LED solutions

LED emergency lighting system

Solutions for emergency lighting

TRIDONIC

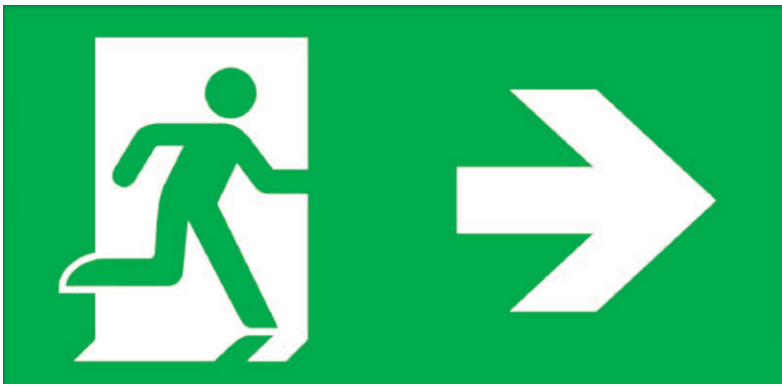
Cultural centre Vallentuna, Sweden
For further reference stories go to
www.tridonic.com/references

LED emergency lighting system

Light that makes people feel safe. At all times.

A system is only as good as the weakest link of its chain. This is why we consider emergency lighting as a functional unity – from power supply to battery, from optimal use of the light source to easy integration into the lighting management and building management systems.

The complete solution – for your emergency lighting
Tridonic solutions for emergency lighting systems provide for safety in your building, even in case of a power failure.



LED emergency lighting system

A functional unity
Focused Tridonic competence

All over the world, Tridonic is a synonym for excellent products and services associated with perfect light. The company is impressive with a clearly arranged portfolio that will meet any requirement.

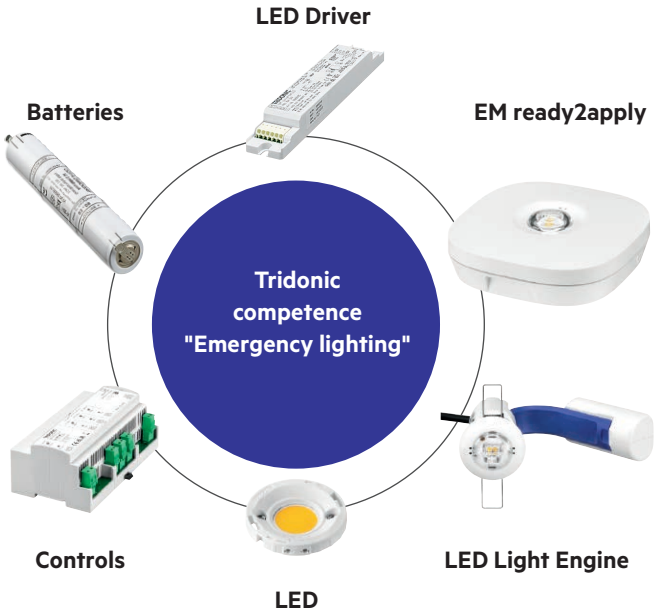
With LED Modules/LED Drivers and lighting management as core competencies – and with a view to the integration of emergency lighting, we are the right partner for electronic component solutions and systems.

Everything from a single supplier
At Tridonic, the competencies of various disciplines merge. We can provide you with the entire portfolio for solutions in the fields of general and emergency lighting: LED Driver, LED modules, LED Light Engine, batteries and controls. This is what makes us a market leader in emergency lighting systems in Europe. Be assured: we can provide you with the components of escape sign luminaires, escape route lighting as well as anti-panic lighting that's suitable for you – at the latest state of the art and in the reliable Tridonic quality that you have grown accustomed to.

Trust, but verify.
From development to production, we check even the most inconspicuous detail for reliability and efficiency. In operation, too, emergency lighting is given particular attention: our automatic monitoring and test equipment guarantees that standards and specifications are reliably met.

Power supply for emergency purposes
Various systems are eligible to supply emergency lighting installations with electricity in case of a power failure: separate battery, group battery, central battery, power generators or high-security mains.

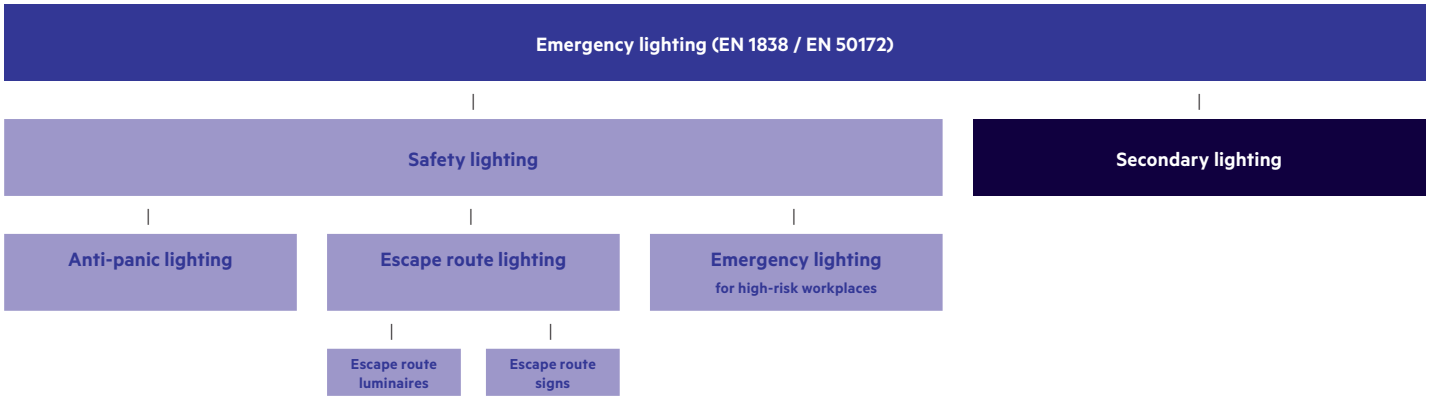
Whether you opt for emergency lighting with decentralised separate battery solutions or for a group or central battery installation – with Tridonic components you will always be on the safe side. The comprehensive range comprises both LED Driver for group and central battery supply and single battery-supplied emergency lighting units.



With good reason

Emergency lighting protects people against panic and accidents

When the general artificial lighting fails, orientation must still be ensured in buildings even for visitors. Accordingly, there are legal provisions governing the equipment and dimensioning of emergency lighting installations that will be activated when there is no mains voltage.
According to international standards and in line with the relevant European Directives, emergency lighting is divided into safety lighting and secondary lighting.



Safety lighting
Safety lighting must provide for a minimum brightness level to avoid panic in buildings and to allow for hazardous procedures to be completed and equipment to be turned off safely. Escape routes and safety devices must be clearly recognisable, thus enabling people to leave the premises quickly. Safety lighting breaks down into anti-panic lighting, escape route lighting and safety lighting for high-risk workplaces.

Secondary lighting
Secondary lighting provides light in places where power failures will not cause any hazard, but where nevertheless work needs to be continued. For a limited period of time, it will assume the function of general lighting.

Anti-panic lighting
Anti-panic lighting is meant to avoid panic in case of a power failure and to enable the people in the building to clearly recognise escape routes. The required illuminance level in the defined area is at least 0.5 lux.

Escape route lighting
Escape route lighting allows for safety devices to be recognised clearly and used safely. Escape routes must be illuminated across a width of 2 m. In doing so, an illuminance level of at least 1 lux along the center line for a path width of one metre must be guaranteed.

According to the EN 1838 standard, the ratio of highest to lowest illuminance must not exceed 40:1 for anti-panic and escape route lighting. The required illuminance level must be reached after no longer than 60 seconds. 50 per cent of the illuminance level, however, must be reached already after 5 seconds. The rated service time is at least one hour.

Emergency lighting for high-risk workplaces
Emergency lighting for high-risk workplaces must reach 10 per cent of the illuminance level required for the respective tasks or at least 15 lux after a maximum switch-on delay of 0.5 seconds. The ratio between highest and lowest illuminance must not exceed 10:1.

LED emergency lighting system

Controlled safety

Function testing – manual or fully automatic

Light enables people to leave buildings safely, helps them to find their way round and reduces accident hazards. Accordingly, various national and international standards, regulations and directives govern the operator's responsibility for reliable operation of the respective installations. What is required here is regular testing and function monitoring.

Three ranges:
BASIC, SELFTEST and PRO
For the function test of the emergency lighting installation, Tridonic disposes of a ballast solution that is adequate both in economic and functional terms for each individual application – from manual testing of individual installations in the BASIC range, via integrated automatic test functions (SELFTEST range) through to central monitoring of the entire emergency lighting system in the PRO range.

Tridonic emergency lighting LED Driver with automatic test functions meet various testing and inspection algorithms according to the IEC 62034 standard. In the process, a random generator controls the start of the test cycles, thus preventing all batteries from being discharged at the same time and avoiding potential safety gaps. To ensure the right moment for running the annual system test, the switching status of the luminaires is permanently monitored. Based on this information, the annual system test can automatically be run at times when the rooms are not in use.

Emergency lighting management
Owing to the DALI communication standard, Tridonic emergency lighting components of the PRO range can easily be integrated into a monitored lighting and emergency lighting system. Additionally, Tridonic complements the general benefits of a DALI system through special highlights, such as the patented easy addressing system and scalable control systems – from the compact control unit through to the PC software.

LED emergency lighting system

Systematic emergency lighting – by Tridonic

The right answer to any requirement

High efficiency LED´s are now the number one choice for use in emergency lighting applications. They are ideal for impressively efficient, and at the same time simple, emergency lighting solutions. Future-oriented solutions with perfectly matched components are generated from the combination of Tridonic's many years of experience in the field of LED Driver and the company's innovative LED light sources.

Solutions for application-specific use

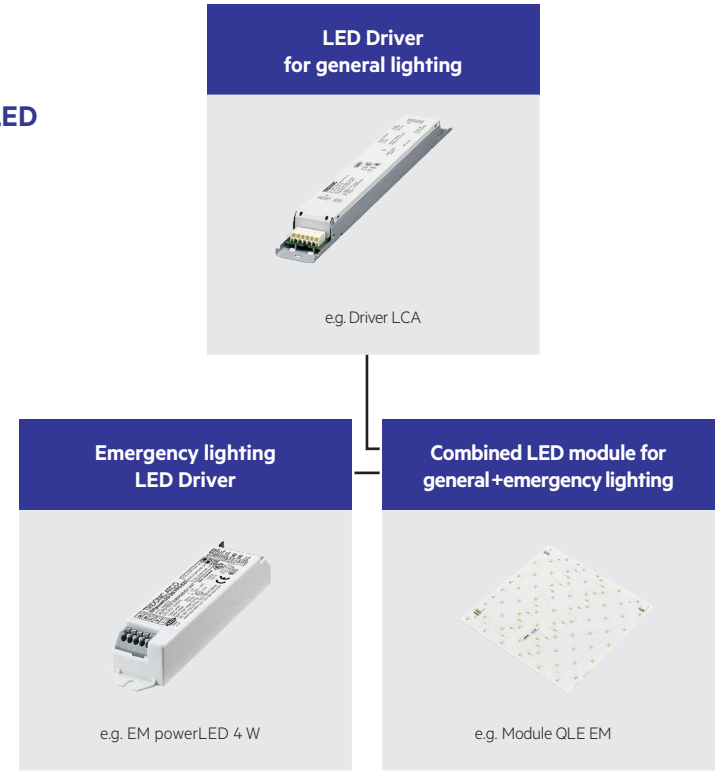
EM powerLED emergency lighting control unit + LED emergency lighting modules
LEDs are ideally suited for use in escape sign, escape route and anti-panic luminaires. In this field, Tridonic offers a wide range of LED modules for emergency lighting operation that boast impressively high system efficiency. Optics that are optimised for the respective application guarantee high illuminance levels combined with extremely compact dimensions.

Emergency lighting LED Driver	—	Application-specific LED emergency lighting module
		
EM powerLED 1 W		… for anti-panic luminaires

Solutions with separate integrated emergency lighting LED

EM powerLED emergency lighting LED Driver + combined LED modules for general and emergency lighting
For use in luminaires for general lighting, Tridonic can provide you with a wide range of LED modules. The modules of the EM range feature defined LED light points for emergency lighting operation – and accordingly an integrated emergency lighting function.

As these LEDs are addressed separately, reliability is increased even further, and ageing effects avoided. Direct integration also reduces wiring effort.

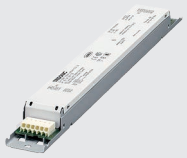


Universal solution for all LED modules

EM converterLED emergency lighting LED Driver + LED modules for general lighting
In the universal system, the LED modules that are also used for general lighting are switched by means of the emergency lighting control gear in case of an emergency.

This solution offers maximum flexibility: it is compatible with all LED modules and all LED gear components made by Tridonic and other manufacturers.

LED control gear for general lighting



e.g. Driver LCA

LED module for general lighting

e.g. Module QLE

LED emergency lighting control gear

EM converterLED

Combined solution for normal and emergency lighting operation

EM powerLED emergency lighting control units for higher LED-power + LED modules for general lighting
The combined emergency lighting LED Driver EM powerLED (80 W lp, 50 W/45 W C, SR) LED emergency lighting control units are the ideal solutions for a cost-optimised structure of the emergency lighting installation. They integrate the LED Driver for mains operation (four channels) and the emergency lighting function (one channel) in one assembly.

Combined Emergency lighting LED Driver

EM powerLED PRO DIM 45W SR

LED modules for general lighting

e.g. Module ELA

LED Light Engine for emergency lighting operation maintained and non-maintained

LED Light Engine EM ready2apply
The EM ready2apply complete solution (BASIC, SELFTEST, PRO) is the ideal solution for simple emergency lighting design. Thanks to the fusion of the LED driver and the LED module in combination with a long-lasting lithium-iron phosphate ($LiFePO_4$) battery, the unit is immediately ready for use.

Surface-mounted luminaire EM ready2apply $LiFePO_4$
This surface-mounted luminaire impresses both with its technical excellence and its space-saving design. To meet a variety of wiring requirements, two rear panels at different height are available for mounting the luminaire, without any need for tools. Both variants are suitable for various field applications, such as BESA installation. The battery in the cover can also be easily replaced in just a few steps.

LED Light Engine

EM ready2apply

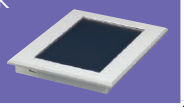
NEW

Light Surface EM ready2apply

Emergency lighting solutions by Tridonic

Complete and standard-compliant

Tridonic offers a diverse range of complete emergency lighting solutions for separate battery-supplied emergency lighting installations – for different requirements and LED modules – that perfectly match the requirements of the various country-specific standards. Here you will find both entirely straightforward and highly sophisticated solutions. The range extends from cost-optimised through to high-end emergency lighting systems.

	Emergency lighting LED Driver	Combined Emergency lighting LED Driver for low power	Combined Emergency lighting LED Driver for high power	Control Systems	Emergency LED Engine
PRO DALI	EM converterLED PRO 	EM powerLED PRO 1–4 W 	EM powerLED PRO DIM 45 W C/SR 	sceneCOM XL EM x/e-touch PANEL EM LINK 	EM ready2apply PRO 
SELFTEST	EM converterLED SELFTEST 	EM powerLED SELFTEST 1–4 W 	EM powerLED SELFTEST FX 45 W C/SR 		EM ready2apply SELFTEST 
BASIC	EM converterLED BASIC 	EM powerLED BASIC 1–4 W 	EM powerLED BASIC LiFePO4 32 W 		EM ready2apply BASIC 

The specifications of the individual products are available at www.tridonic.com/emergency.

LED emergency lighting system

EM powerLED high power

Emergency LED driver for general and emergency lighting

The EM powerLED high power range of combined units is the smart solution where cost optimised or feature driven emergency lighting is required. It integrates the LED driver for mains operation and emergency lighting into one unit. Drivers are available for all applications from low profile non-SELV units for use in linear and square luminaires to compact SELV units for use with downlights and decorative luminaires. Versions are available to cover Basic testing, Self-testing and DALI addressable and monitored testing installations.

The innovative PRO compact versions are true one for all products allowing lighting control and dimming alongside emergency testing with a single DALI address. The units are fully compatible with the main PREMIUM and EXCITE range of Tridonic mains LED Drivers and can be used seamlessly in any installation. Strain relief SR compact versions in conjunction with plug in remote battery offer an out of the box solution.

EM powerLED SELFTEST FX 45 W
Independent automatic self-testing
EM powerLED SELFTEST with its integrated automatic test functions is performing a weekly function test and an annual duration test independently. The test result is shown locally via a bi-colour status display LED.

EM powerLED PRO DIM 45 W
Central control and monitoring via DALI
The DALI addressable EM powerLED PRO combines both lighting control and automatic tested and monitored emergency lighting in one product.

EM powerLED BASIC FX SC $LiFePO_4$ 32 W
The combined emergency lighting LED driver is very compact and reduces wiring work.

At a glance: **EM powerLED high power**

- Combined functionality
- Small range for maximum coverage including selection of duration and power output
- Compact SELV and linear* non-SELV units
- Strain relief and embodiment versions of SELV units
- Basic, self-testing and PRO DALI versions
- Integrated simple corridorFUNCTION for BASIC versions
- ST versions with switchDIM
- PRO versions with a single DALI address for emergency and lighting control
- I-SELECT 2 for easy and accurate current selection

* Only currently available in BASIC test versions.

LED emergency lighting system

EM powerLED low power

Emergency lighting LED Driver for a wide range of applications

The characteristic features of Tridonic emergency lighting LED Driver are small dimensions and extremely flexible applications. Apart from the operation of powerful individual LED light points, they are also able to actuate several LED points with a lower individual rating. The entire range of Emergency lighting LED Driver has been designed for operation with environmentally friendly NiMH batteries. The unique intelligent multi-level charging circuit provides for quick and gentle charging of the batteries.

EM powerLED 1 W and 2 W may be used in maintained mode and in non-maintained mode. They are accordingly suited for both maintained operation in escape sign luminaires or for minimum lighting at night as well as in safety luminaires with a low to medium rating. EM powerLED is available with 1, 2 and 4 W.

EM powerLED BASIC 1–4 W
Compact and efficient
EM powerLED BASIC 1–4 W is a high-grade emergency lighting control unit offering maximum reliability for the operation of 1 to 2 LEDs in a row within minimum space (cross-section of 21 × 30 mm).

EM powerLED BASIC SC 32 W
Small housing for approved battery
The combined emergency lighting driver for self testing is a space-saving version for NiCd and NiMH batteries and can either be built into the luminaire or used as an independent device. It is designed for a forward voltage of 15 to 50 volts and supports a maximum output power of 32 watts. The driver is also available with an IP20-protected battery pack. I-SELECT 2 plugs can be used to adjust the output current between 350 and 700 mA.

EM powerLED SELFTEST 1–4 W
Automatic testing and monitoring
EM powerLED SELFTEST 1–4 W works independently and automatically runs all function tests and annual system tests as well as the control of the batteries. The result is displayed by the two-coloured status LED.

EM powerLED PRO 1–4 W
Integration into a DALI system
The top high-tech product of the range – EM powerLED PRO 1–4 W – boasts unrestricted DALI compatibility and numerous impressive features, including the patented addressing system allowing for simple control of DALI emergency lighting control gear in any installation.

At a glance: **EM powerLED low power**

- Basic, Selftest and DALI-addressable versions
- Compact design with 1, 2 or 4 W output power
- Combined unit for mains and emergency lighting operation
- Maintained and non-maintained mode
- Various mounting options

The specifications of the individual products are available at www.tridonic.com/emergency.

LED emergency lighting system

EM converterLED

Highly compatible emergency LED driver

At a glance: **EM converterLED**

- Can be combined with dimmable and non-dimmable LED Drivers for maintained operation
- Can be used flexibly in combination with LED modules by Tridonic or other renowned manufacturers
- Basic, Selftest and DALI-addressable versions
- For medium to high LED performance
- Constant current operation for constant lighting result
- SELV and non-SELV versions

The rapid growth of LED technology within the lighting sector has created need for suitable emergency lighting systems for luminaires. Thanks to power control in emergencyoperation, the slim, transparent range of the EM converterLED product group offers most flexibility for a number of combinations of LED light sources with LED Drivers by Tridonic and other renowned manufacturers.

As a LED Driver for non-maintained mode, EM converterLED is used in combination with standard and dimmable LED Drivers. It is available as SELV and Non-SELV versions and with different functions. According to SELV classification, versions with a maximum output voltage of 50 V, 90 V and 250 V are available.

The latest EM converterLED product range now also supports $LiFePO_4$ batteries:

New $LiFePO_4$ battery generation

The entire EM converterLED group supports both commonly used NiCd and NiMH batteries and the latest generation of $LiFePO_4$-based batteries. These products have a much longer life time of up to 100,000 hours, an 8-year guarantee and are environmentally friendly. Their high energy density enables smaller batteries, and subsequently more compact luminaire designs.

One housing format for all
The housing concept for the EM converterLED range with fixed dimensions for length, width and height (179 × 30 × 21 mm) provides luminaire manufacturers with the possibility to scale and extend their luminaire ranges with different emergency lighting functions, without having to change the mechanical design and holes of their luminaires.

Overview

EM converterLED BASIC G2
Cost-optimised and efficient

EM converterLED BASIC offers fundamental emergency lighting functions for cost-optimised emergency lighting solutions. National test standards for emergency lighting applications are implemented manually; test results must be manually documented.

EM converterLED SELFTEST G2
Local monitoring

EM converterLED SELFTEST features a decentralised selftest function in compliance with national standards for emergency lighting applications. Typically, the test results will be displayed at the luminaire by means of a two-coloured LED; the results are documented manually.

EM converterLED PRO G2
Central monitoring via DALI

EM converterLED PRO features a selftest function in compliance with national standards. The test procedures and test sequences as well as the documentation of test results are managed through a central DALI system. The NFC interface allows the emergency lighting drivers to be easily commissioned and the black box data to be read out via companionSUITE. Also integrated is the DALI power supply, which paves the way for wireless emergency functionality, in a compact luminaire design.

EM converterPACK
Driver and battery combined

The EM converterPACK combines emergency lighting driver and battery in one housing. Existing luminaires can therefore easily be equipped for emergency lighting mode – without the need for a combo device or special driver. The housing with strain relief is easily mounted via a plug-in system and offers the option of loop-through wiring. In the practical EM converterPACK box, driver and battery combinations can also be installed outside the luminaire.

EM converterLED 6W/9W BASIC/PRO HP
For high-bay applications

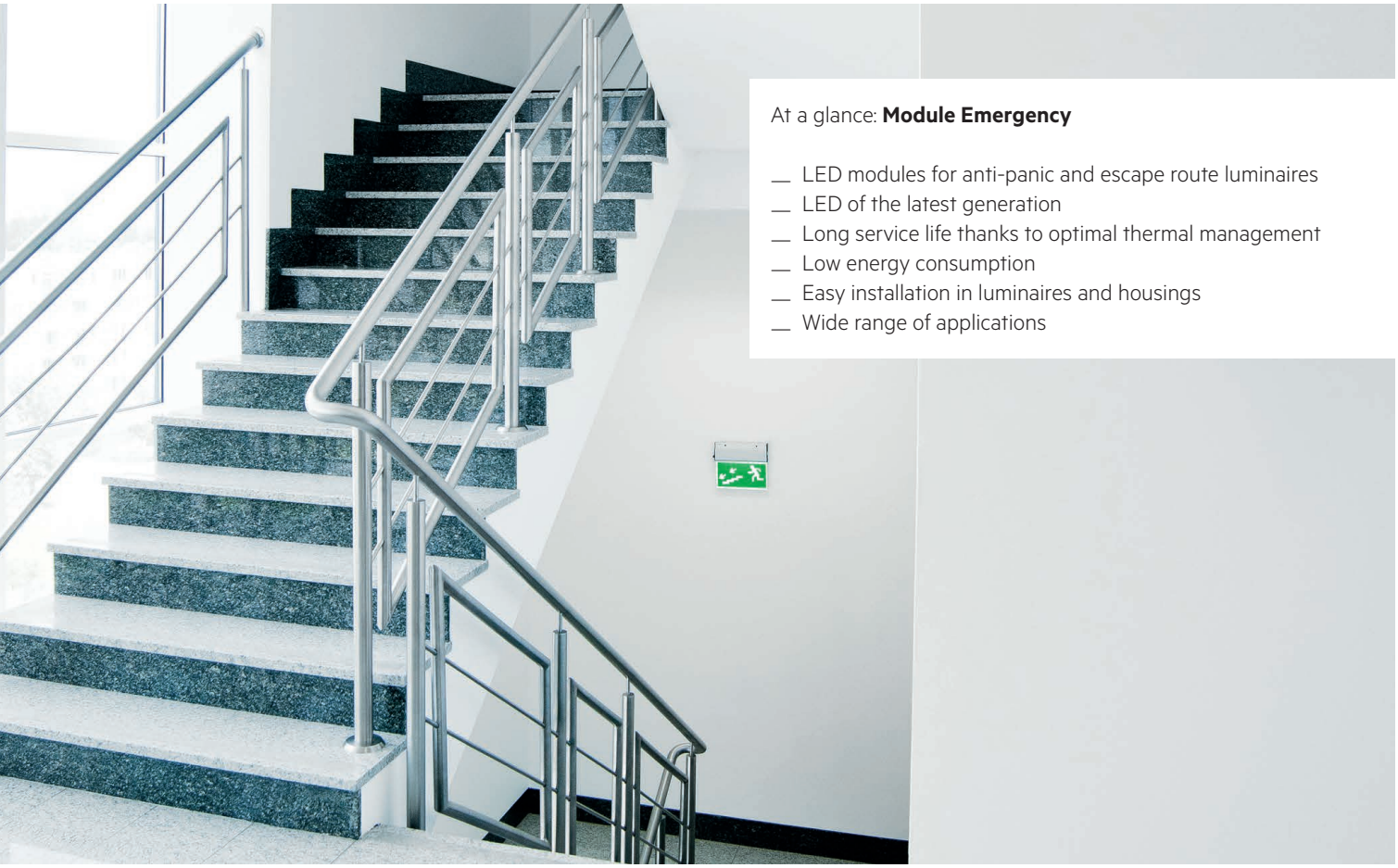
The driver variant with 6 or 9 watts was specially developed for high installation heights or applications with high emergency lighting power requirements. They are optionally available for manual testing or with automatic test function and are powered by long-life $LiFePO_4$ batteries.

The specifications of the individual products are available at www.tridonic.com/emergency.

LED emergency lighting system

Module Emergency

Emergency light sources of utmost efficiency



At a glance: **Module Emergency**

- LED modules for anti-panic and escape route luminaires
- LED of the latest generation
- Long service life thanks to optimal thermal management
- Low energy consumption
- Easy installation in luminaires and housings
- Wide range of applications

Module EM-ES for uniform illumination of escape signs.

As compared to fluorescent luminaires, LEDs boast high system efficiency – even at low ambient temperatures. They can be switched on and off as often as necessary, immediately producing full light output. These are ideal conditions for emergency lighting systems with their regular tests and monitoring routines. Due to its compact size, the environmentally friendly LED also offers more flexibility.

Module EMERGENCY (EM) feature an optic ideally matched to the respective application. In spite of its extremely compact size and highly energy-efficient operation, it thus guarantees illumination in conformity with applicable standards.

Module EM-ES
For escape sign luminaires
For uniform illumination of exit signs or escape signs, Tridonic offers convenient LED strips that make an excellent contribution to safety energy consumption of only 1 W for over 50,000 hours. Different models are available for the various luminaires, with the length and number of LEDs varying. EM powerLED Emergency lighting LED Driver provide for reliable low power operation.

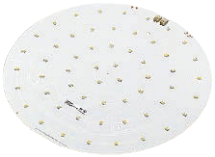
Module LED including Emergency

Reliable, bright – and highly functional

The SLE, QLE EM, CLE EM and LLE EM modules are modules for general general lighting, which have additional, separate LEDs for the emergency emergency lighting function. These can be switched on and off independently of the DALI independently of the other LEDs for orientation and emergency lighting.

Module SLE
LED modules of the latest generation
Due to the circular, compact design with powerful lumen packages, the Module SLE product range opens up a new dimension of flexibility.

The reliable LED module is suitable both for downlights and for spotlights with uniform light distribution. In interiors, colour temperatures of 3,000 K and 4,000 K as well as a colour rendering index CRI > 80 enhance lighting quality, while in outdoor areas the versions with 5,000 K and a CRI > 70 are particularly impressive on account of their high efficiency.



Module CLE EM, QLE EM and LLE EM
Flexible LED system solutions
By combining the octagonal, square and linear LED modules at will, it is very simple to integrate efficient LED technology into existing luminaire designs. At the same time, new design concepts can be implemented – regardless of the optic fitted, for LED system solutions are suitable for all systems, from wide-area luminaires to recessed luminaires. With their high colour rendering, warm white and intermediate colour temperatures, they are an equivalent alternative, in terms of quality, to traditional fluorescent lamps.
Another positive feature is their energy balance: excellent system efficiency of up to 155 lumens per watt results from the high energy efficiency of the LED modules and the perfectly matching LED Drivers. For emergency lighting operation, the respective emergency version of these modules is fitted with separate LED light points.

At a glance: **LED modules with emergency lighting LEDs**

- Minimum ageing of the emergency lighting LEDs
- Increased reliability
- Hardly any impact on normal lighting during function tests
- Easy wiring and full compatibility
- Independent from voltage and output of the main LEDs

The specifications of the individual products are available at www.tridonic.com/emergency.

Batteries

High quality for sophisticated applications

The proper function of an emergency lighting installation not only depends on reliable control gear – but, to a great extent, on the quality of the batteries used.

Due to continuous charging and high temperatures, the batteries used for emergency lighting installations are subject to demanding conditions during normal operation and they must provide full output at the times they are needed most urgently. Tridonic batteries have been specifically tested for this task, and have been designed for a service life of at least four years in maintained operation at high temperatures and constant charging.

Tridonic batteries have been developed and tested according to the most stringent standards applicable to emergency lighting installations.

Batteries for any application

For the wide range of emergency lighting LED Driver, all three NiCd, the more environmentally friendly NiMH and the long lasting $LiFePO_4$ batteries are offered. The charge controllers of these compatible devices were designed specifically for both technologies either with electronically regulated charging circuits or with the latest multi-level charge controllers to guarantee the least possible energy consumption combined with optimal battery service life.

At a glance: **batteries by Tridonic**

- High-grade batteries made by internationally renowned manufacturers
- High-temperature cells with long service life according to the latest battery technology
- NiCd for optimal efficiency
- NiMH for good energy density and small dimensions
- $LiFePO_4$ for long lifetimes and even further reduced dimensions

The specifications of the individual products are available at www.tridonic.com/emergency.

LED emergency lighting system

EM ready2apply

Everything an emergency escape lighting system needs

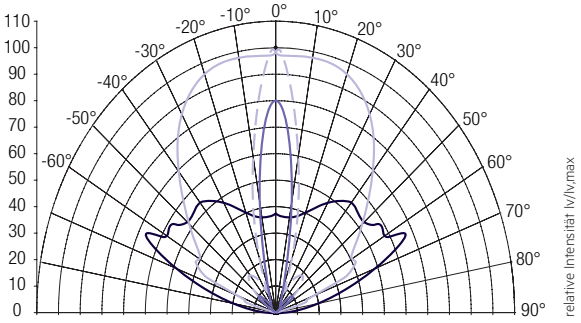
The EM ready2apply product family combines all the emergency escape lighting components in a compact space. Both the downlight and the surface-mounted variant are fitted with three interchangeable optics. EM ready2apply offers a perfectly coordinated complete solution that is equipped for any area of application in emergency lighting. As the gaps between the LED engines can be anything up to 15.1 metres, fewer luminaires are required. The combination of an energy-efficient lithium iron phosphate battery ($LiFePO_4$) with a long life time of eight years results in a high-quality product which, thanks to its clever mounting concept, also saves valuable time during installation.

Efficient battery for optimized reliability
The new lithium iron phosphate ($LiFePO_4$) battery gives the EM ready2apply luminaire a long lifetime of eight years, keeping maintenance costs at a minimum. The battery's safety has been extensively tested by external independent specialists. The result is an extremely reliable solution, which allows an impressive three year battery guarantee. A unique push-click-connection with a snap in mechanism provides an integrated strain relief.

- Available as 1 cell or 2 cells variants
- Fully tested for safety with included temperature protection and monitoring
- Compact micro connector providing polarity safe connection
- 8 years design life and 3 year guarantee

The right optics for any solution
Every box contains three easily interchangeable optics, which equip EM ready2apply for **anti-panic** lighting, illuminating **escape routes** and to highlight **spots**.

- Maximum flexibility in every box
- Easily interchangeable with just a click
- Luminaire spacing up to 15.1 metres



EM R2A BASIC/ST/PRO

Type	Rated duration	Operation	Power
EM R2A BASIC	1 h, 3 h	non-maintained, maintained	1 W, 2 W
EM R2A SELFTEST	1 h, 3 h	non-maintained, maintained	2 W
EM R2A PRO	1 h, 2 h, 3 h	non-maintained, maintained	2 W

All variants

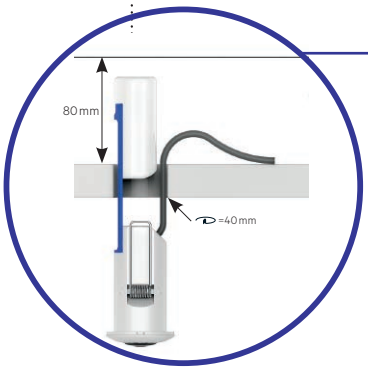
- Test variants:
  BASIC, tests have to be carried out manually and test results must be manually documented
  SELFTEST, tests carried out automatically and the results are documented manually
  PRO, test procedures and test sequences as well as the documentation of test results can be managed through a central DALI system.

Installation variant

LED driver and module in one

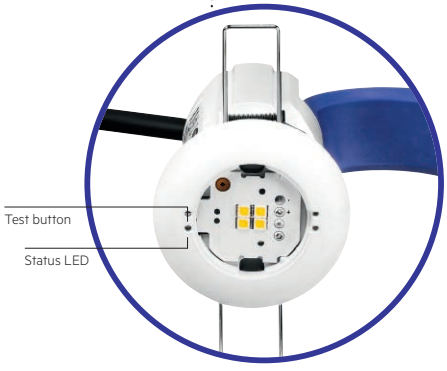
Flexible circuit technology has allowed Tridonic to integrate a complete solution into an extremely small housing. The complete assembly offers an ideal solution for a variety of ceiling constructions with void heights as small as 80 mm.

- Luminaire, battery and optics in a single box
- Small compact design for use in limited space
- Maintained and non-maintained variants
- Colour temperature: 6,500 K
- High colour rendering index: CRI > 80
- Narrow colour tolerance: MacAdam 3



Installation in just a few steps

Thanks to a clever installation concept, which even integrates the packaging as a useful installation guide, the EM ready2apply can be installed in just a few easy steps. The compact housing with the integrated driver allows for an aesthetic emergency solution even when space is limited.

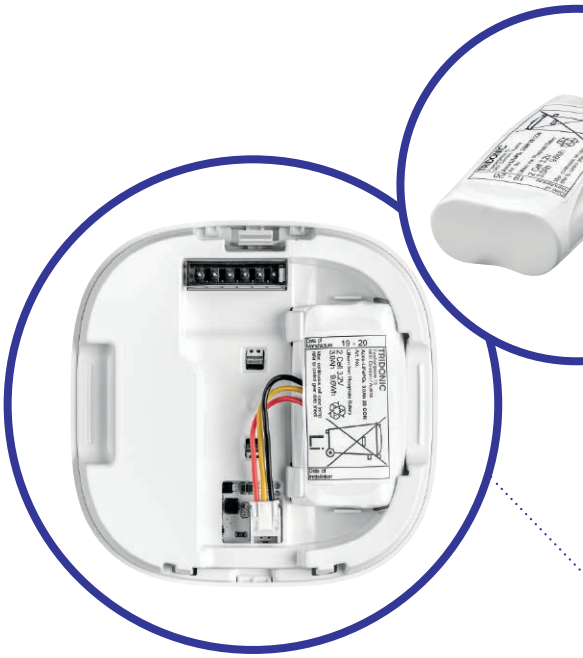


LED emergency lighting system

EM ready2apply surface-mounted luminaire

Small luminaire, big responsibility

This surface-mounted luminaire impresses both with its technical excellence and its space-saving design. To meet a variety of wiring requirements, two rear panels at different heights are available for mounting the luminaire, without any need for tools. Both variants are suitable for various field applications, such as BESA installation. The battery in the cover can also be easily replaced in just a few steps.



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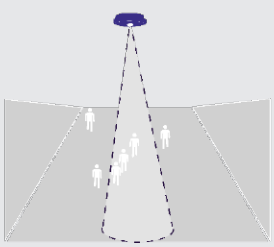
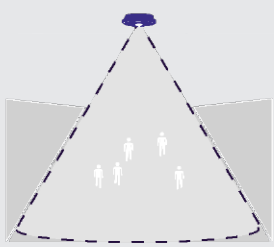
Using the optics
The three interchangeable optics with click-in mechanism illuminate important objects and dangerous areas (spot), reduce stress and panic levels (anti-panic) and ensure that escape routes are clearly illuminated (escape route).

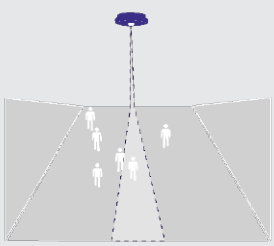
Spot distribution



Anti-Panic



Escape



Discreet design
The lower variant of the rear panel blends seamlessly into its environment. Rear wiring makes the luminaire quick to mount.

Flexible installation
The higher variant of the rear panel is suitable for all types of wiring. Rear, side and through-wiring of the luminaire are all possible.

At a glance:
EM ready2apply surface-mounted luminaire
- Two rear panels at a height of 33 and 56 millimetres
- Suitable for rear, side and through-wiring
- BASIC, SELFTEST, PRO test variants
- Interchangeable optics: anti-panic, escape route, spotlight
- Size: 124 x 124 x 40 mm
- $LiFePO_4$ battery

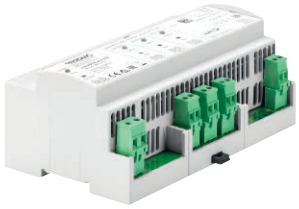
Type	Cable entry	Rated duration	Operation	Power
EM R2A BASIC SM	rear cable entry side cable entry	1 h, 3 h	non-maintained	2 W
EM R2A SELFTEST SM	rear cable entry side cable entry	1 h, 3 h	non-maintained	2 W
EM R2A PRO SM	rear cable entry side cable entry	1 h, 3 h	non-maintained	2 W

- Test variants:
  BASIC, tests have to be carried out manually and test results must be manually documented.
  SELFTEST, tests carried out automatically and the results are documented manually.
  PRO, test procedures and test sequences as well as the documentation of test results can be managed through a central DALI system.

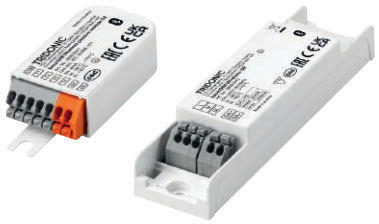
DALI-basierte Lichtsteuerung

sceneCOM evo
DALI goes Wireless

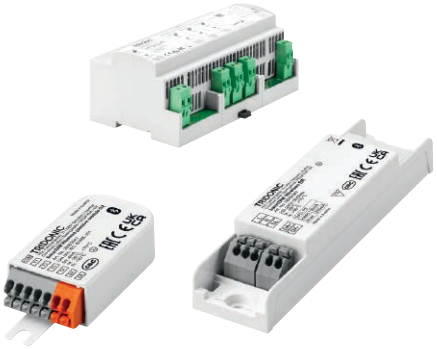
When combined, the DALI-2-based sceneCOM lighting control unit and basicDIM Wireless control technology from Tridonic make the perfect intelligent lighting management team. Thanks to a targeted system extension, sceneCOM evo can now be used on wireless luminaires with an integrated basicDIM Wireless module, allowing existing systems to be expanded simply, quickly and cost-effectively.



Application Controller sceneCOM evo DA2
The Single Master Application Controller is certified according to the latest DALI-2 standard, making it compatible with all DALI-2 certified devices on the market. Software licence extensions enable the Application Controller to be extended with project-specific functions at low cost, thus offering even more flexibility when planning and implementing lighting solutions.



basicDIM Wireless DALI Gateway
The Gateway bridges the gap between wireless and DALI-based lighting control units. Luminaires with an integrated basicDIM Wireless radio module can therefore be easily integrated into and controlled from existing sceneCOM evo and S lighting management systems. They can also be integrated into building management systems via the sceneCOM evo and S Application Controllers. The combination of DALI and basicDIM Wireless thus helps create the ideal basis for straightforward refurbishment projects with significantly less installation work.



Drahtloses Emergency System
By combining sceneCOM evo and basicDIM Wireless, wireless safety luminaires can also be integrated into DALI systems and centrally monitored. The DALI Gateway handles the communication between the Application Controller and the basicDIM Wireless radio module in the luminaire. Additional DALI cables are therefore no longer required.

LED emergency lighting system

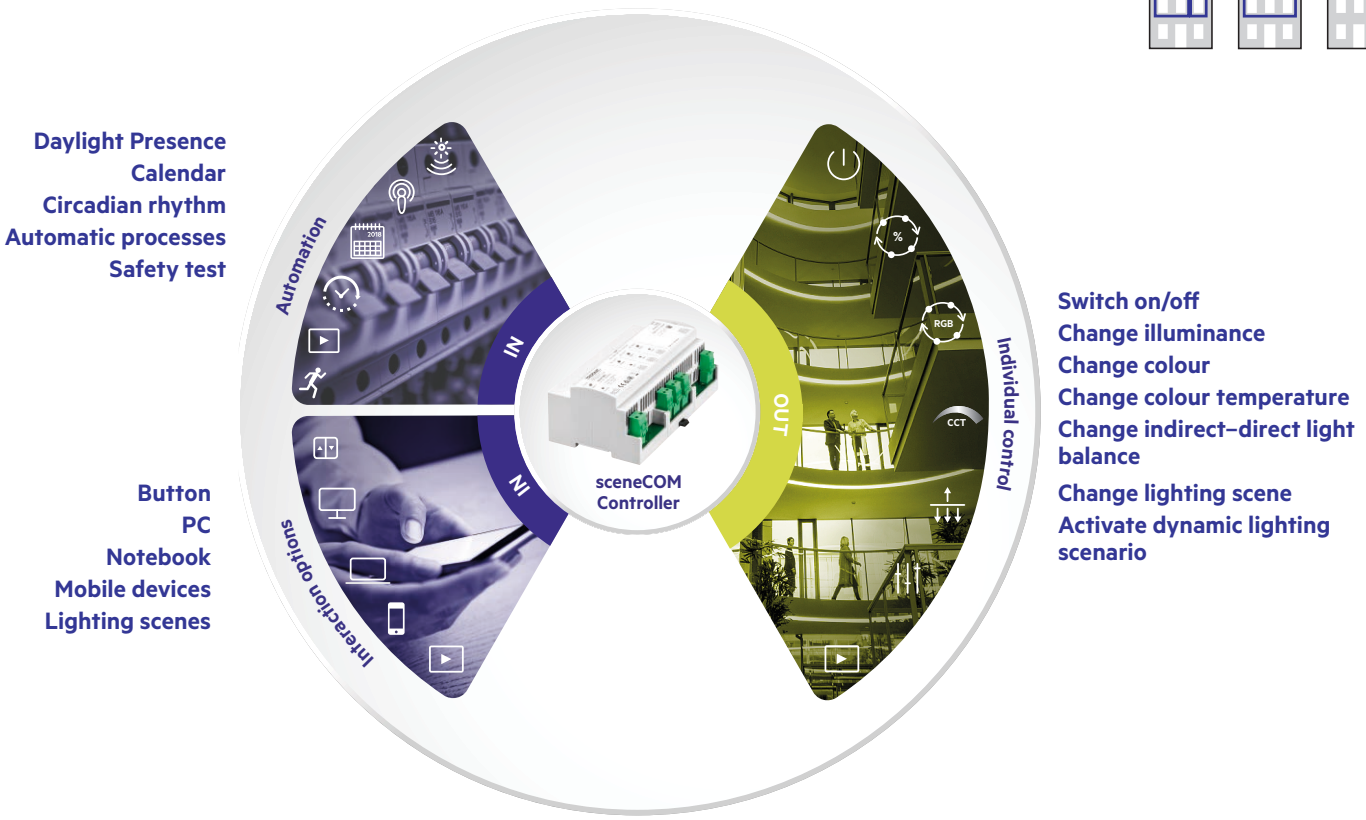
sceneCOM XL EM, DALI based light management

Controlling and managing light has never been easier

Automated emergency testing and reporting
Facilitate maintenance and centralised monitoring. Reporting of functionality and duration testing and failures.

The controller – the compact command centre

A system overview



At a glance:

sceneCOM Controller

- Independent lighting control for up to 192 DALI devices on 3 DALI lines
- Simple configuration via WEB interface
- Comprehensive control of DALI circuit is possible
- Freely programmable daily planning with calendar function
- DALI emergency lighting test plan and monitoring (up to 50 emergency light devices)
- Corresponds to IEC 62034
- IP rating IP20
- For distribution board installation

Interfaces

- 3 DALI lines
- BACnet interface
- Terminals: Screw terminals

Functions

- Addressing wizard
- Presence linking
- Local and downloadable data backup
- Calendar
- Self-contained emergency luminaires
- Freely programmable shows
- RGB and Tunable White
- Scenes and zones

Close light

We attach great importance to a strong international presence – this allows us to stay sufficiently close to our customers

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