

LED solutions

Industry

Lighting solutions for industrial applications



TRIDONIC



Lighting solutions for industrial applications

Your benefits

Energy and cost savings thanks to

- extended temperature ranges
- integrated dimming function
- very low standby power consumption

Ideal colour rendering, high module efficiency, adapted illuminance levels and light colours

- thanks to perfectly matched converter
and module systems

The integrated constant light function ensures constant luminous intensity throughout the life of the system

Extreme reliability and reduced maintenance thanks to

- long life-time
- increased dielectric strength (Surge/Burst)
- constant luminous flux throughout the life of the system

Versatile applications thanks to

- connections to sensors and light management systems
- integration of the components in existing emergency
lighting systems

Lighting solutions for industrial applications

High-bay sensor, combinable with system solutions, for industrial applications

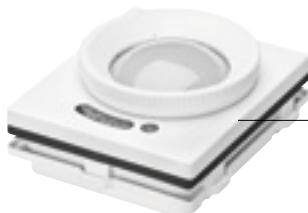


basicDIM ILD G2
SFI 20 10DPI WH

At a glance:

basicDIM ILD G2

- PIR sensors with ambient light and motion detection
- Integrated DALI-2 compatible application controller
- For up to 20 DALI-2 drivers
- ILD G2 is supporting up to 4 motion-slave sensors MSensor G3
- Direct connection to DALI power source
- Easy commissioning and control via IR remote control
- Low-, mid- and high-bay versions for different room heights up to 16 meters
- Ideal for single luminaires and rooms, corridors or smaller areas



basicDIM ILD G2 SFI
20 16DPI WH



MSensor G3 SFI 30 PIR 10DPI
For mid-bay application

At a glance:

MSensor G3

- PIR sensor with ambient light and motion detection
- DALI 2 certified
- as DALI 2 input device can be integrated in various wired and wireless Lighting Management Systems
- Slim housing for luminaire installation
- With IP66 protection (mid-bay) and IP65 protection (high-bay)
- Power supply via DALI line
- Easy commissioning via DALI Application Controller
- Low-, mid- and high-bay versions for different room heights up to 18 meters
- For scalable DALI systems



MSensor G3 SFI 30 PIR 16DPI
For mid-bay application

Lighting solutions for industrial applications



Reliable light for every need

Industrial environments place special requirements on lighting systems. Long operating times and critical atmospheres place heavy demands on any lighting system, and maintenance is often associated with major effort and high costs.

The Tridonic range of products are perfect replacements for fluorescent and HID light sources as they meet all the requirements for industrial lighting.

Heavy industry

Because of its complex production process, the heavy industry is characterised by extreme environmental conditions. Multiple cooling and heating steps in the production process lead to major differences in temperature within the production hall. The luminaires are continuously exposed to vibrations, shocks, enormous forces and a high level of dirt. The luminaires are continuously exposed to vibrations, shocks, enormous forces and a high level of dirt. A high degree of reliability is essential to enable continuous operation.

Lighting solutions for industrial applications



Deep-freeze warehouses

According to the HACCP guidelines, the prescribed minimum temperature for deep-freeze warehouses and deep-freeze logistics centres is below -18 °C. Depending on the products the temperatures are therefore between -18 °C and -30 °C. In order to avoid devices malfunctioning at these extreme temperatures, cold-resistant equipment and electronics suitable for deep-freezing must be used and precise placement ensured.

Driver for industrial applications

Reliable, robust and durable

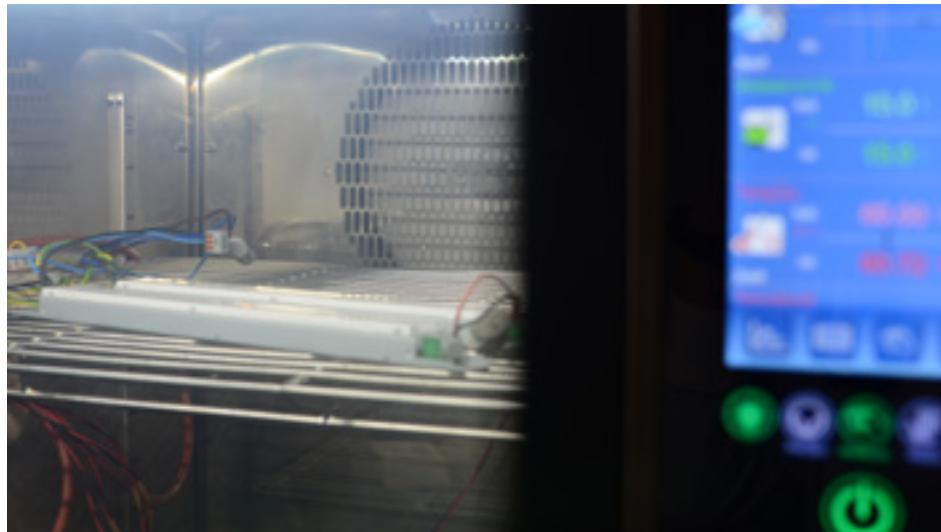
Qualities	Standard applications (office, supermarket,..)	Tridonic Industry
Typical ambient temperatures	-10°C...+50°C	-40°C...+70°C
Dielectric strength (surge/burst)	2 kV	4 kV
Max. Failure rate (50,000h, Ta=50°C)	10%	2.5%

LED Driver from Tridonic for industrial applications have been designed to reduce stress on the components and lead to long life (thermal load/peak voltage). In addition, the circuit design is tested with increased vibration levels that reflect the harsher operating conditions in industrial applications.



The test station in Dornbirn is optimized for the toughest conditions

- Ambient temperatures of up to
- up to -40 °C and up to +80 °C
- 4kV transient protection
- 4 times longer life and 4 times lower failure rate than standard devices (at 50,000h, Ta 50 °C)
- Extended shock and vibration tests
- according to EN 60068



Test station for ambient temperature in Dornbirn (Austria)

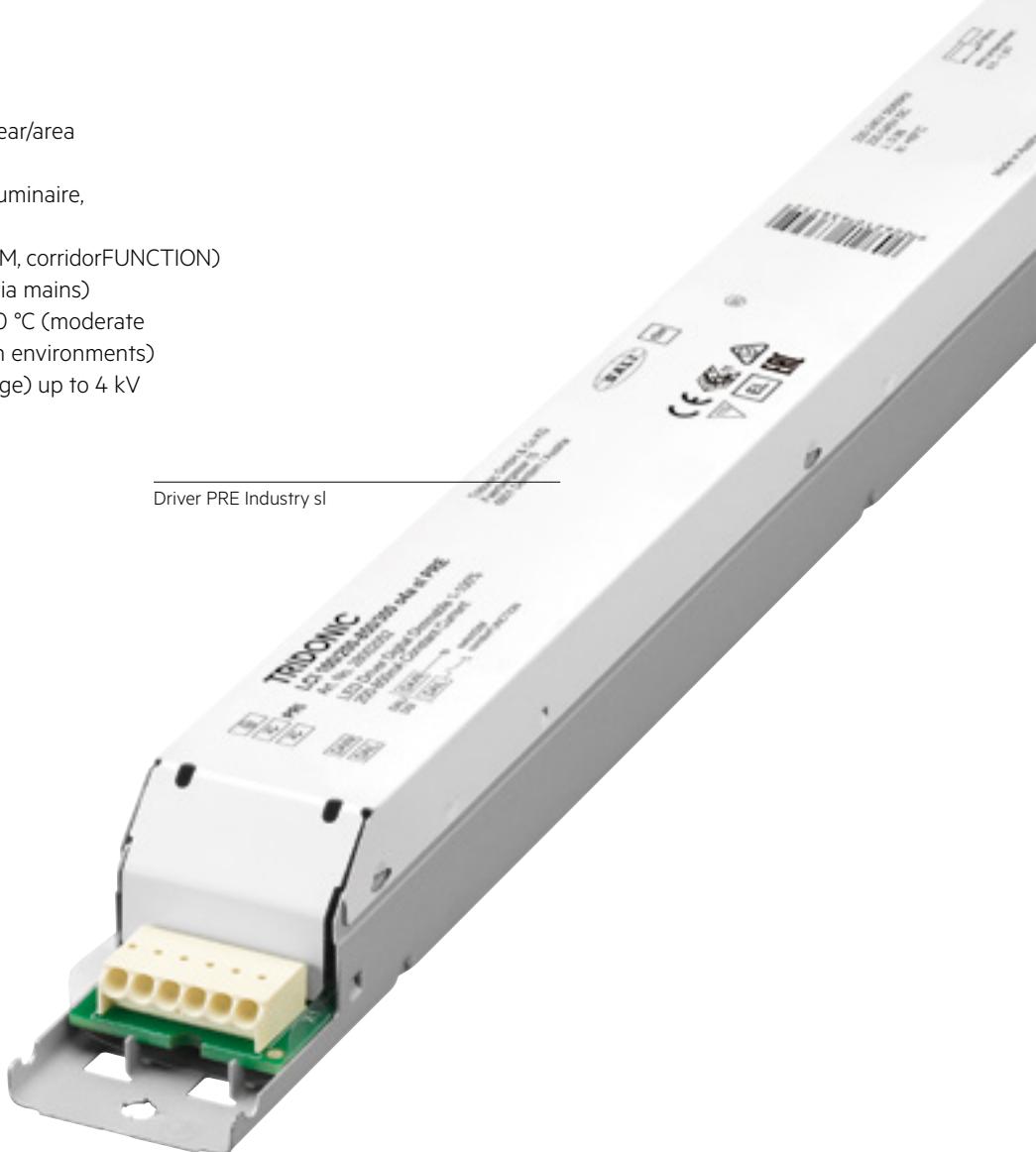
Driver premium (PRE) Industry

At a glance:

Driver premium (PRE) Industry

- Constant current built-in LED Driver for linear/area lighting in industry applications
- lumDATA for storage and transmission of luminaire, energy and diagnostic data
- Interfaces: one4all (DALI DT 6, DSI, switchDIM, corridorFUNCTION) ready2mains (configuration and dimming via mains)
- Extended temperature range of – 25 to + 50 °C (moderate environments) and – 40 °C to + 70 °C (tough environments)
- Suitable for mains voltage peaks (burst/surge) up to 4 kV
- Dimming range 1–100 %
- 5- or 8-year guarantee
- Life-time of 100,000 hours

Driver PRE Industry sl



Driver premium (PRE) | Linear

Type	Output current (mA)	Output power (W)	Output voltage range* (V)	Input voltage (V)	Size (mm)	Guarantee (Year)	environment temperature range (°C)	Order No.
premium (PRE) Industry for tough environments								
LCI 100/200-850/300 o4a sl PRE	200 – 850	100	80–300	220–240	360 x 30 x 28	8	– 40 to + 70	28002052
LCI 150/325-1050/300 o4a sl PRE	325 – 1,050	150	80–300	220–240	360 x 30 x 28	8	– 40 to + 70	28002053
premium (PRE) Industry for moderate environments								
LCI 150/325-1050/300 o4a sl PRE mod	325 – 1,050	150	80–300	220–240	360 x 30 x 28	5	– 25 to + 50	28002054

* Depending on the selected output current. Further details can be found in datasheet

Driver excite (EXC) Industry

At a glance:

Driver excite (EXC) Industry

- Constant-current LED Driver for luminaire installation
- For linear high-bay luminaires
- ready2mains technology: configuration and dimming via the mains cable
- Extended temperature range of – 25 bis + 60 °C (moderate environments) and –40 to +70°C (tough environments)
- Increased dielectric strength (Surge/Burst) of 4 kV/4 kV
- Adjustable current from 200 – 1,050 mA
- Type of protection IP20
- Life-time of 100,000 or 200,000 h
- 5- or 8-year guarantee

Driver EXC Industry sl



Driver excite (EXC) | Linear

Type	Output current (mA)	Output power (W)	Output voltage range* (V)	Input voltage (V)	Size (mm)	environment temperature range (°C)	Order No.
Excite (EXC) Industry for tough environments							
LC 150W 200-1050mA IND sl EXC	200 – 1,050	150	300	220~240	360 x 30 x 28	– 40 to + 70	28000691
Excite (EXC) Industry for moderate environments							
LC 150W 200-1050mA sl EXC	200 – 1,050	150	300	220~240	360 x 30 x 28	– 25 to + 60	28001698

*Depending on the current selected output. Further details can be found in datasheet.

Driver excite (EXC) Industry



At a glance:

Driver excite (EXC) Industry with NFC

- Constant-current built-in LED Driver, particularly suitable for industrial applications in tough environments with elevated ambient temperatures such as cold warehouses or factories
- Adjustable output current between 100 and 700 mA
- Extended temperature range of –25 bis +60 °C (moderate environments) and –40 to +80°C (tough environments)
- Increased dielectric strength (Surge/Burst) of 4 kV/4 kV
- Adjustable output current (I-SELECT 2 resistor or NFC)
- Type of protection IP20
- Life-time up to 100,000 h
- 8-year guarantee

Driver excite (EXC) | Linear | Fixed-Output Industry

Type	Output current (mA)	Output power (W)	Output voltage range* (V)	Input voltage (V)	Size (mm)	Order No.
LCI 75W/100-700 mA 250 V flexC NF Ip EXC3	100 – 700	75	250	220~240	360 x 30 x 21	87500919
LCI 150W/250-1050 mA 300 V flexC NF Ip EXC3	250 – 1,050	105	300	220~240	360 x 30 x 21	87500920

Further details can be found in datasheet.



At a glance:

Driver EXC h21/28 Industry with NFC

- Efficiency up to 96
- Large operating window: 250 to 1,200 mA
- Currents flexibly adjustable via NFC
- Wide temperature range: -40 °C - 80 °C
- 220 W version for luminaires with very high lumen output up to 30,000 lm
- Excellent performance at high temperatures
- Lifetime up to 90,000 hours (at ta = 70 °C)

Driver excite (EXC3) | Linear | Fixed-Output Industry | with NFC

Type	Output current (mA)	Output power (W)	Output voltage range* (V)	Input voltage (V)	Size (mm)	Order No.
LCI 75W/250-500mA 230 V flexC NF h21 EXC3	250-500	75	300	220~240	360 x 30 x 21	28003510
LCI 105W/350-500 mA 230 V flexC NF h21 EXC3	350-500	105	300	220~240	360 x 30 x 21	28003511
LCI 150W/500-850 mA 230 V flexC NF h28 EXC3	100 – 700	150	300	220~240	360 x 30 x 28	28003512
LCI 220W/800-1200 mA 230 V flexC NF h28 EXC3	250 – 1,050	220	300	220~240	360 x 30 x 28	28003513

You can find more details in our data sheet

smartSWITCH 12DP

Switching sensors for industrial applications



smartSWITCH HF 12DP MB f



smartSWITCH HF 12DP MB S f

Sensor smartSWITCH HF 12DP MB

This sensor for luminaire fixtures combines daylight and motion detection in two ultra-slimline housing variants with various fixing points. It is especially suitable for industrial applications and extrem heights. The high-frequency technology means that motion can easily be detected, even through glass and plastic. In addition to the detection range, a threshold for the ambient light and the delay time before switch off can also be set by the nine dip switches in the sensors. The bright-out function prevents the light from switching on when there is sufficient daylight.

At a glance:

smartSWITCH 12DP

- Daylight and motion sensor
- Installation heights up to 12 m
- Temperature range from -20 to +70 °C
- Adjustable detection range (100 to 10 %)
- Bright-out function and support for corridorFUNCTION

smartSWITCH HP 12DP MB S f

Type	Size (mm)	Order No.
smartSWITCH HF 12DP MB f	70 x 36.5 x 24.5	28003498
smartSWITCH HF 12DP MB S f	58 x 52 x 24.5	28003499

Further details can be found in the datasheet



02

03

04

05

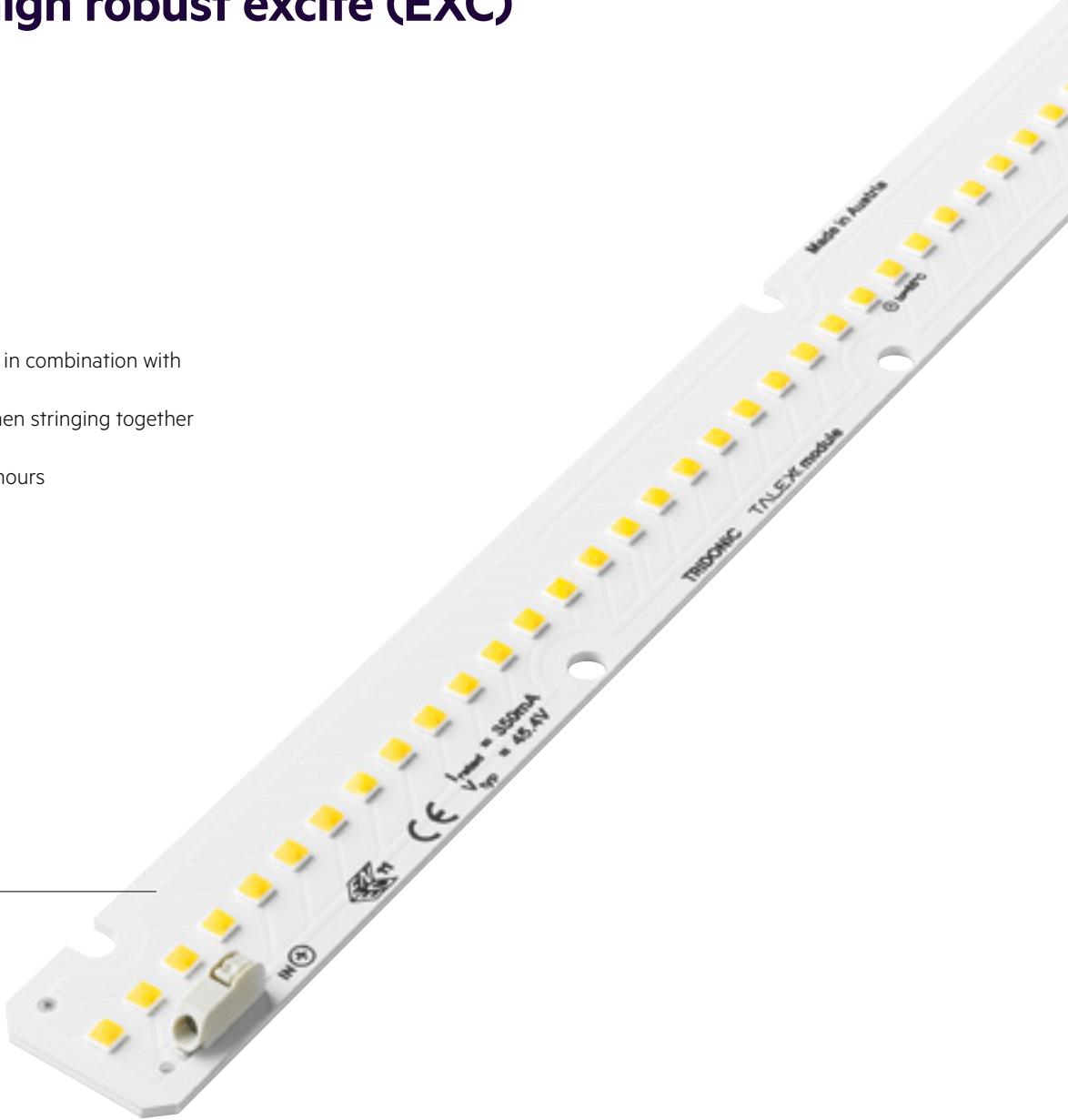
Module LLE high robust excite (EXC)

At a glance:

Modul LLE 24 mm EXC

- Efficacy up to 154 lm/W
- Extended temperature range in combination with industrial drivers
- Perfect light homogeneity when stringing together of several LED modules
- Long lifetime up to 100,000 hours
- 8 years guarantee

Module LLE 24x280 mm EXC



Module LLE high robust excite (EXC)

Type	Colour-temperature (K)	CRI	Typ. luminous flux ^⁹ Operation mode (lm)		Typ. power consumption ^⁹ Operation mode (W)		Module efficacy (lm/W) (Tp=65 °C)		Size (mm)	Order No.
			High Efficiency	High Output	High Efficiency	High Output	High Efficiency	High Output		
LLE 24x280mm 2000lm 830 EXC	3,000	>80	2,230	2,900	15.9	23.9	140	121	24x280	89602077
LLE 24x280mm 2000lm 840 EXC	4,000	>80	2,240	2,940	15.9	23.9	141	123	24x280	89602078
LLE 24x280mm 2000lm 850 EXC	5,000	>80	2,240	2,940	15.9	23.9	141	123	24x280	89602079
LLE 24x280mm 2000lm 865 EXC	6,500	>80	2,240	2,940	15.9	23.9	141	123	24x280	89602080
LLE 24x560mm 4000lm 830 EXC	3,000	>80	4,460	5,800	31.8	47.8	140	140	24x560	89603034
LLE 24x560mm 4000lm 840 EXC	4,000	>80	4,480	5,880	31.8	47.8	141	141	24x560	89603035
LLE 24x560mm 4000lm 850 EXC	5,000	>80	4,480	5,880	31.8	47.8	141	141	24x560	89603036
LLE 24x560mm 4000lm 865 EXC	6,500	>80	4,480	5,880	31.8	47.8	141	141	24x560	89603037

^⁹Tolerance range for optical and electrical data ±10 %

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Light you want to follow.

