** buttons
- **4** buttons
- **RGB** signalling **Leds on buttons**
- **RGB Led bar** with **Capacitive Swiper**

REGULAR | FENIX | METAL

2 & 3 MODULES VERSION

Multisensor overview

OL – U range

- Temperature + Humidity + CO2
- **Mechanical** buttons
- **4** buttons
- **RGB** signalling **Leds on buttons**
- **RGB Led bar** with **Capacitive Swiper**
- Matte varnish plastic

REGULAR

THERMOSTAT + HUMIDISTAT + CO_2

Multisensor

Sharing is caring in a KNX world

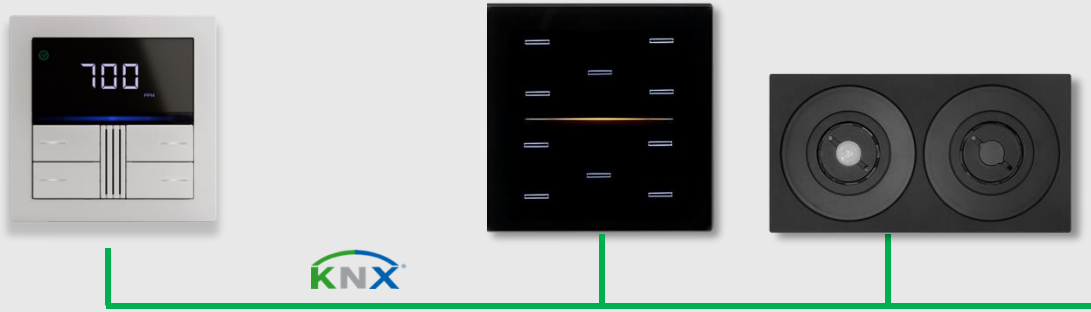
OL – U Display

OL-U Multisensor

Humidity, Temperature, CO_2

Represent CO_2 data shared from other devices

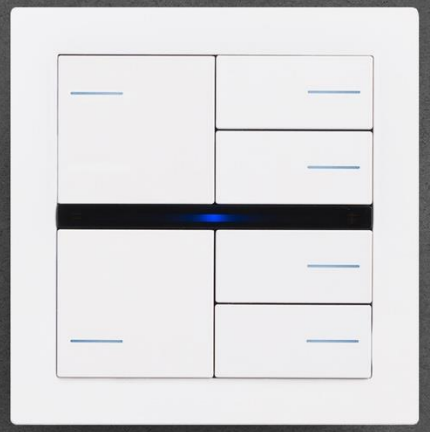
Co_2 display



Co_2 Measure

Materials and versions

OL – U range



REGULAR Version

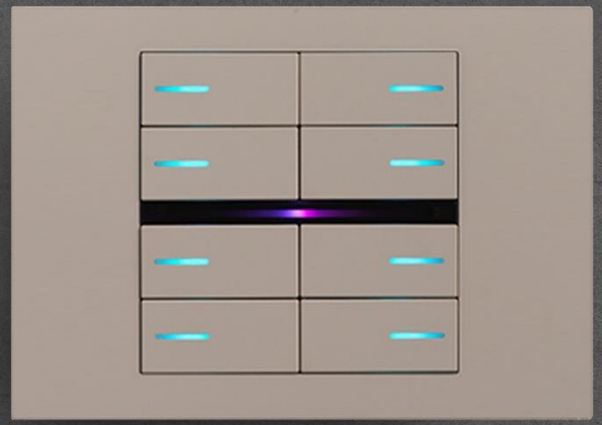
Available colours – Painted plastic

White

Black

Materials and versions

OL – U range



FENIX Edition

Available colours - FENIX®

Arizona Beige 0748	Kos White 0032	Alaska White 0030	Fes Blue 0754	Bromo Grey 0724	Ingo Black 0724

FENIX™ innovative material (NTM nano tech matte)

Created with proprietary technology, the external surface of FENIX is characterized by the use of new generation acrylic resin, hardened and fixed through a process called Beam Curing.

At first glance, the surfaces impress with their super matt appearance. Touching it, you feel the pleasant soft touch effect, with the added surprise of not leaving fingerprints. Thermal repairability of surface micro-scratches is also possible.

low light reflection, extremly matte

softness to touch

anti fingerprints

thermal repairability to superficial scratches

https://www.fenixforinteriors.com

Materials and versions

OL – U range

METAL Edition

Available colours – Brushed metal

- Bronzo
- Oro Champagne
- Argento
- Oro

Customization

OL – U range

customized through laser engraving with text or icons,
even in backlit mode.

Going double frames

horizontal

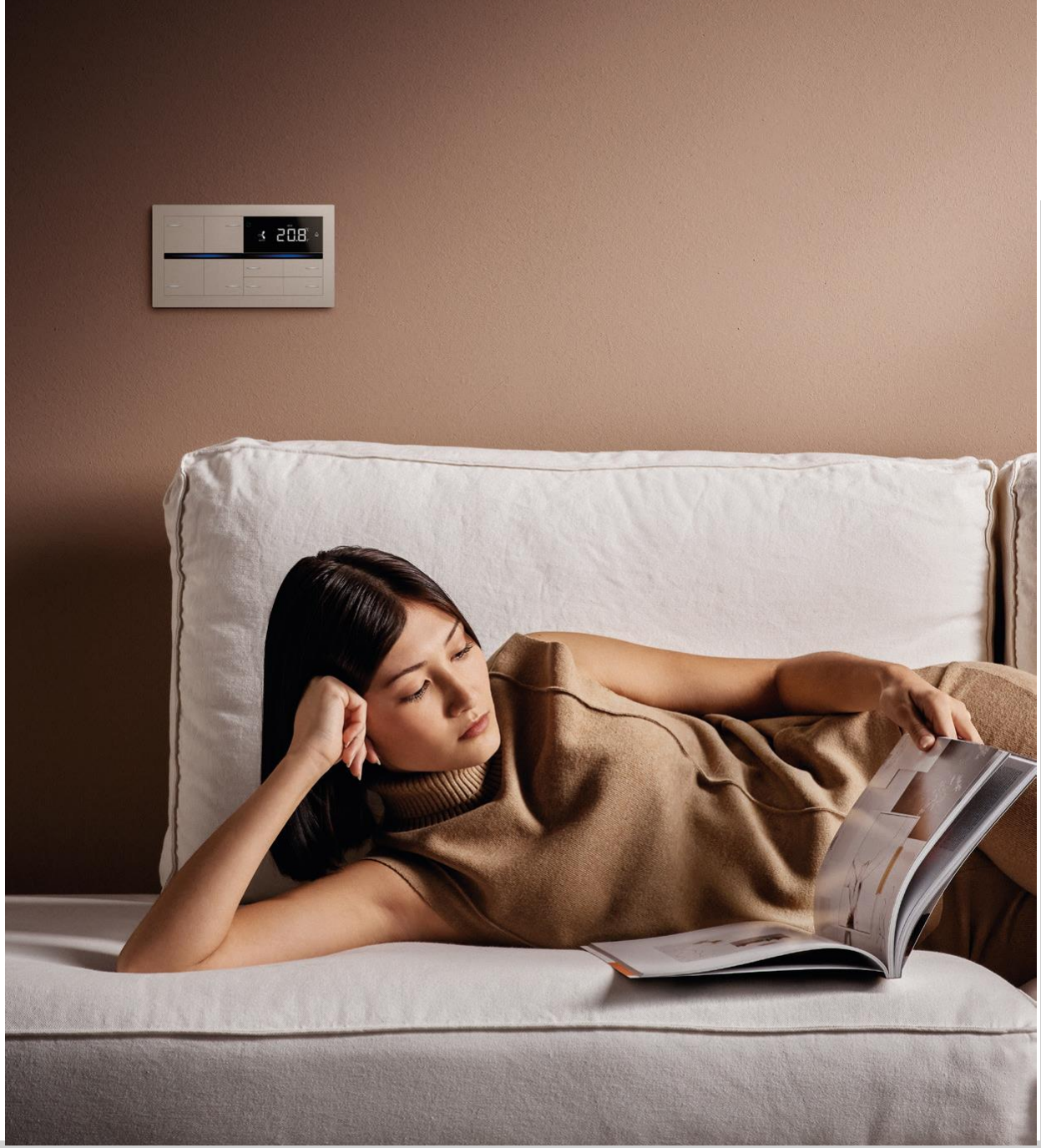
71 x 71 mm + 71 x 71 mm

71 x 71 + 45 x 45 mm

55 x 55 + 55 x 55 mm

71 x 71 + 55 x 55 mm

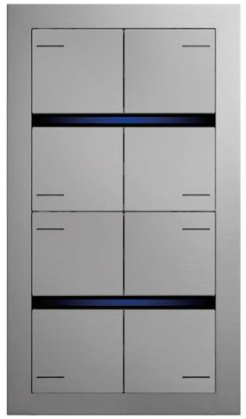
45 x 45 + 45 x 45 mm



Going double frames

vertical

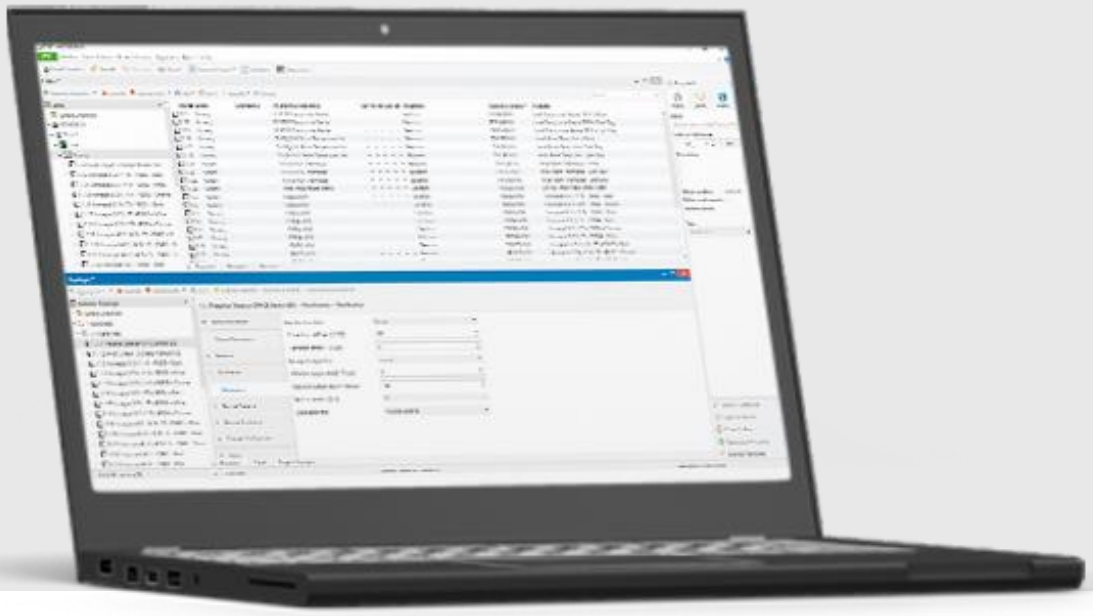
71 x 71 mm + 71 x 71 mm



71 x 71 mm + 71 x 71 mm

71 x 71 + 55 x 55 mm

ETS Programming tool and



- Buttons and Channel Features
- Gestures and other related differentiators
- Interoperates for room & area applications
- KNX Secure option
- ETS 6.x ready

UX

WORKS WITH OVERALL EELECTRON PORTFOLIO PRODUCTS/APPLICATIONS AND SOLUTIONS

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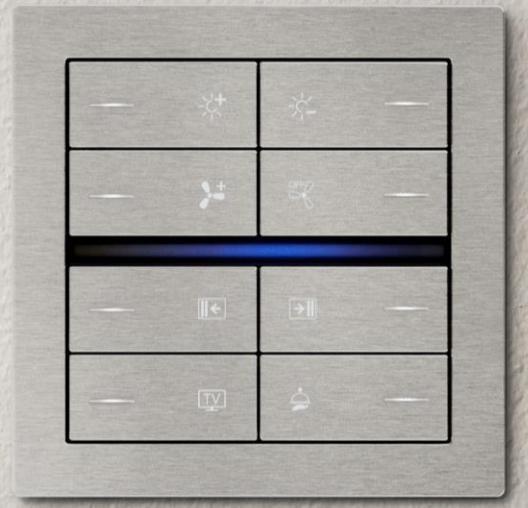
The OL-U range wins the German Design Award 2025 in the Excellent Product Design - Building & Elements category.

OL-U represents a unique solution that combines advanced technology, customizable aesthetics and intelligent functionality, designed to improve the comfort and efficiency of environments.



“The OL-U series impresses with its sophisticated technology and scalable, well-thought-out design for a uniform look in the smart home.”

reddot winner 2024

MODULAR BUILDING AUTOMATION

&

Generating DATA

HIGHLIGHT

2024

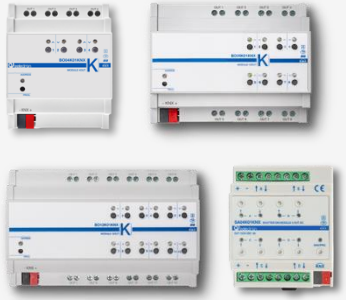
Portfolio: actuators & connectivity evolution

S_Series

MONITORING
LIGHTING
LOGICS

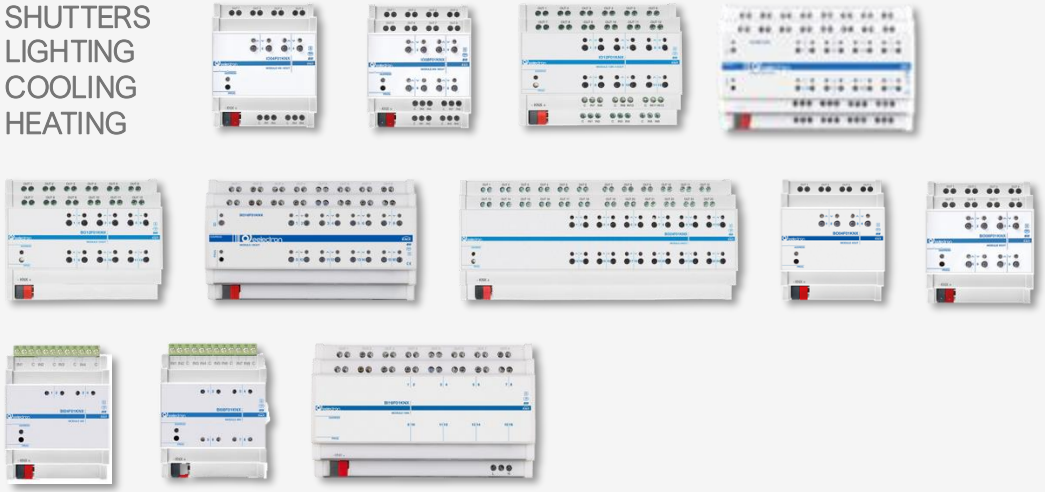
K_Series

SHUTTERS
LIGHTING
LOGICS



F_Series

SHUTTERS
LIGHTING
COOLING
HEATING



Supervision

Connected Devices

Comfort Control

Pushbutton Interfaces

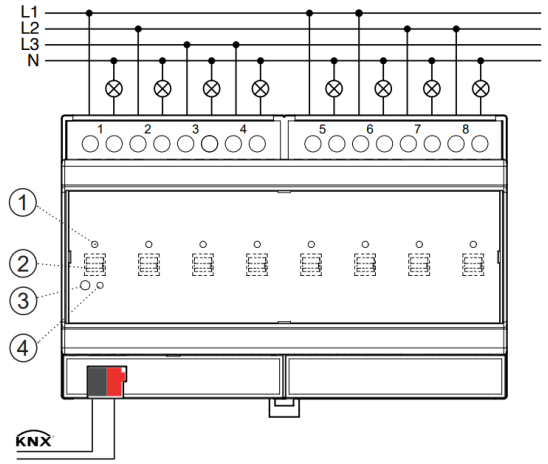
Systems Components

Interfaces

20A Actuator Model

NEW PRODUCT

8 Outputs



BO08S02KNX

- ✓ The device does not require an additional power supply and is ready for immediate use, after the bus voltage has been applied
- ✓ The front panel is removable, allowing the operator to manually operate on the tab switch even if the device is knx-unplugged (only after disconnecting the power supply to the loads and disconnecting the mains voltage)
- ✓ Counter functions
  - # of commutations
  - energy meter counter
- ✓ Logic features:
  8 logic blocks: simple expressions with logical or threshold operator or complex expressions with algebraic and conditional operators
- ✓ Heartbeat function ready

20A RELAYS FOR EACH OF THE 8 CHANNELS

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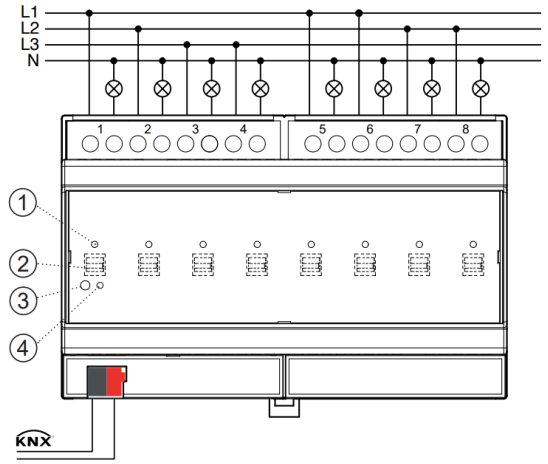
20A Actuator **with current sensing**

NEW PRODUCT

8 Outputs



- ✓ The device does not require an additional power supply and is ready for immediate use, after the bus voltage has been applied
- ✓ 20A relays for each of the 8 channels
- ✓ The front panel is removable, allowing the operator to manually operate on the tab switch even if the device is knx-unplugged (only after disconnecting the power supply to the loads and disconnecting the mains voltage)
- ✓ Counter functions
  - # of commutations
  - energy meter counter
- ✓ Logic features:
  8 logic blocks: simple expressions with logical or threshold operator or complex expressions with algebraic and conditional operators
- ✓ Heartbeat function ready

CURRENT SENSING FEATURE OF EACH RELAY OUTPUT WITH **“TRUE RMS”** METHOD (RMS = ROOT-MEAN-SQUARE VALUE)

BO08S01KNX

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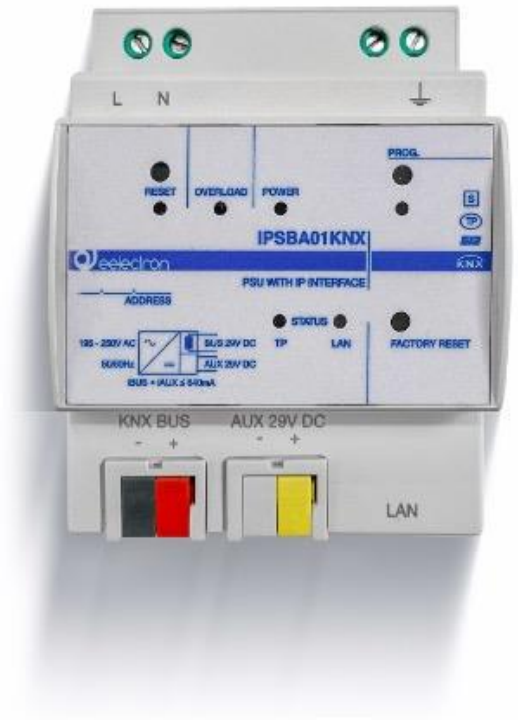
“The Bridge” at a glance

NEW PRODUCT

IPSBA01KNX
IPSBA02KNX



KNX SECURE

WHAT

- Direct KNX connection as IP and TP
- MQTT included on IPSBA01KNX
- KNX power supply / auxiliary output up to 640 mA
- Compact 4 DIN RAIL module

WHY

- Lower installation efforts
- Local Schedules, Diagnostic and other functional blocks
- KNX TP devices off-on line detection
- ETS database fully programmable

AN INNOVATION, ANSWERING TO BUILDING AUTOMATION AND DATA COLLECTION FOR DIGITAL APPL.

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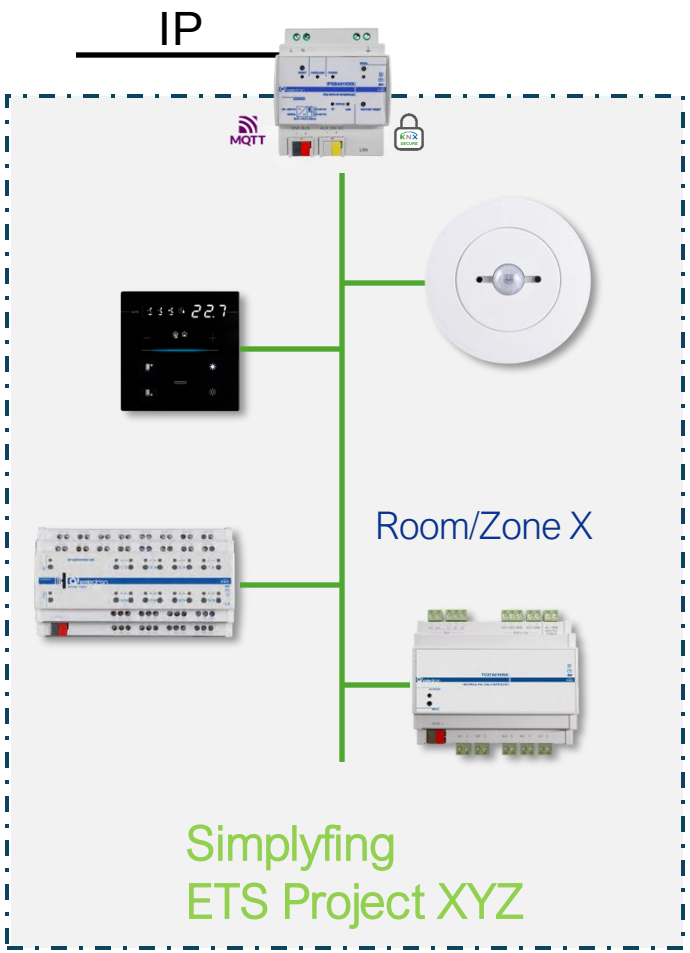
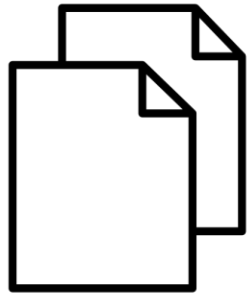
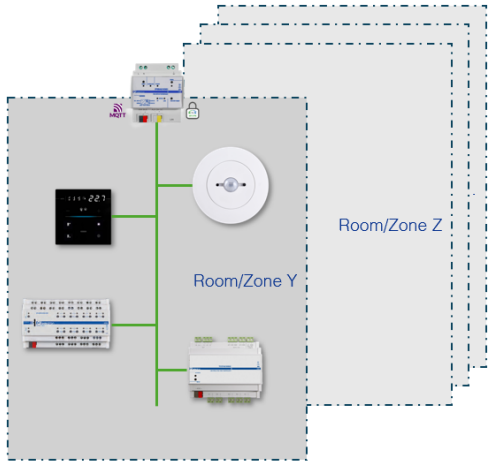
ETS Project – Some Key Benefits with bridge IP





Replicating XYZ
ETS Project



With Bridge IP same devices **of different Rooms/Zones types are commissioned with same Group Address**
And monitored with diagnostics (on-line/off-line)

Reduce operating downturn each model has devices with same group / address

EASY TO DESIGN AND SMART TO PROGRAM !

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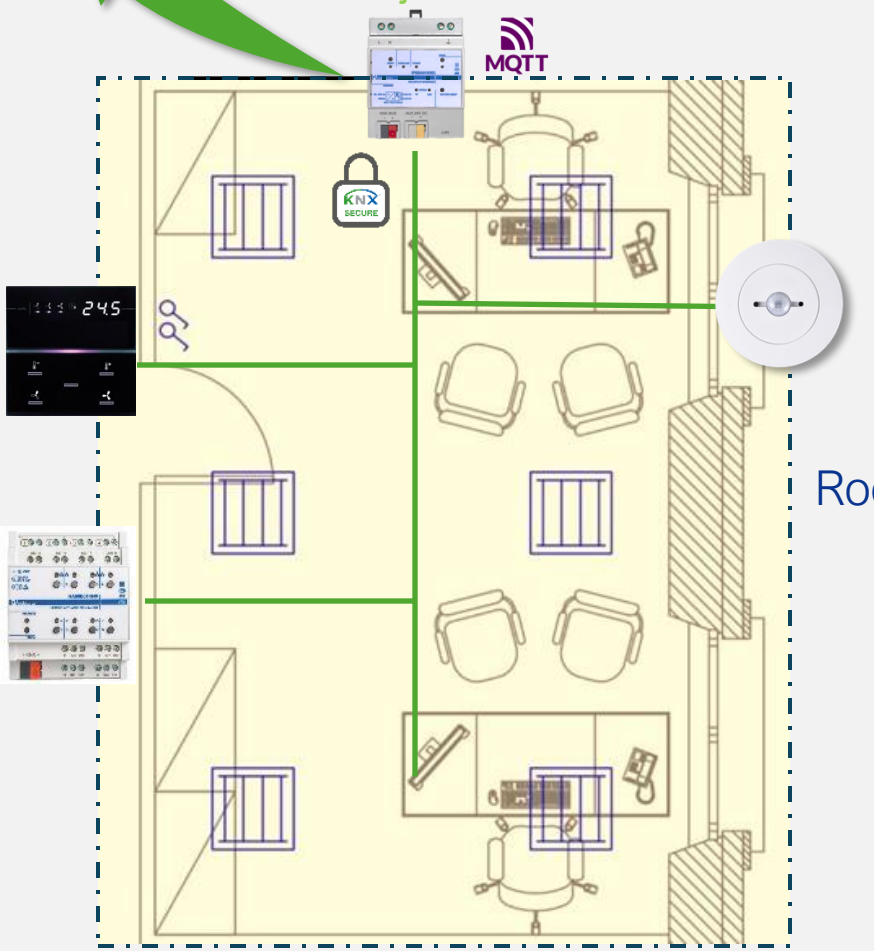
Smart Automation in the era of data generation & sharing requests

BEMS,BACS other supervision

ETS Project with MQTT selected DATA



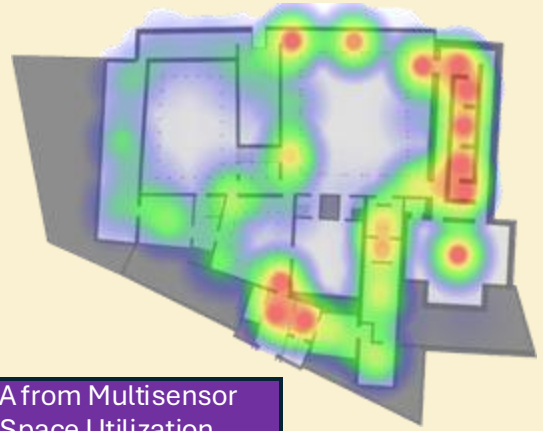
EXAMPLES FOR DATA SHARING to 3-party

BUILDING	XYZ		Month	Dec	2024				
Tenant			M2		Exceeding Kwh to be charged		Monthly Rate	Energy Bill	Grand Total
Studio 1	Room 1		22		0				
	Room 2		2		12				
	Room 3		15		104				
Apartment A			110		88				
Shop 3			250		0				
Offic Floor 3			484		0				

DATA from meters, counters energy consumption for (monthly) report

3rd party Application

Your requested DATA



DATA from Multisensor % Space Utilization for an Heatmap

DATA as hourly rates, # faults, other... for dashboarding,...

EXTENDING CONNECTIVITY AND ENABLING NEW APPLICATIONS

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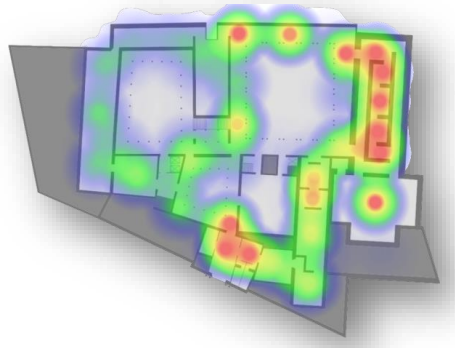
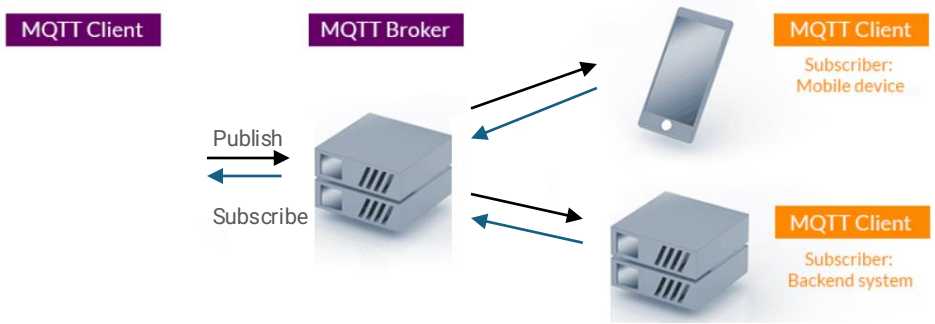
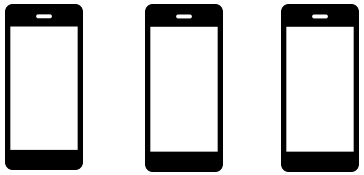
Why Bridge IP

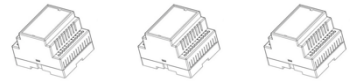


MQTT → Connect to the IoT World





Other Supervison SCADA, BEMS/BACS Operating Centers



Other devices as Engines, Edge, Controllers and actuatos

RELIABLE & SMART BUILDING AUTOMATION

IP CONNECTED ENABLING DIGITAL APPLICATIONS

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AUTOMATION & CONNECTIVITY

KNX & KNX SECURE
HIGHLIGHT

2024

Universal Inwall Module 4 IN & 2 OUT

4 Inputs – 2 Outputs

NEW PRODUCT

IO42E01KNX

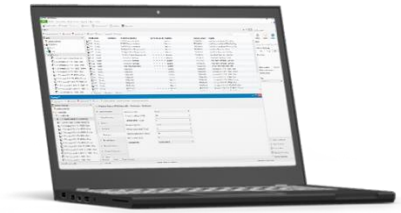
KNX SECURE

Device 2 outputs on board can be configured

- Each output can be configured independently for load control (2 independent channels)

  Input from heat/cooling and electrical pulse counters

- Outputs can be configured in pairs for the roller shutters and blinds (1 channel)



- For controlling a servomotor, in pairs
- For logic interlock control

CURRENT STAGE IT REPLACES IO32 DEVICE

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K_Series for 12-24 V DC applications

4 OUT 24 Vdc

NEW PRODUCT

S A 0 4 K 0 1 K N X

An actuator **for controlling DC motors** dedicated for

- blinds or shutters
- motorized air grilles
- ….

Allows **control of 12-24 V DC** drives with a load capacity of max. 6A per contact.

Functions: logic, scenarios, thresholds, alarm and timers, two-point control

EXTENDING ACTUATORS RANGE

W E B I N A R D E C 1 0 t h 2 0 2 4

8 IN module 100-250 V AC/DC

NEW PRODUCT

BI08H01KNX

A binary input module equipped **with 8 high-voltage inputs.**

The inputs are protected against voltage from **100 to 250 V AC/DC**.

- **Logics and scenarios management fuctions**

- High distances managed with no interferences, induction problems..

- Suitable for electrical cabinets or retrofitting installation

- **Simple voltage detection (monitoring)**

EXTENDING ACTUATORS RANGE

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Gateway KNX TP and BACnet IP – IC01E01BAC

NEW PRODUCT

IC01E01BAC

KNX TP - BACnet IP

The IC01E01BAC gateway is an interface **between KNX TP and BACnet IP**.

Configured KNX communication objects are converted into BACnet objects and can therefore communicate with third-party devices in the architecture.

BTL Certified

ETS FULLY PROGRAMMED

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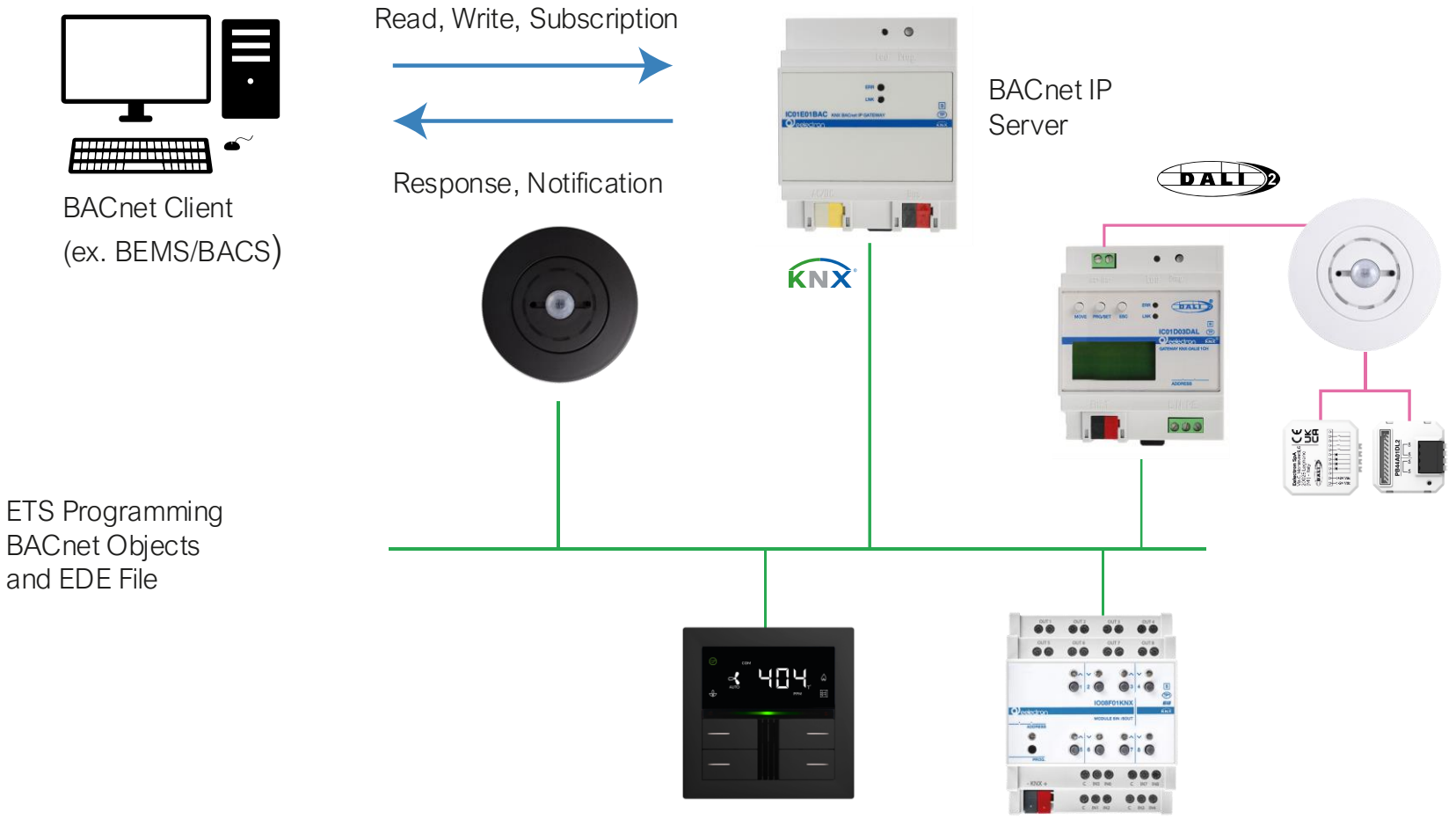
A layout example as ETS project



ASK FOR SUPPORT TO NEAREST EELECTRON REPRESENTATIVE

eelectron®

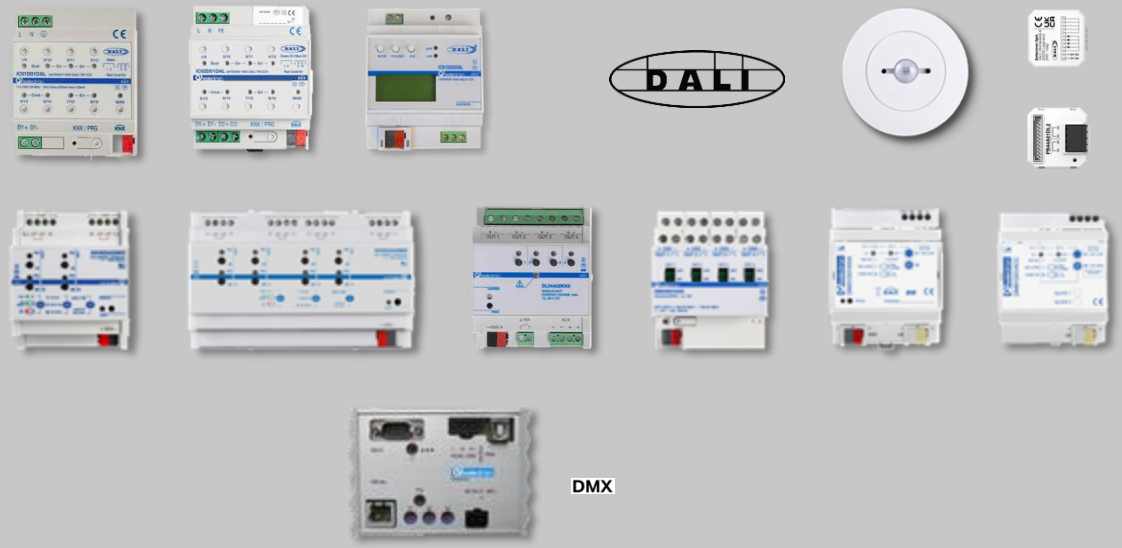
SMART BUILDING CONTRIBUTION

LCS
HIGHLIGHT

2024

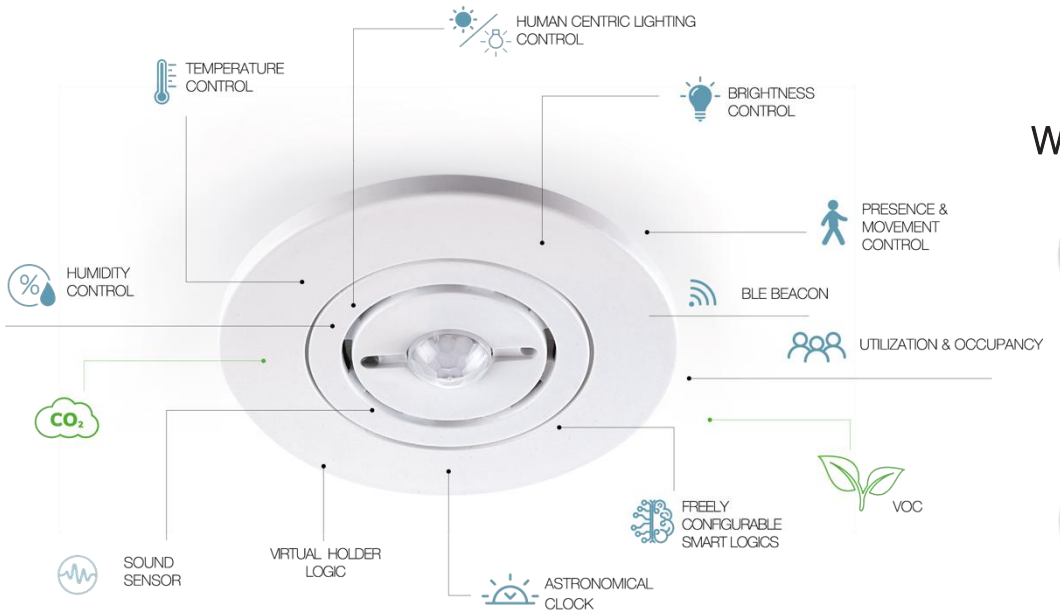
Portfolio: product range in expansion & «big-data generation»

Lighting Control



MULTI.Sensors

DESIGN PLUS powered by light+building DESIGN AWARDED



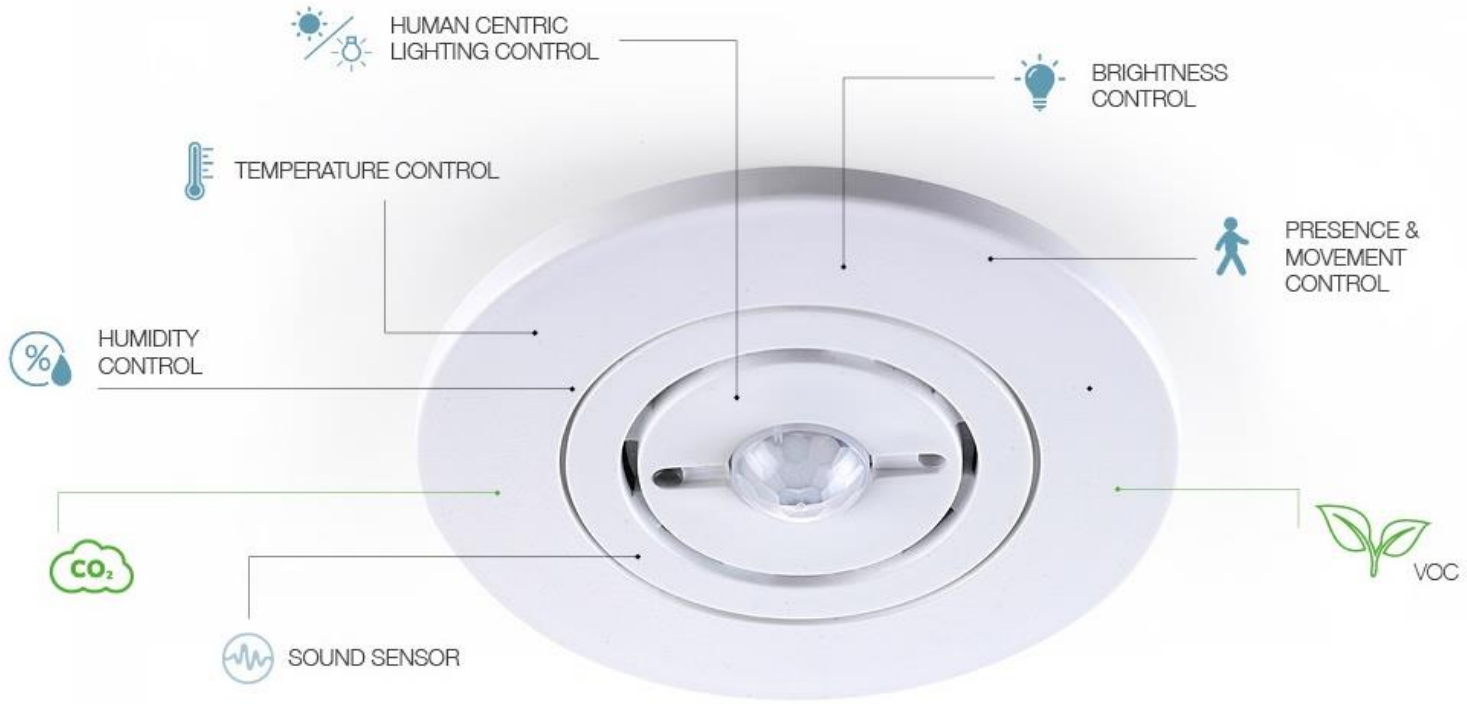
Wide Range

Corridor

Weather Station

Energy meters

Focus on **DALI-2** - Sensors



DALI 2 CERTIFIED

The DALI-2 presence sensors STANDARD and MULTISENSOR include a **brightness sensor** for environmental lighting control.

The MULTISENSOR version includes **humidity** and **temperature** sensors with the relative control algorithms and a **sound sensor** that can be used as part of presence detection or other applications

DALI-2 Presence detectors & MultiSensor

LIGHTING CONTROL

TEMPERATURE CONTROL

HUMIDITY CONTROL

PD00A01DL2-3

PD00A01DL2-1

DALI-2 Presence Detector
Standard with Lighting Control B/W

PD00A02DL2-3

PD00A02DL2-1

DALI-2 Presence Detector
MultiSensor Lighting, Temperature, Humidity, Sound, B/W

INTRODUCING DALI-2 MULTI-SENSORS

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DALI-2 Pushbutton interfaces

The pushbutton interfaces integrate up to four conventional lighted pushbuttons into one DALI channel, managing different buttons states. The **PB44A01DL2** version also integrates 4 LEDs which can be powered by connecting the interface to an auxiliary line, reducing consumption on the BUS.

Dali 2 Push Button
Interface 4 INPUT

Dali 2 Push Button
Interface 4 INPUT / 4 LED

DALI-2 CERTIFIED

DALI Gateways

NEW PRODUCTS

KNX DALI GATEWAY TW 1CH

IC01D01DAL

KNX DALI GATEWAY TW 2CH

IC02D01DAL

KNX/DALI GATEWAY 1 CH MultiMaster

IC01D03DAL

THE POWER OF **DALI** AND **KNX** IN DIGITAL LIGHTING SOLUTIONS

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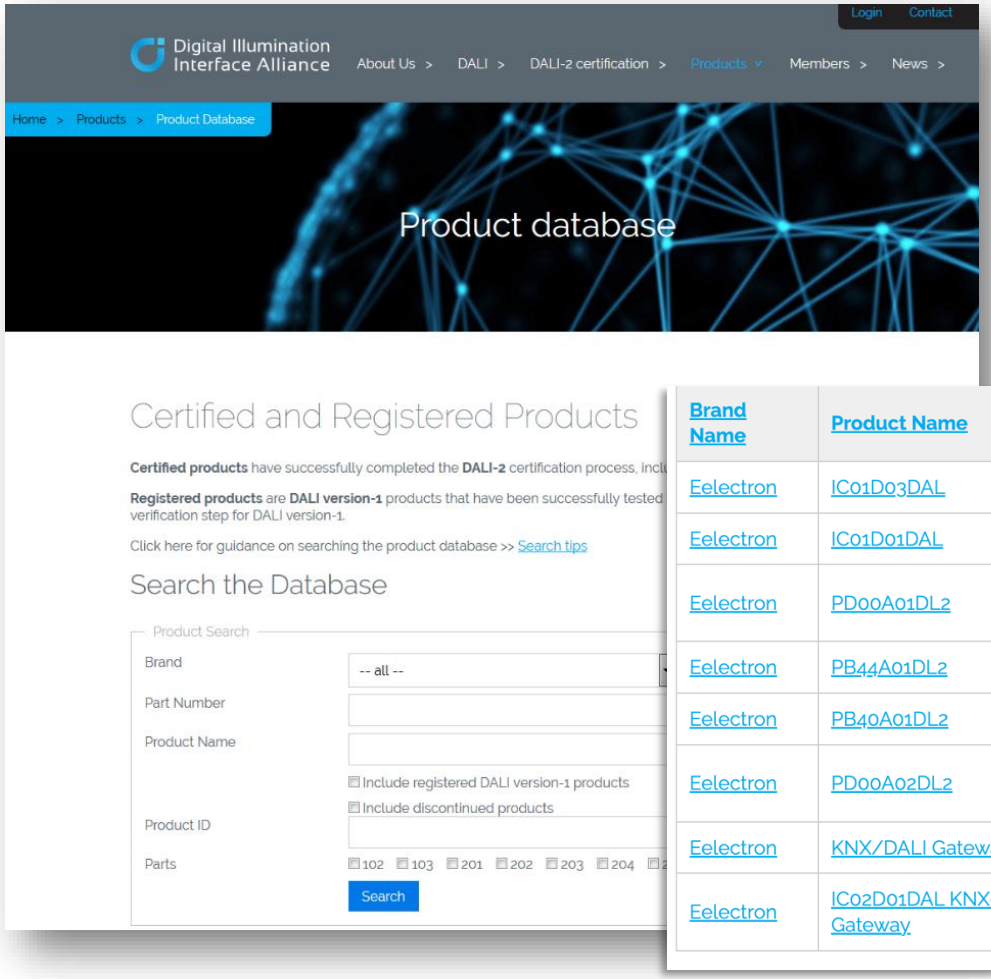
List of DALI certified eelectron products



Brand Name	Product Name	DALI Parts	Bus Unit Config	Initial registration date	Last Updated	DALI-2 Certified	D4i Certified	DALI+
Eelectron	IC01D03DAL	101, 103		Feb 29, 2024	Feb 29, 2024	Yes		
Eelectron	IC01D01DAL	101, 103		Feb 29, 2024	Feb 29, 2024	Yes		
Eelectron	PD00A01DL2	101, 103, 301, 303, 304		Dec 6, 2023	Dec 6, 2023	Yes		
Eelectron	PB44A01DL2	101, 103, 301		Dec 6, 2023	Dec 6, 2023	Yes		
Eelectron	PB40A01DL2	101, 103, 301		Dec 6, 2023	Dec 6, 2023	Yes		
Eelectron	PD00A02DL2	101, 103, 301, 303, 304		Dec 4, 2023	Dec 4, 2023	Yes		
Eelectron	KNX/DALI Gateway TW	101, 103		May 15, 2023	May 15, 2023	Yes		
Eelectron	IC02D01DAL KNX-DALI TW 2CH Gateway	101, 103		Jan 31, 2022	Jan 31, 2022	Yes		

https://www.dali-alliance.org/

Contributing to Lighting Control Systems with a prevalent DALI-2 based approach

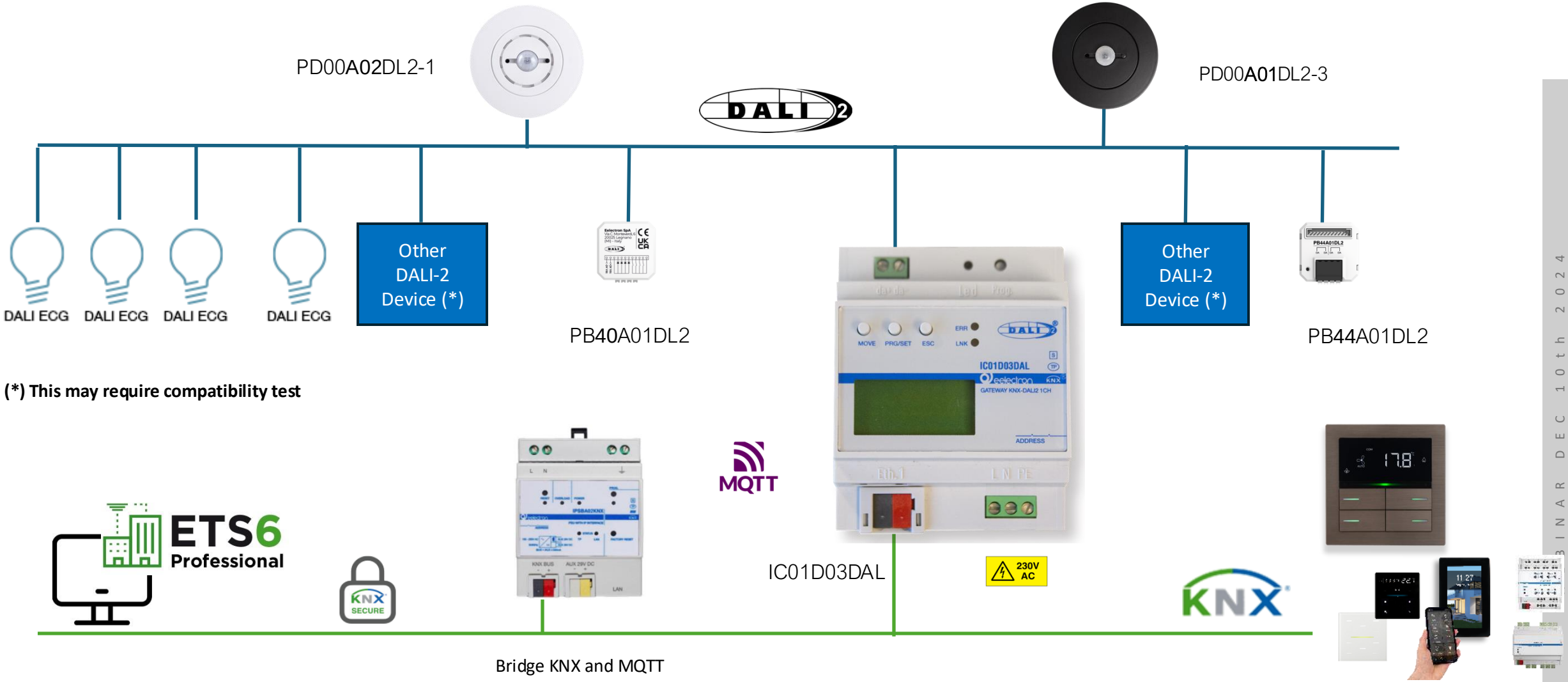
DALI ceiling wiring

Mainly PIR and Lux Sensors

Pusbutton Lights only

Connectivity to BEMS/BACS

LCS configuration with KNX interoperability example



DALI-2 GATEWAY TO KNX FOR SUPERVISION OR TO INTEROPERATE WITH OTHERS SUBSYSTEM

Portfolio – Key Benefits

Occupants & Building Operators User Experiences

Building Automation | System Integration

Wired Wireless

Energy Efficiency & Sustainibility

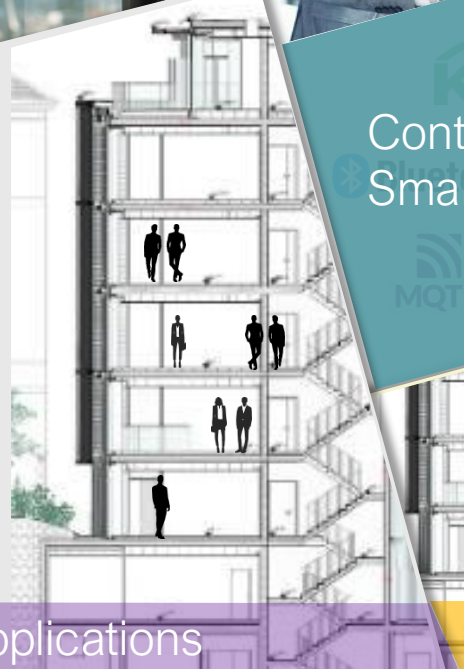
up to **50%** with KNX single room control

up to **60%** with KNX lighting control

up to **60%** with KNX ventilation control

SUSTAINABILITY

Contributing to Smart Buildings



Data, Information, Analisys..

Connected Applications | Apps

Connected Secure Room & Zone Applications

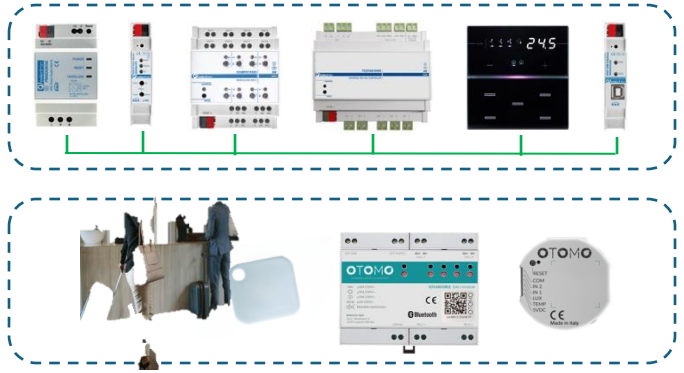
Generating Big-Data for Digital Applications

OCCUPANT BASED COMFORT | Easy to install, modify and extend

HEALTHY SPACE MANAGEMENT | Easy to maintain remote or local

Discover “ready to use” Technical & Sales Marketing Tools

PRODUCTS & SOLUTIONS CATALOGUES



DEMO PACKAGES & DEMOCASES

KIT FOR LAB TEST OR QUICK SHOWROOM SETUP

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NEXT

You can see all of this at …

next webinars from

January 2025

eelectron®

What's NEXT

Continue to stay in contact with us in 2025…

(Secure) KNX products evolution

DALI-2 expansion

Multisensors Add-on

Hospitality Solution Updates

Others in development ……

New Vertical Markets Solutions Brochure

Presentations for Applications

Technical Catalog My25 Updates

More to come …..

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