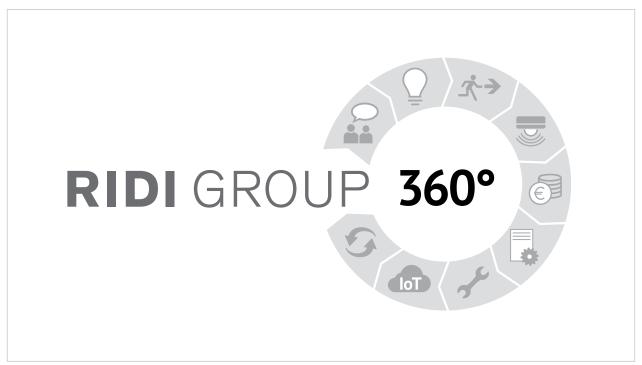
# WE EXPAND POSSIBILITIES

**EVERYTHING FROM A SINGLE SOURCE** 

#### **EDITION 1**

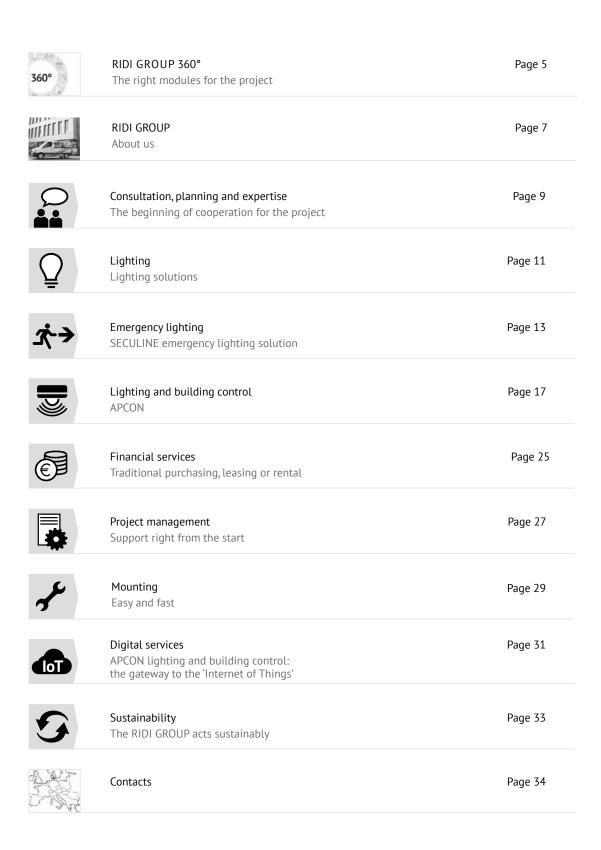






Spectral li:fy









### RIDI GROUP 360°

#### The right modules for the project

The RIDI Group 360° portfolio comprises a wide range of products and services, allowing us to offer attractive terms to our customers for larger projects.

RIDI Group 360° consists of nine modules, which can be combined together as necessary. This means these modules can be combined to form the best package according to the specific project requirements and customer needs.

In their entirety, the modules allow us to offer comprehensive remote and on-site project support, technical support, design, quality assurance, mounting, financial services and after-sales service.

We work together with our customers and partners to help them choose the right package for them.

You have the choice - we get it done!

Consultation, planning and expertise

Lighting

**★→** Emergency lighting

Lighting and building control

Financial services

Project management

Mounting

Digital services

Sustainability

Manfred Diez Dipl.-Ing. Group CEO



### RIDI GROUP

#### About us



RIDI Leuchten GmbH is one of Europe's premier manufacturers of high-quality luminaires, with branch offices and agencies across the continent.

With the RIDI, Spectral and lify brands, the product spectrum ranges from technical luminaires and functional continuous lighting systems to designoriented lighting objects and residential lighting.

This means the RIDI GROUP can fulfil almost any interior lighting request.

Cutting-edge CAD systems are used to design new products and further develop tried-and-trusted models. The highly automated production process ensures excellent and consistent product quality. The RIDI GROUP offers solutions ranging from simple lighting to complex lighting control systems. We also focus on the construction of more unusual special luminaires with custom designs, from the initial planning stage through to the manufacturing process.

One of the most modern logistics centres in the lighting industry means products are available extraordinarily quickly.

Quality, service and direct customer contact are the RIDI GROUP's top priorities. As a result of the rapid progress and technological changes the industry is experiencing, the latest knowledge is continuously communicated to sales staff, lighting planners and customers through courses, seminars and company tours.

In order to maximise the use of lighting applications and to focus on the respective requirements these demand, RIDI Leuchten GmbH introduced the multi-brand strategy.

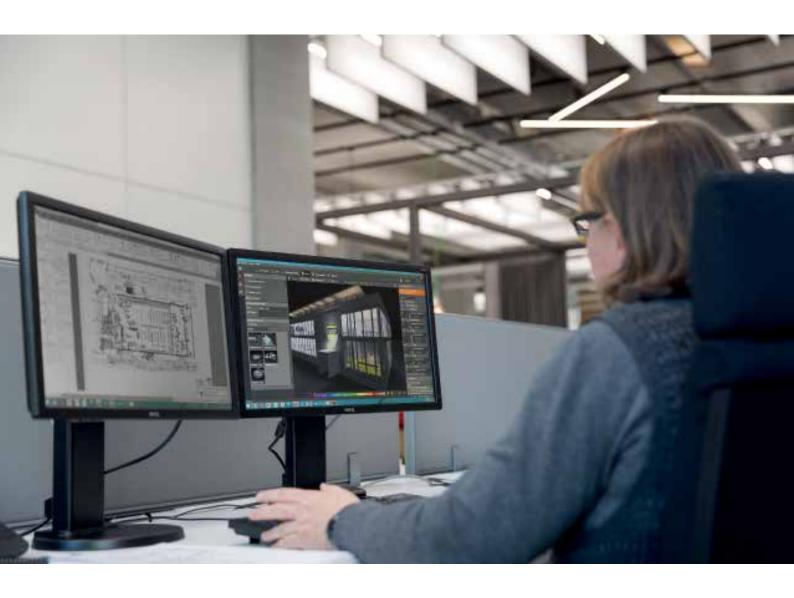
**RIDI**-brand luminaires are focused on functionality and are mainly used in commercial applications such as office, industrial, schools and public buildings.

**Spectral** offers design-oriented luminaires with a clear design language and innovative lighting technology. The architectural brand promises exclusive lighting accents at the highest technical level.

The **li:fy** brand specialises in giving every room a cosy atmosphere full of warmth and that 'certain something'.

The versatile product range of luminaires the continuous development of new lights and the customer-oriented conception of special models distinguish RIDI as a quality manufacturer.

The RIDI GROUP's extensive product range covers almost any interior lighting request thanks to the multi-brand strategy.





# CONSULTATION, PLANNING AND EXPERTISE

The beginning of cooperation for the project

Nowadays, extensive planning and consultation is required when designing a project or even an entire building. The latest findings and opportunities when it comes to economy, efficiency, design, employee motivation and connectivity must be optimised and networked.

Lighting in new buildings or renovation projects has stringent requirements that need to be met before the actual design can be developed.

The technical expertise of the RIDI GROUP's employees helps to ensure that the right decisions are made at an early stage.

Depending on the scope of the project, questions about the minimum and maximum requirements, any existing desires and ideas, the budget, the use of the building, flexibility, the importance of the lighting, funding programs and the timeline can also be discussed on-site together with the decision-makers.

The RIDI GROUP's many years of project experience guarantees high-quality implementation. Our employees and their professional expertise and knowledge are at your disposal whenever you have questions or concerns.

We at the RIDI GROUP will provide your project with consultation and support until it is completed and beyond, if required.







## LIGHTING

#### Lighting solutions

Our three brands, RIDI, Spectral and li:fy, offer you a wide range of interior lighting options.

These three brands can meet almost any requirement, regardless of whether your project is municipal, private, industrial or involves a funding program. Lighting solutions are made possible thanks to the RIDI GROUP's wide range of products, vertical integration and flexibility. The RIDI GROUP is the perfect partner for all kinds of lighting solutions, from single solutions to large-scale projects.

In 2012, RIDI Leuchten GmbH developed a lighting solution that is just as innovative now as it was then: RIDI TUBE. RIDI TUBE is an LED lamp that replaces the conventional T16 or T26 lamps and can be changed just as quickly. This means that RIDI GROUP's luminaires can be quickly and easily equipped with long-lasting LED lamps.

Our own SMD (surface mounted device) assembly lines for LED modules means that RIDI Leuchten GmbH is independent of suppliers, which allows for fast delivery of luminaires and provides special solutions for the project sector. This enables each type of luminaire to be equipped the perfect matching LED source. The flexible nature of the LEDs' assembly and subsequent connection of individual modules means they are available in various designs, dimensions, light intensities and light colours.

There are almost no limitations to what you can achieve.

The RIDI GROUP's large product portfolio means everything is an option and allows our employees to find the optimal light and lighting solution for every project.

We start by helping you select the luminaires and create a lighting concept in line with any legal regulations and based on lighting calculation and visualisation.

Product data is also available on the RIDI GROUP's websites or as a plug-in for common planning programs such as DIALux and Relux, so that you can also plan your project yourself.

The RIDI Campus offers special DIALux and Relux seminars on lighting calculation, for both beginners and advanced planners, architects and lighting consultants.

Product data and any other related material can be found here:



### Spectral

www.spectral-lighting.com







## **EMERGENCY LIGHTING**

#### SECULINE emergency lighting solution

Emergency lighting is a crucial element in a building's lighting concept and is important for safety and security. The RIDI GROUP'S SECULINE emergency lighting solutions consist of carefully selected, state-of-the-art components that meet the highest quality standards. All legal regulations are factored in as a matter of course.

With the SECULINE emergency lighting solutions, the SECUCON single-battery monitoring solutions and the SECUPLY central-battery powered solutions, the RIDI GROUP offers tailored complete solutions for projects.







**SECUWAY** escape route sign luminaires are available in a wide variety of designs to match all of the RIDI GROUP's lighting solutions.

The Iconia escape route sign luminaires from the Spectral brand portfolio are ideal for sectors with particularly high architectural demands.

Be it SECUWAY or Iconia, all escape route sign luminaires are state-of-the-art and can be perfectly integrated into a comprehensive solution.

#### **Design options:**

- Standard design for operation with different central-battery supplies
- Customer-specific design with an integrated monitoring module for operation with centralbattery supplies from various manufacturers
- DALI design for operation with a SECUPLY central-battery supply
- Single-battery design with integrated rechargeable battery and self-test in accordance to DIN EN 62034
- DALI single-battery design with integrated battery and self-test in accordance to DIN EN 62034, and connected to the SECUCON single-battery monitoring system



#### SECUTRAIL and SECUSPOT emergency luminaires

The integration of emergency luminaires enables continuous lighting systems with the same design. In mains operation, the emergency luminaires are combined with the general lighting and, in the event of a blackout, illuminate the escape route with reduced light output.

**SECUTRAIL** emergency luminaires can be fully integrated.

**SECUSPOT** is suitable for areas that can be optimally illuminated by a separate emergency luminaire. SECUSPOT is available in recessed-ceiling luminaires and surface-mounted luminaires with different light distributions.

#### **Design options:**

- Standard design for operation with a centralbattery supply
- Customer-specific design with an integrated monitoring module for operation with central-battery supplies from various delete different manufacturers
- DALI design for operation with a SECUPLY central-battery supply
- Single-battery design with integrated rechargeable battery and self-test in accordance to DIN EN 62034
- DALI single-battery design with integrated battery and self-test in accordance to DIN EN 62034, and connected to the SECUCON single-battery monitoring system

#### SECUCON single-battery monitoring via DALI

The DALI version of SECUCON single-battery monitoring solutions can be controlled and monitored via a separate touch panel or via web visualisation in a web browser. That way, the SECUWAY and Iconia single-battery escape luminaires and the SECUTRAIL and SECUSPOT single-battery safety luminaires can all be monitored properly, the test times can be set and the legally required inspection logbook for proof of cyclical checks can be viewed and stored.



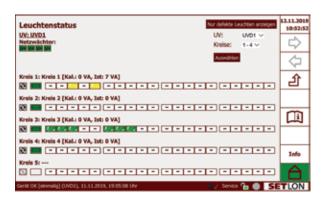
#### **SECUPLY** central-battery systems

SECUPLY central-battery power supplies with DALI monitoring are designed according to industrial standards.

The modular design of this emergency lighting supply system is carefully designed, clearly structured and makes solutions for any project possible. This system provides maximum ease of use regardless of whether the LPS (Low Power Supply) version with power limitations or the CPS (Central Power Supply) version with up to 40 load circuits and a maximum battery output power of 100 KW is used.

All luminaire data and status displays can be viewed in just three taps via a 7-inch touch PC integrated into the system cabinet. An integrated SD card stores the results of the legally required cyclical checks. The system can also be monitored remotely via web browser.

In order to ensure industry standards, the SECUPLY system relies on a PLC (programmable logic controller). This allows for maximum modularity and offers scalability for a project's individual solutions.

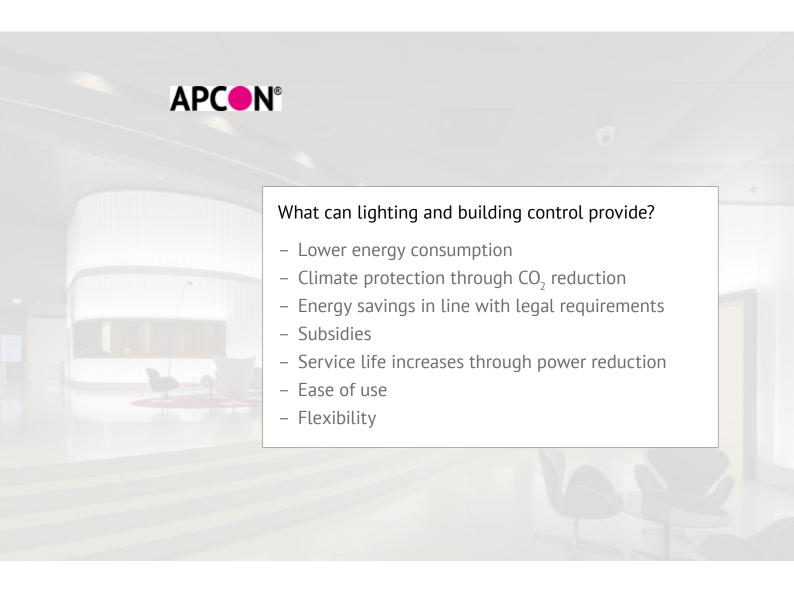




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# LIGHTING AND BUILDING CONTROL



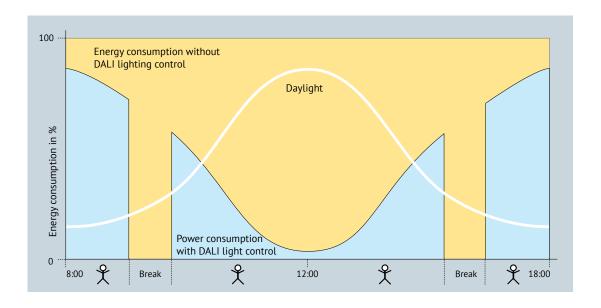
The RIDI GROUP's APCON lighting and building control system meets the requirements for lower energy consumption for lighting systems. It reduces CO2 emissions and increases service life with features ranging from reducing power to completely switching the lighting system off via sensors.

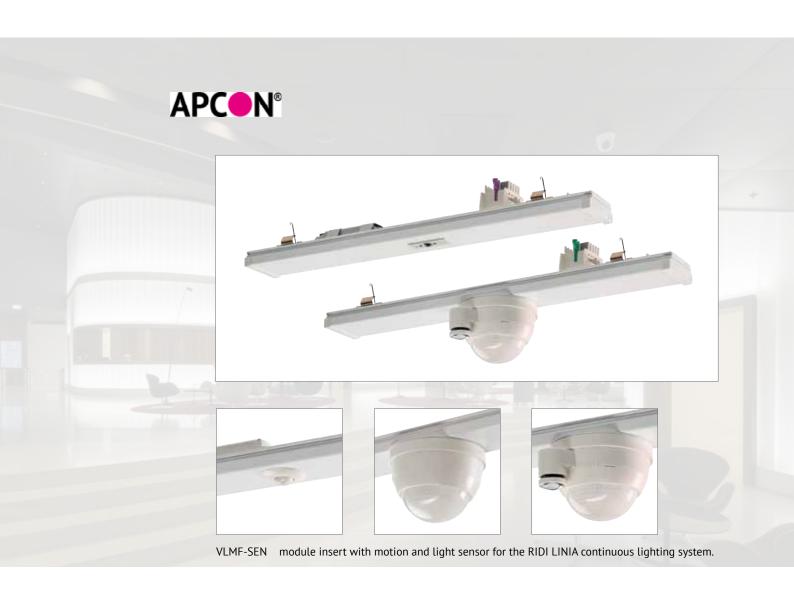
APCON offers great ease of use with elements such as touch panels, apps, dimmers, pushbutton couplers, as well as the option of connecting user-specific control panels.

Adaptations to changes in use or expansions can be easily implemented and provide maximum flexibility.

Here is an example of a normal office routine: Up until now, the lighting is usually switched on in the morning and off again in the evening, regardless of whether it was a sunny summer's day or a dark winter's day. With APCON, the lighting can be switched on by sensors that detect when people are present and can be dimmed based on the amount of daylight.

If you compare the diagrams that show the actual energy consumption with and without DALI lighting control, you immediately get an idea of how much energy can be saved.







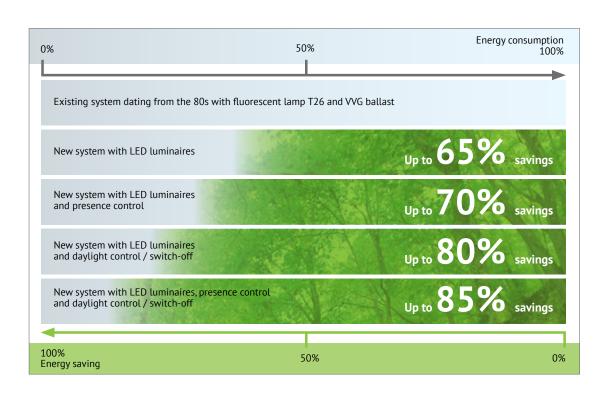
Another example is the energy savings offered by new systems that have been refurbished with LED lighting compared to old systems. You can save up to 65% in energy just by changing to LED.

You can save up to 85% in energy with a presence detector, daylight control and automatic switch off or a combination of these tools.

APCON lighting and building control solutions are designed to work in harmony with the RIDI GROUP's highly efficient lighting systems.

It makes sense to use only as much light as is needed and only when it's needed.









#### Lighting and building control System overview

APCON can do so much more. The RIDI GROUP's product range covers the functional possibilities of APCON lighting and building control.

The selection begins with simple motion detection and extends to customer-specific requirements, such as building access control or blind control.

#### **APCON EASY**

APCON EASY solutions are application oriented and offer suitable remote operation and carefully designed apps for configuration. This system is particularly suitable for shelf aisles, corridors, simple industrial halls, hotels, retirement homes, shops, offices and classrooms.

APCON EASY motion detection is based on selected products from recognised manufacturers. Connecting a wireless lighting control solution to the widely used Casambi system (RIDI Smart Control) this is also possible with APCON EASY.





#### Much more than just lighting control

Most lighting control systems on the market are limited to lighting control by itself, for example, motion detection, daylight-dependent control, scene and coloured light control.

Some also allow for the realisation of building control tasks or at least the connection to a building management system.

With the APCON lighting and building control system, we have taken it one step further, enabling the implementation of logical functions/links and even the monitoring of single-battery and central-battery emergency luminaires, for example.

Further information on monitoring emergency luminaires can be found in the emergency lighting section on page 13.

#### **APCON INDIVIDUAL**

APCON INDIVIDUAL lighting and building control solutions are custom-made and offer a high level of functional possibilities, making it the ideal system for more demanding applications such as sports facilities, various industrial sectors, factory buildings and in logistics.

The product portfolio includes all lighting control components required for lighting and building control:

- DALI power supplies
- DALI USB interfaces for software
- Touch panels
- Pushbutton devices
- Daylight and motion sensors
- Control units for Tunable White/circadian alignment
- Control units for RGB/RGBW

APCON INDIVIDUAL components are available for top-hat rail installation in control cabinets, ceiling installation, wall installation in junction boxes and luminaire installation.

They are configured using clearly structured, license-free software.

#### **APCON UNLIMITED**

APCON UNLIMITED offers maximum functionality and flexibility. Only industrial standard components are used. These programmable logic controllers are programmed in accordance to the EN 61131 standard and guarantee a high degree of safety when in operation and have virtually unlimited functional possibilities/scalability in terms of function and system scope.

APCON UNLIMITED lighting and building control solutions are designed for large projects, such as automobile manufacturers' production departments and in large logistics centres.







# A wide range of functions beyond lighting control

Function	APCON' EASY	APCON" INDIVIDUAL	APCON' UNLIMITED
Motion detection	✓	✓	✓
Presence detection	✓	✓	✓
Daylight-dependent control	$\checkmark$	$\checkmark$	$\checkmark$
Integration of switching elements	✓	✓	$\checkmark$
Scene control	✓	✓	$\checkmark$
Daily, weekly and annual scheduling	✓	✓	✓
RGB/RGBW	<b>√</b>	✓	✓
Tunable White	✓	✓	$\checkmark$
Human Centric Lighting/HCL	$\checkmark$	✓	$\checkmark$
Energy monitoring	-	✓	$\checkmark$
Logical functionality	-	✓	$\checkmark$
Touch panel	-	✓	$\checkmark$
Monitoring of single-battery emergency lighting including inspection logbook pursuant to VDE 0108	-	✓	$\checkmark$
Monitoring of central-battery emergency lighting including inspection logbook pursuant to VDE 0108	-	-	$\checkmark$
Web visualisation	-	-	✓
Connection to building control systems	-	-	✓
Remote access possibilities	-	-	✓
Customer-specific requirements	-	-	<b>√</b>





# FINANCE SERVICES

#### Traditional purchasing, leasing or rental

The RIDI GROUP offers several options for reducing the financial burden that a new acquisition or the renovation of a lighting system entails.

Agreements are also held for the landlord and/or consumer that increase efficiency, ensure that the system is being monitored and analysed and enable remote diagnosis.

#### Lighting leasing

Financing via leasing agreement makes it easier to plan for costs, given that acquisition costs are not a high burden and the depreciation periods are shorter (maximum period of 72 months).

Leasing is possible starting from a value of €500. You should consider whether this is a good option for your lighting solution.

#### Lighting rental

We like to follow the motto, "rent that which loses value, buy that which gains".

Renting preserves the operator's liquidity, the costs are low and can be calculated precisely, investments are possible even with a small budget and return of investment (ROI) starts from day one.

The RIDI GROUP guarantees low rates, transparent re-leasing rates, and no grey areas or hidden legal pitfalls.

The advantage of renting lighting is that the equipment is always state-of-the-art due to shorter production and innovation cycles.





# PROJECT MANAGEMENT

Support right from the start

The RIDI GROUP relies on its experienced in-house project managers for the successful implementation of lighting projects.

This means that all information and processes relating to the project are coordinated and processed centrally. All of the previously agreed upon modules in the 360° portfolio are also accessible.

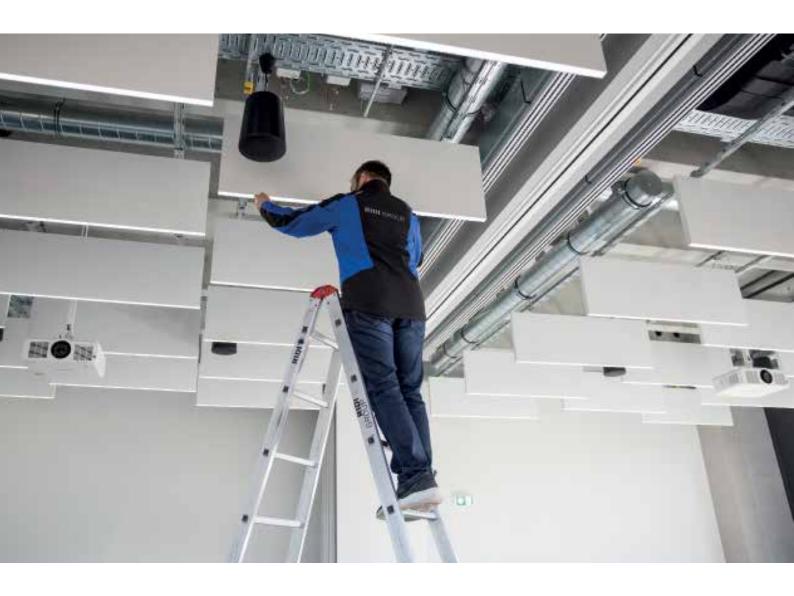
Just as the planner/customer would want, the project manager has everything at their fingertips.

They not only coordinate the planning, but also the implementation of the project with regard to installation as well as the integration and later use of digital services.

This includes planning documents, minutes, agreements, schedules, logistics planning, luminaire layout plans, coordination with other trades, project documentation and much more.

The employees at RIDI GROUP have the most modern and collaborative technology, and of course that human touch.

Should any issues arise, the project manager is your personal contact.





### MOUNTING

#### Easy and fast

The RIDI GROUP's highly-trained and reliable mounting team will take care of your project.

The implementation of a lighting system within a project must be done in coordination with other trades. That is why the RIDI GROUP has a mobile mounting team that can complete the work within a given time frame.

In the case of refurbishments, these services also include the deinstallation and professional disposal of the existing system.

The mountig steps start with the measurement of the rooms, drilling of holes for the suspension points, suspension of the luminaires or direct installation, wiring of the luminaires and finish with the transfer to the interface as well as the commissioning of the luminaires.

Of course, we prepare circuit diagrams and sometimes even a plan for the laying of cables for the on-site electrician.

The RIDI GROUP's mounting team also takes care of installing the sensor technology and programming the actuators, sensors and instructions.

The RIDI GROUP's mounting team assembles the lighting system and its control elements on-site but does not replace your electrician.





# DIGITAL SERVICES

APCON lighting and building control: the gateway to the 'Internet of Things'

APCON opens up the world of IoT. Sensors generate movement data and are constantly measuring the light intensity, for example. The luminaires' intelligent and fully-electronic components write and store the operating data, which is networked via a bus line.

This provides the infrastructure for the evaluation and further use of this versatile data.

This is made possible by interfaces that are adapted to the building and its IT infrastructure, and meet all security requirements, allowing data to be passed on directly to the relevant cloud applications.

The analysis of the data obtained, coupled with the experience gained by using the lighting system on a daily basis and the APCON lighting and building control system tailored to it, can highlight potential areas of optimisation and, in turn, increase energy savings.

For example, updating or changing the configuration can shorten the motion sensors' follow-up times or reduce the light's setpoint value.

The scalability of APCON's lighting and building control system means that control points for lighting or more lighting in other areas of the building can be added at any time.

After choosing to go with a comprehensive RIDI GROUP 360° solution, the RIDI GROUP's team of experts are there for you whenever you need them, even in the years to come.





### SUSTAINABILITY

#### The RIDI GROUP acts sustainably

Sustainability and responsibility at RIDI Leuchten GmbH spans production, products and logistics, all the way through to environmentally friendly electricity production and heating at the headquarters in Jungingen, Germany. In addition, employees also take care of completed projects by providing support and advice as part of the after-sales service.

Using resources in a responsible manner begins with the BEK Bioenergie Killertal GmbH biomass cogeneration plant, which is connected to the RIDI GROUP.

This plant heats the entire site in Jungingen, thus making a valuable contribution to reducing CO<sub>2</sub> emissions.

At the end of 2019, the conversion to a steam turbine increased electricity production from 2.2 million KWh per year to approximately 5 million KWh per year.

Responsibility for the products is also very important.

RIDI Leuchten GmbH manufactures its products in way that is as energy efficient as possible and pays attention to their sustainability, quality and durability.

The development of the RIDI-TUBE and the associated assembly and compatibility options, as well as the in-house production of LED boards, both help to avoid long delivery times and long transport routes and create sustainable lighting.

The luminaires are manufactured to be as recyclable as possible, that is, there are no bondings or fixed connections

#### After-sales service

The RIDI Campus offers training courses in 'products in use', installing RIDI GROUP products as well as seminars on lighting calculation software.

At the request of the customer, luminaires and spotlights are aligned according to the operator's requirements after mounting and after the building has been commissioned, especially in the retail sector.

The lighting system can be maintained and cleaned upon request.

This includes maintenance for emergency lighting control systems as well as the modification of the lighting system if the building undergoes restructuring.

The RIDI GROUP team is there for you for future renovations and expansions.

#### Last but not least:

Our first level support will be happy to provide further assistance with delivery, mounting or any other questions about a RIDI GROUP project within its term and can be contacted at qs-support@ridi.de.



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