

siteco

Made in  
Traunreut

## Trunking systems

The best system. For every application.

More...  
efficient.  
flexible.  
robust.

## Licross 11 / 21

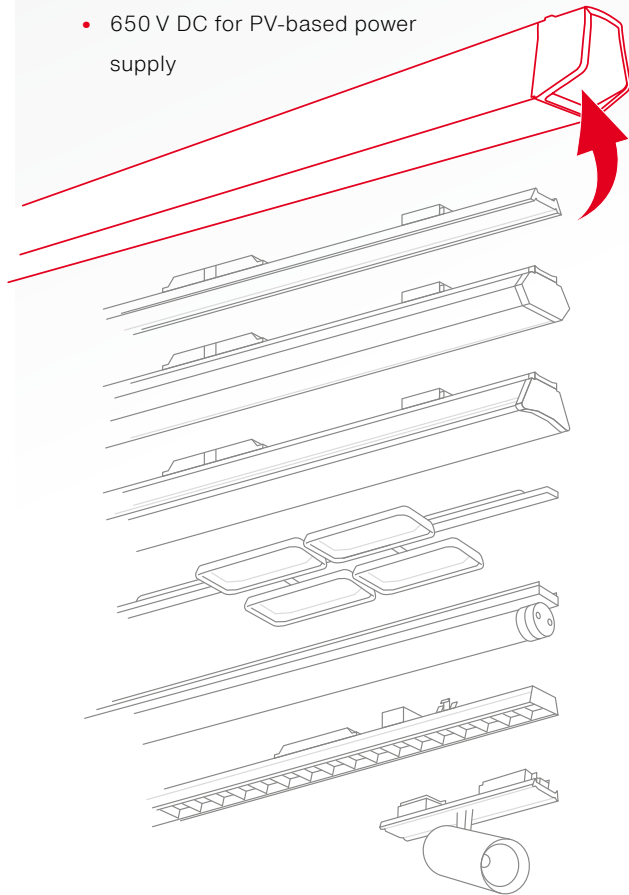
The digital infrastructure of the future.

- 14 cores max.
- Efficiency 209 lm/W
- Service life up to 100,000 h
- Luminous flux maintenance of 95 % (L95)
- Failsafe, patented contact block and robust quick-release catches
- 14 beam characteristics
- 6 light colors incl. Tunable White
- Color rendering max. CRI 90
- Protection rating max. IP64
- Ambient temperature max. +50 °C
- 650 V DC for PV-based power supply

209  
lm/W

14  
cores

More  
robust



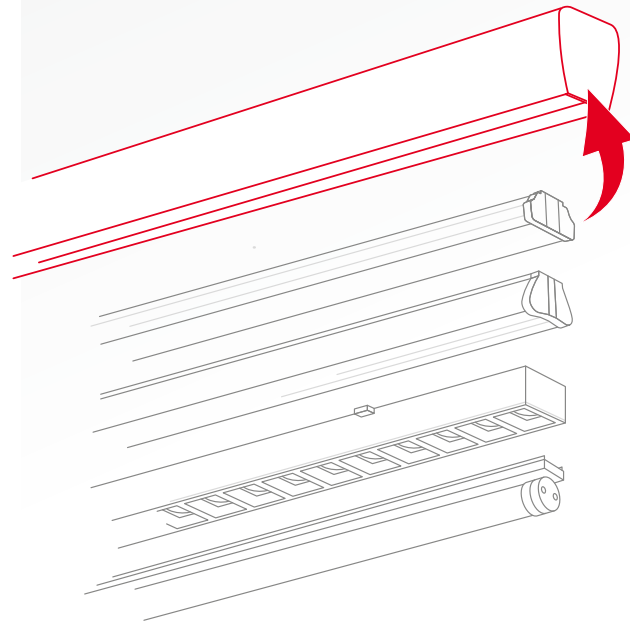
## Modario 31

The classic, now with up to 12 cores.

- 12 cores max.
- Efficiency > 180 lm/W
- Service life up to 70,000 h
- 4 beam characteristics
- 2 light colors
- Color rendering CRI 80
- Protection rating max. IP50
- Ambient temperature max. +40 °C

> 180  
lm/W

12  
cores



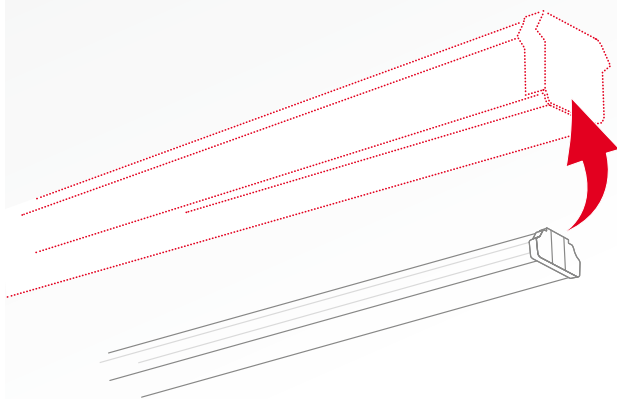
# The best system.

## DUS 31

> 180  
lm/W

**The refurbishment solution  
for the trunking pioneer.**

- Efficiency > 180 lm/W
- Service life up to 70,000 h
- 2 beam characteristics
- 2 light colors
- Color rendering CRI 80
- Protection rating max. IP50
- Ambient temperature max. +40 °C

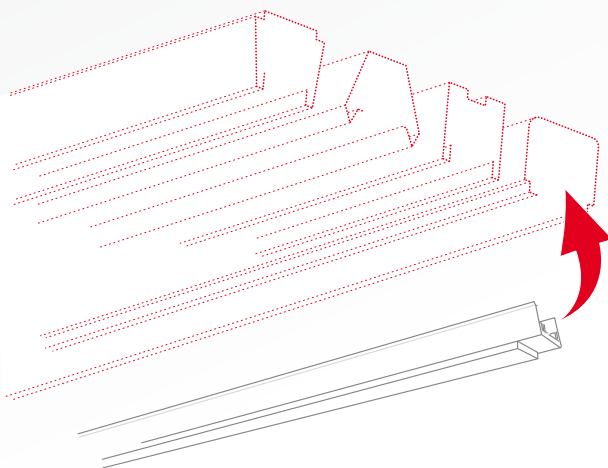


## Trunking Flex 31

> 180  
lm/W

**The refurbishment solution  
for all trunking systems.**

- Efficiency > 180 lm/W
- Service life > 70,000 h
- 5 beam characteristics
- 4 light colors
- Color rendering CRI 80
- Ambient temperature max. +40 °C
- Variants with and without through-wiring



**SITECO has  
been a trunking  
pioneer for 50 years.**

And because we never stop  
improving, you find the  
best solution here for every  
application.

# For every application.

# Licross

209  
lm/W

14  
cores

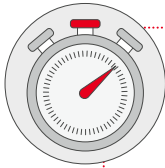
More  
robust

**The digital infrastructure of the future.**



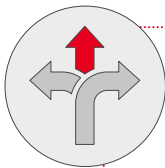
## Quantum leap in efficiency.

With 209 lm/W, Licross is the most efficient trunking system on the market, thus ensuring minimum operating costs and extremely fast amortization.



## The assembly world champion.

Installation in record time. Tool-free installation of all electrical and mechanical components. New contact block and catches for a new level of speed and reliability in assembly.



## One system for all applications.

Add damp-proof luminaires, highbay luminaires, emergency lighting and office luminaires with one-click installation. Integrate loudspeakers and cameras, transmit data, and incorporate WiFi hotspots or even indoor positioning systems.



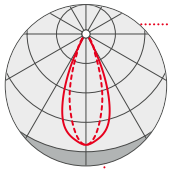
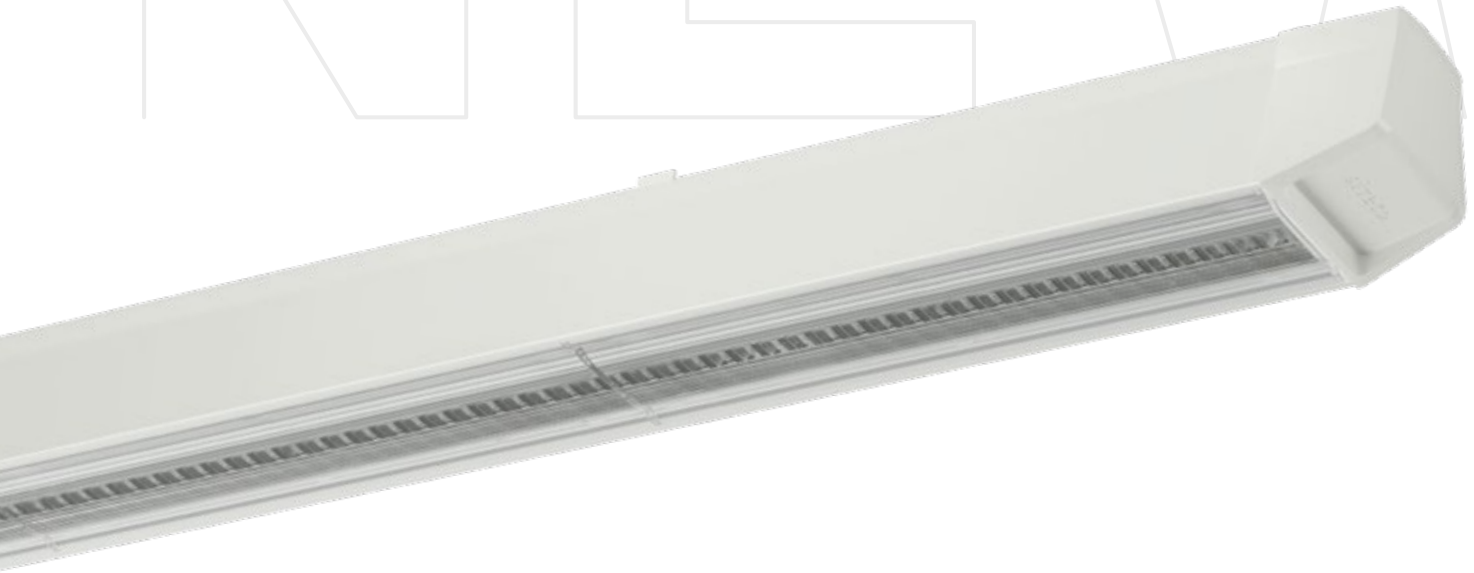
## Integrated emergency lighting.

Two emergency power supplies possible thanks to 14 cores. Emergency luminaire inserts for central and single battery support all standard emergency lighting systems.

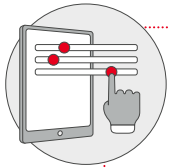


## Industry 4.0.

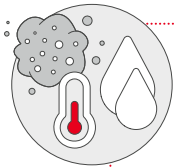
The world's first trunking system with 14 cores enables data transmission at up to 1 Gbit/s, making it your data highway for Industry 4.0.

**Fully optimized light distributions.**

You will always find the right light for every application with Licross. Optimized optical systems ensure efficient illumination, optimum visual comfort with the best color rendering and excellent glare control.

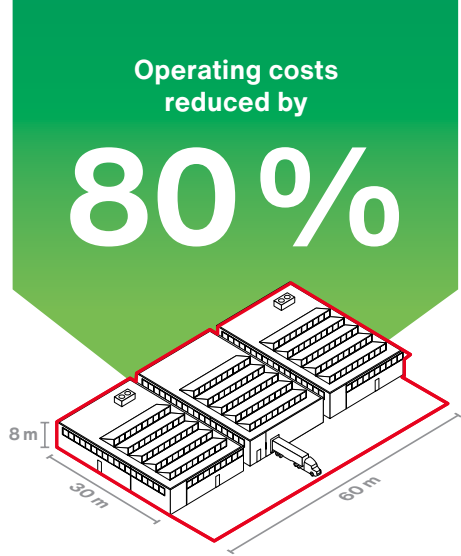
**Full control.**

Optimized sensors save energy everywhere. Control the light according to daylight and presence. The Matrix sensor prevents incorrect switching by driverless transport systems, since it distinguishes between people and machines.

**Extremely robust.**

Dust, moisture and high temperatures? No problem. High protection ratings up to IP64 and temperature resistance up to 50 °C enable use even in harsh environments.

# Why efficiency counts.



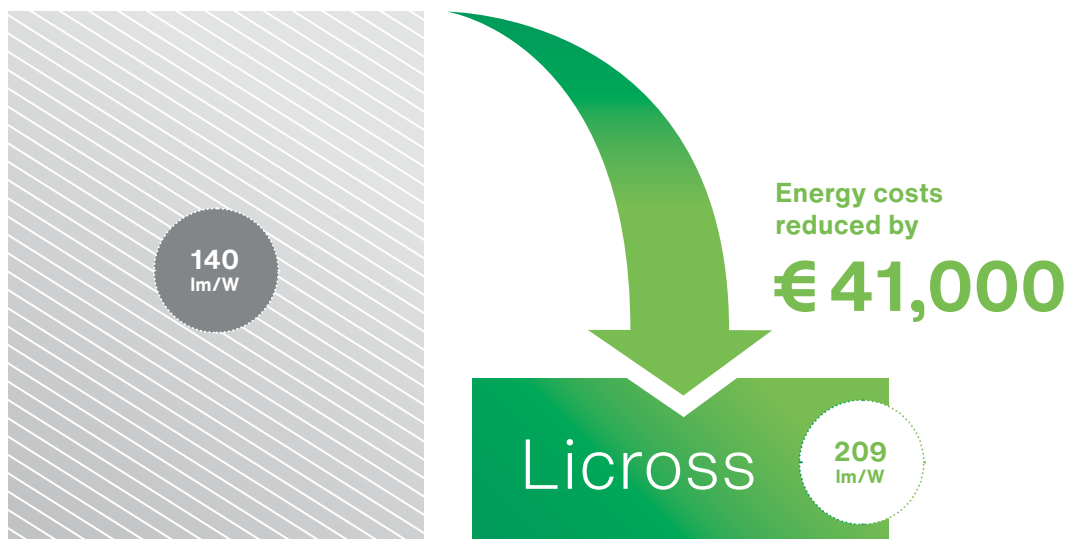
## Because it pays off.

Calculation example for a new lighting system with 209 lm/W.

	old installation	new installation	
Luminaire type	4 × 58 W, ECG	Licross Recessed	
Number of luminaires	153	162	
<b>Energy consumption per year</b> in kWh	<b>138,753</b>	<b>28,979</b>	-80%
<b>Reduction in energy consumption per year</b> in kWh		-109,774	
<b>CO<sub>2</sub> emissions per year</b> in t	<b>59.2</b>	<b>12</b>	-80%
<b>Reduction in CO<sub>2</sub> emissions per year</b> in t		-47.2	
<b>Operating costs per year</b> in €	<b>42,624</b>	<b>8,463</b>	-80%
<b>Savings per year</b> in €		-34,161	

Calculation based on energy price of 0.26 €/kWh.

**With 209 lm/W, even faster amortization and significantly lower energy costs over the service life.** With the new Licross, you save an additional 41,000 euros in energy costs over the service life compared to the standard.



# Assembly world champion.

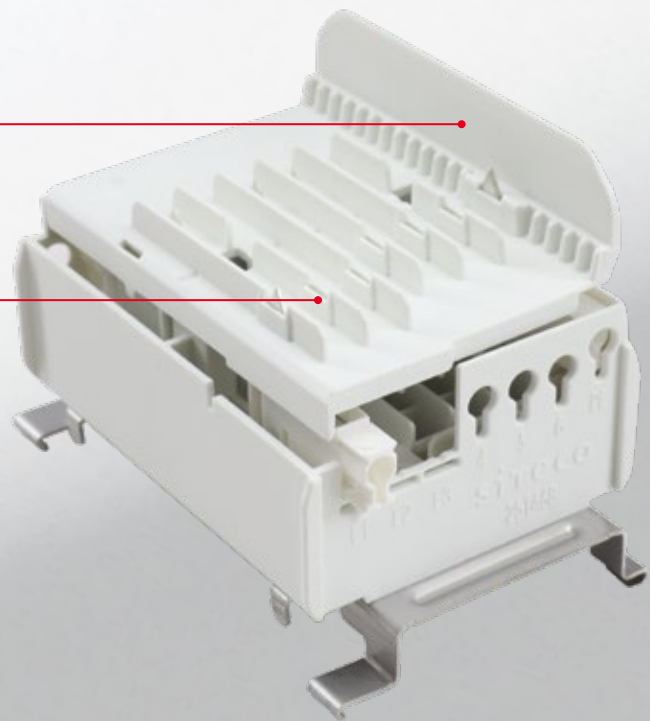
**More robust for maximum assembly speed.**

**The patented Licross contact block** has been further optimized: **installation now even faster and, above all, safer.**

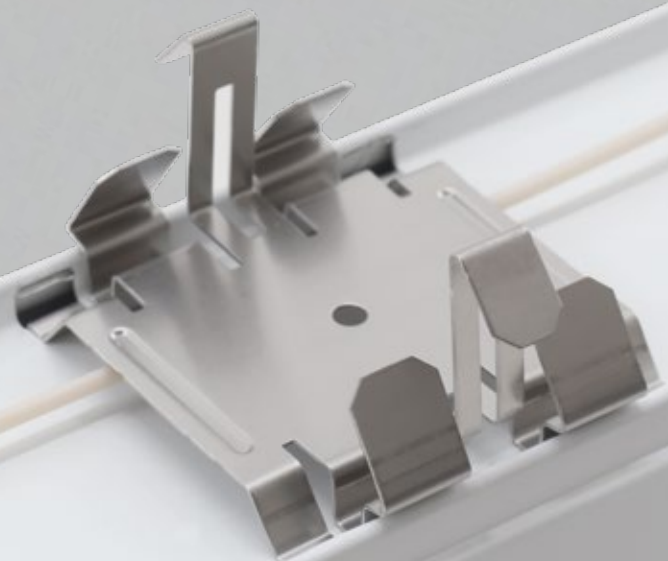
Safe positioning of inserts thanks to large guiding rib.

Exact alignment of the contacts and cores.

Robust spring construction ensures a secure grip.



**The new quick-release catch** guarantees lightning-fast insertion and secure mounting of the inserts in the trunking rail. The catch hook prevents anything from accidentally falling off.



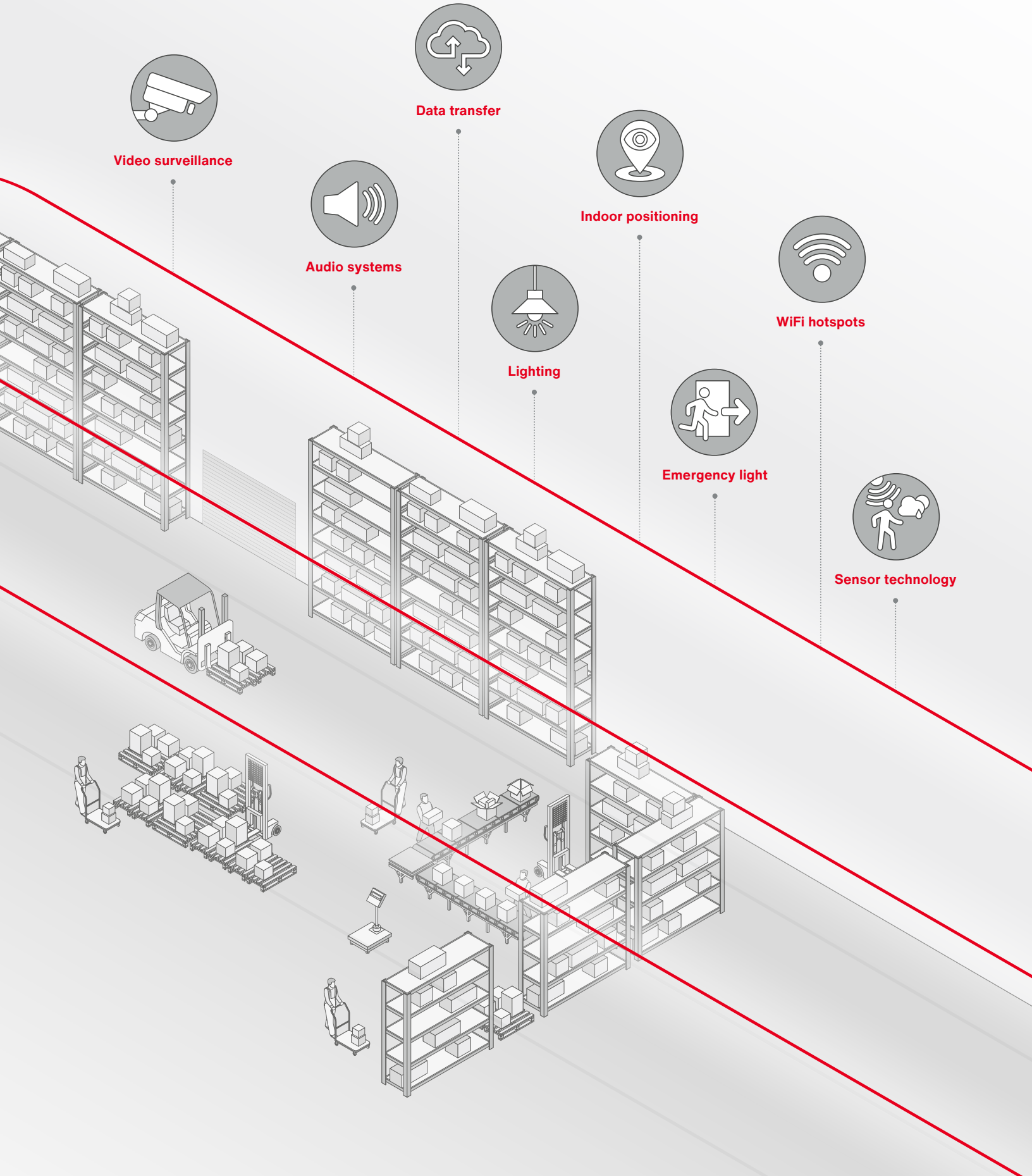


Licross

## Setting the course for tomorrow today.

State-of-the-art lighting technology means maximum efficiency. That's not enough for us. We offer a system that becomes the backbone of your building infrastructure and goes far beyond lighting. A solution with maximum flexibility in application that is already equipped for the requirements of the future.

**Licross - the backbone of your digital infrastructure.**



Video surveillance

Data transfer

Audio systems

Indoor positioning

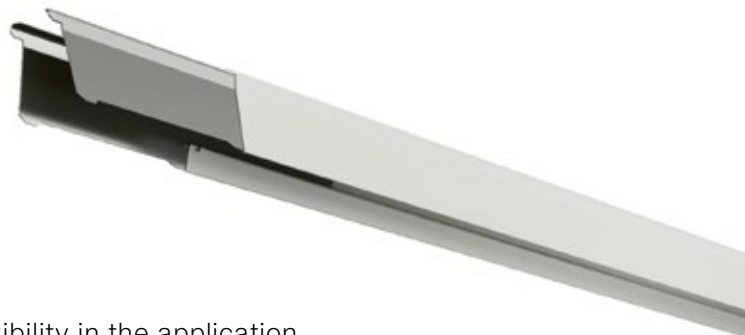
WiFi hotspots

Lighting

Emergency light

Sensor technology

# Maximum flexibility. Expandable and freely configurable.



## The backbone of your building infrastructure.

### Licross trunking system – the rail

- Future-proof thanks to 14 cores and with maximum flexibility in the application
- Linear through-wiring with fully variable tapping option for the inserts
- Available from 5-core to 14-core (2.5 mm<sup>2</sup>)
- Lengths: 4.5 m, 3 m and 1.5 m
- Tool-free mechanical and electrical connection of rails and inserts
- Protection ratings: from IP20 to IP64 with one rail
- Integration of various emergency lighting components in accordance with EN 60598-2-22



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## Did you know?

Licross inserts can be mounted **anywhere** in the rail. Tedious calculations in system dimensions are a thing of the past. **Made possible by the patented tap.**

### Flexible arrangement of the luminaire inserts:

Seamless arrangement of the luminaire inserts



Flexible arrangement of the luminaire inserts



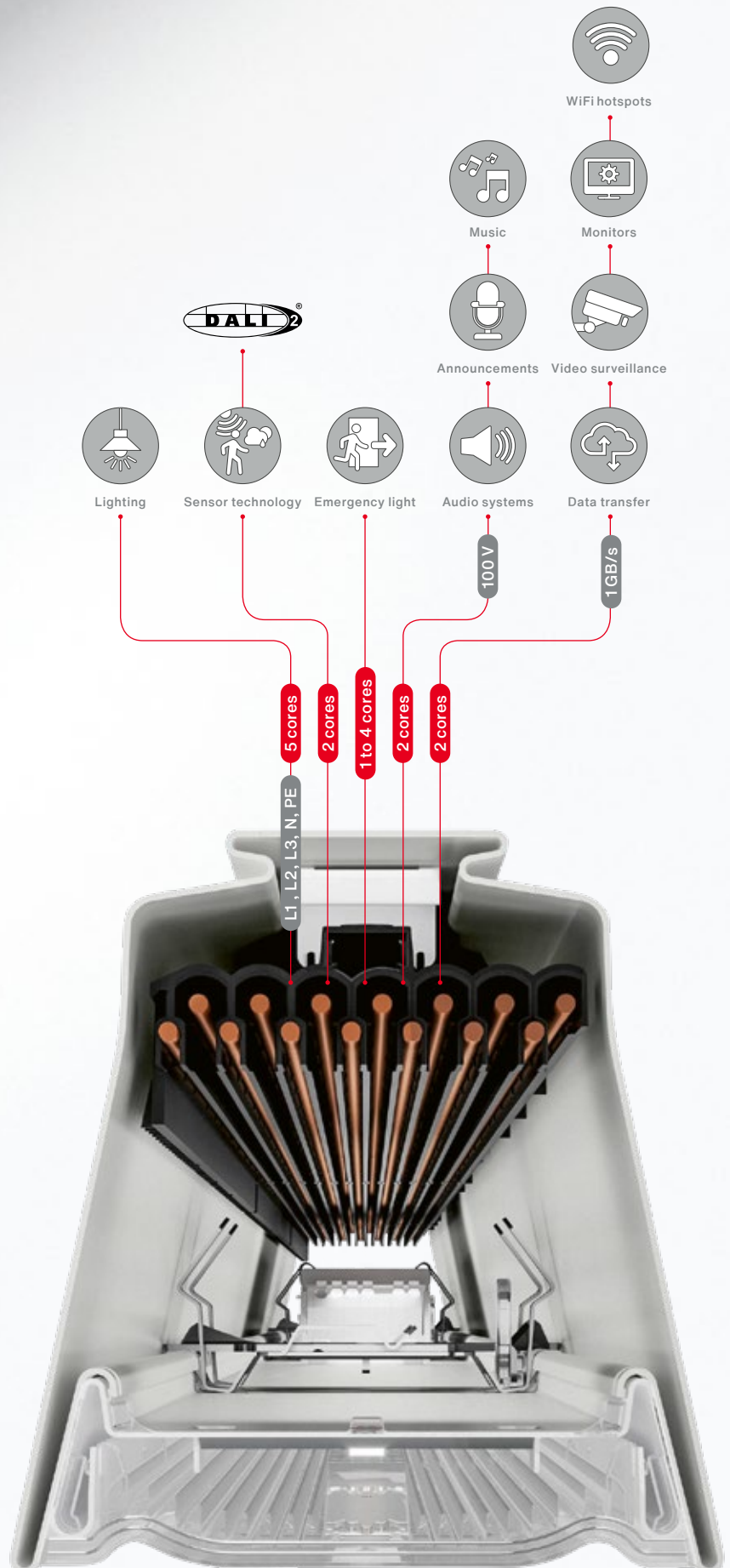
Grid spacing of the luminaire inserts



# 14 cores. When more is simply more.

Licross is available with up to 14 cores. Without additional wiring effort. That makes it easy to integrate more functions into the rail, e.g. three phases for light, two DALI-lines and two emergency supplies plus audio transmission.

**Wide range of applications thanks to 14 cores.**

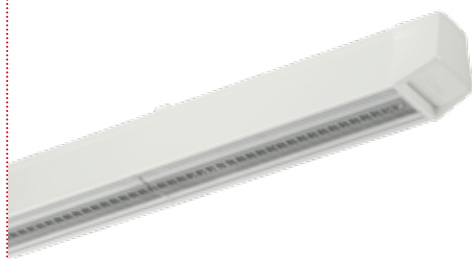


# Licross 11 / 21

## Maximum flexibility.

Whether for industry, retail or the office, you will always find the right solution thanks to lumen packages, optics, protection ratings and temperature ranges optimized to suit the respective application.

Licross

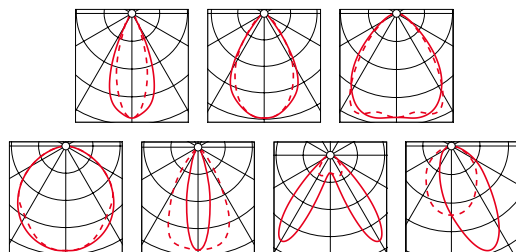


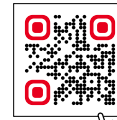
**Recessed**  
The flexible all-rounder



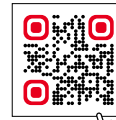
**Opal**  
Uniform light for ancillary areas

<b>Application</b>	11	General lighting in halls, retail spaces, schools, ...	Preferred for low rooms, ancillary spaces and garages; for a pleasant lighting atmosphere thanks to 12 % indirect light component
	21		
<b>Distribution</b>	11	narrow / medium / wide / diffuse / elliptical narrow / asymmetrical / double asymmetrical	opal / diffuse direct beam with 12 % indirect light component
	21		
<b>Light colors</b> K	11	2,700 ... 6,500 / 3,000 / 3,500 / 4,000 / 5,000 / 6,500	3,000 / 3,500 / 4,000 / 5,000 / 6,500
	21		
<b>Glare control</b> UGR	11	≤ 19 / ≤ 22 / ≤ 25 / ≤ 28	≤ 22 / ≤ 25 / ≤ 28
	21		
<b>Luminous flux</b> lm	11	4,300 to 27,200	2,750 to 26,350
	21		
<b>Luminous efficacy</b> max. lm/W	11	> 200 lm/W	> 185 lm/W
	21		
<b>Type of protection</b>	11	IP40 / IP54	IP40 / IP54
	21		
<b>Ambient temp.</b> max.	11	+50 °C	+ 45 °C
	21		
<b>Service life</b>	11	100,000h (L95)	100,000h (L95)
	21		





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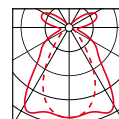
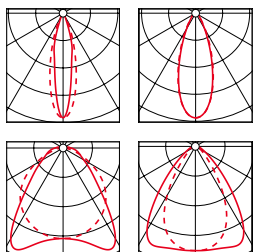
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**Protected**  
The professional for the industry

**Performance**  
A plus in light

General lighting in rooms with high humidity or dust ...	Workplace lighting with high visual requirements ...
extr. narrow/narrow/narrow with ceiling illumination / wide with ceiling illumination	direct / indirect wide
2,700 ... 6,500 / 3,000 / 4,000 / 5,000 / 6,500 4,000 / 5,000	2,700 ... 6,500 / 4,000 / 5,000 / 6,500 4,000 / 5,000
≤ 19 / ≤ 22 / ≤ 25 / ≤ 28	≤ 19 / ≤ 22 / ≤ 25
5,500 to 16,100 5,000 to 15,050	
> 170 lm/W	> 185 lm/W
IP54 / IP64	IP40 / IP54
+50 °C	+50 °C
100,000h (L95) 75,000h (L80)	100,000h (L95) 75,000h (L80)



# Licross flexible inserts.



## High-bay lighting

- Highbay insert for high lumen packages of 14,000 to 70,000 lm
- Suitable for harsh ambient conditions due to IP64 and temp. max. 55 °C



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## Office lighting

- Highly efficient office lighting for best visual performance
- Suitable for continuous row mounting with gapless louvre optics



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## Shop lighting

- Spot inserts for accent lighting and excellent color rendering
- Available with different beam angles



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Licross stands for unlimited possibilities. Thanks to open interfaces and 14 cores, you can flexibly integrate lighting inserts, emergency lighting, sensors and much more into your lighting infrastructure.



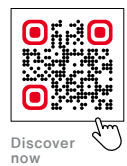
### Protective lighting

- For areas in which harmful gases can occur
- Gas-tight with IP69 K



### Safety lighting

- Illumination of areas and escape routes
- Integration of all essential emergency lighting systems possible



### Sensor technology

- Secure detection of people and vehicles
- Open, future-proof interfaces
- Stand-alone solution for simple refurbishment





### Network

- Data transmission with up to 1 Gbit/s
- Network connection via the Licross
- LAN connection
- Universal interfaces (PoE adapter)
- Up to 12 ports / IP subscribers at any position



### Other

- Audio transmission with 2 free wires in the trunking system

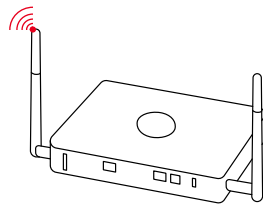


### 650 V

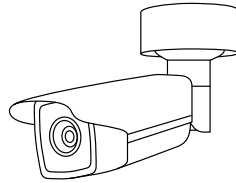
- Highest energy efficiency thanks to lower current flow with the same power
- Future-proofing and integration
- High connected load per feed-in point



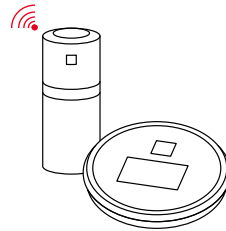
## Typical applications



Internet access

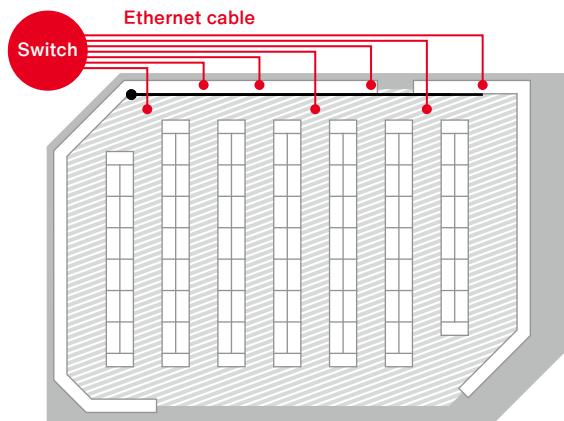


Video surveillance



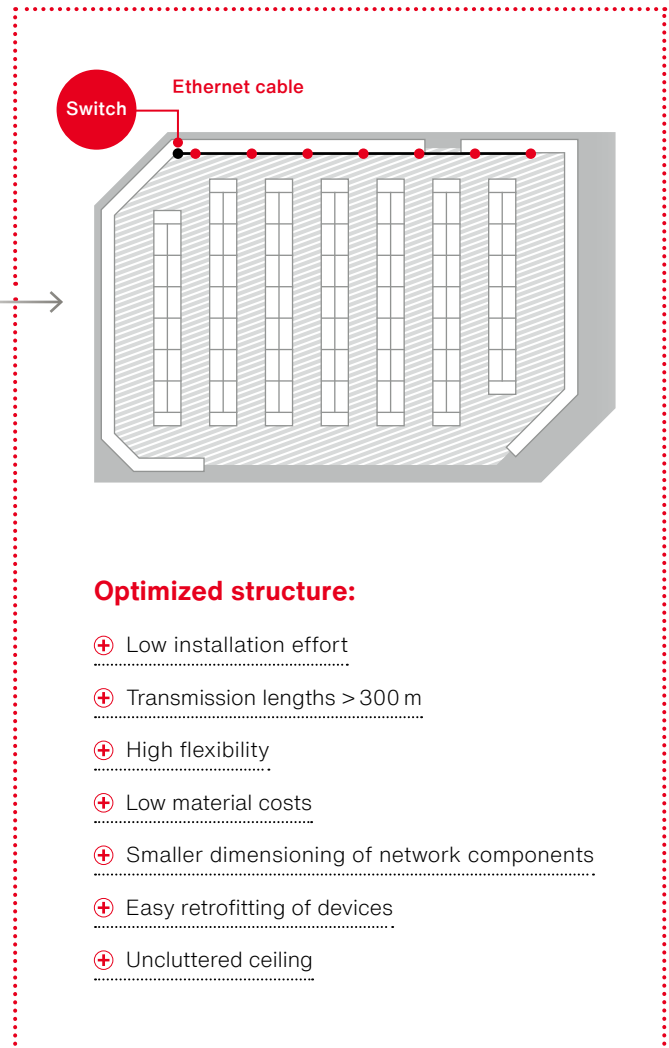
Tracking  
(e.g. material flow monitoring)

## The advantages at a glance



### Previously complex installation:

- ⊖ Major installation effort
- ⊖ Only a maximum transmission length of 100 m
- ⊖ Low flexibility
- ⊖ High material expenditure
- ⊖ Large dimensioning of the network components
- ⊖ Visually mostly unsatisfactory



### Optimized structure:

- ⊕ Low installation effort
- ⊕ Transmission lengths > 300 m
- ⊕ High flexibility
- ⊕ Low material costs
- ⊕ Smaller dimensioning of network components
- ⊕ Easy retrofitting of devices
- ⊕ Uncluttered ceiling

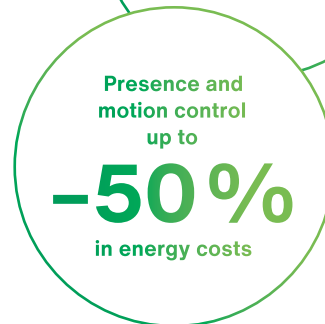
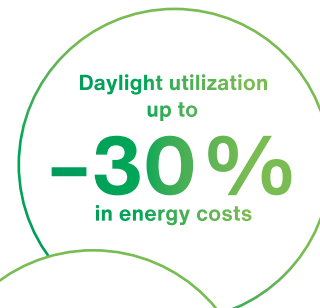
# Full control.

**Innovative control for even greater efficiency and faster amortization.**

## **Lighting control pays off always and everywhere.**

High energy prices make lighting control indispensable. It ensures reduced operating costs, an even faster amortization of the system, and is usually the prerequisite for a government subsidy.

Powerful sensors are essential for effective lighting control. Different areas of use require different sensors. For Licross, you will always find the right product, from the office to the highbay warehouse, and for every mounting height and all environmental requirements (IP20 to IP54) – easy to integrate with just one click.



### **Local control**

The uncomplicated solution for individual areas thanks to plug & play sensor technology – simple parameterization and commissioning by an electrical installer.



### **Central control**

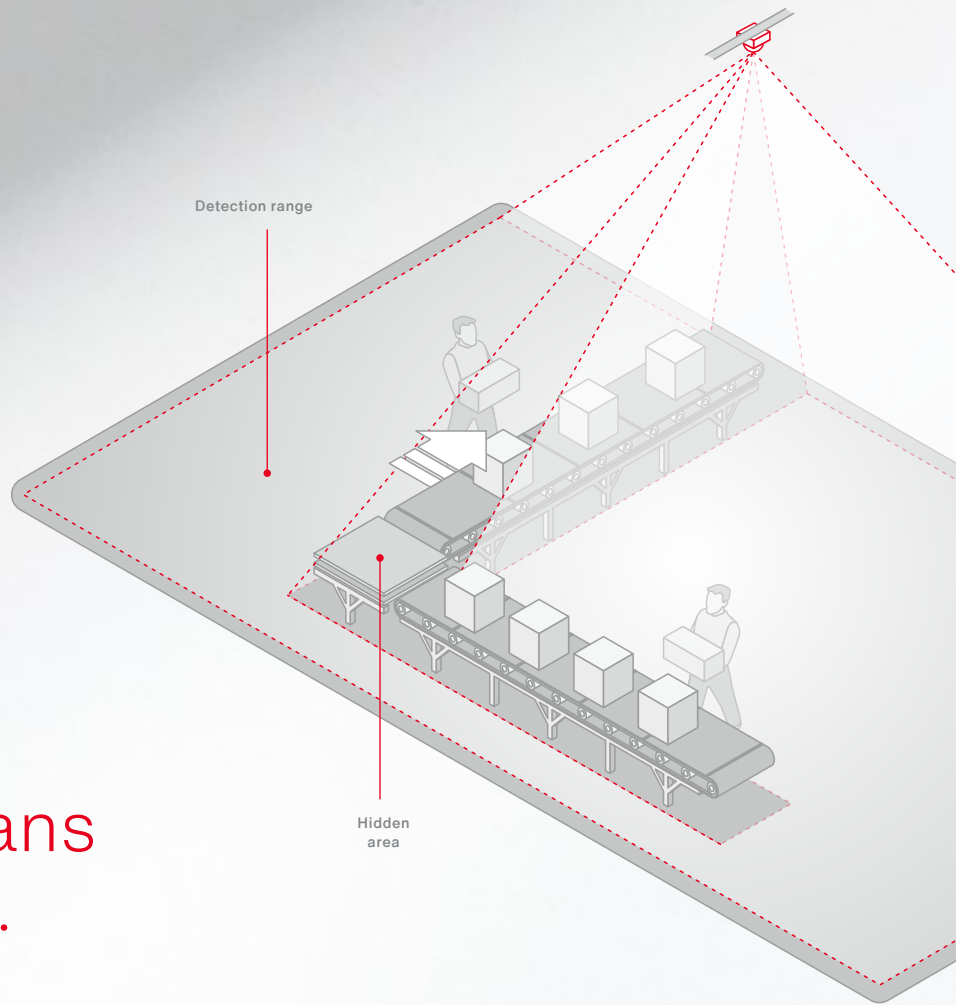
Full flexibility by connecting different lighting zones via central control and integration into the building management system.

### **Control across locations**

Comprehensive networking and control of multiple locations for full transparency and intelligent analysis options.

**Perfectly tailored solutions – from simple plug & play control to integrated building management systems.**

NEW



## Sensors that distinguish between humans and machines.

Daylight and presence-dependent control saves a lot of energy. But what if the presence detector also switches on the light when machines move? SITECO has developed the Matrix Sensor for that purpose. This sensor of the future distinguishes between people and machines, and only switches on the light when it is really needed.

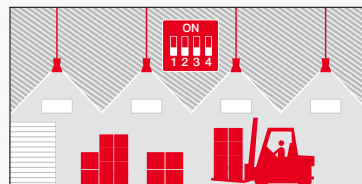
### More flexible thanks to state-of-the-art electronics.

Luminaire inserts with **multilumen** can be used flexibly. If necessary, the luminous flux can be easily adjusted using a DIP switch, e.g. if the use of a room changes.

**Constant luminous flux** (CLOi) simplifies planning and saves energy. **DALI 2** gives you the full flexibility of lighting control.

**Warehouse today, production tomorrow.** With Licross, you remain flexible thanks to multilumen. If usage changes, you can easily adjust the illuminance levels using a DIP switch.

As in this case, for example, from 300 lx to 500 lx.



Warehouse with 300 lx



Production with 500 lx

# Modario 31

> 180  
lm/W

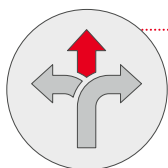
12  
cores

The classic, now with up to 12 cores.



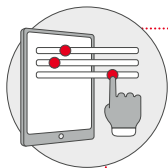
## Now even more efficient.

With up to 180 lm/W, it's easy to tap into energy-saving potentials and implement the latest energy efficiency standards, whether for new systems or by replacing conventional inserts in existing Modario systems.



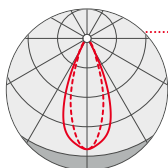
## Now even more flexible.

Thanks to the extension to 12 cores and the new luminaire inserts **Modario 31 Silica**, **emergency light inserts** and **Monsun 31 for Modario**. Suitable for extensive applications such as storerooms and corridors, highbay racking, shipping areas or retail spaces.



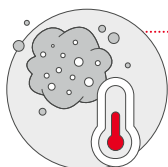
## Everything under control.

Can be integrated into all modern light management systems thanks to DALI 2-variants.



## Always the right light.

Prismatic frosted optics for low glare and high visual comfort. Luminous flux tracking and multilumen capability also with ON / OFF versions provide the basis for lighting solutions tailored to your requirements.



## As robust as ever.

Service life of 70,000 h, protection ratings up to IP50 and temperature resistance up to 40 °C enable use even in demanding environments.

# Flexible and expandable.

## 12 cores for more functions:

### Modario 31 trunking system - the rail

- Flexible application thanks to 12 cores
- Linear through-wiring with fully variable tapping option for the inserts
- Available from 5-core to 12-core (2.5 mm<sup>2</sup>)
- Lengths: 4.5 m, 3 m or 1.5 m
- Tool-free mechanical and electrical connection of rails and inserts
- Protection rating: IP20
- Integration of various emergency lighting components in accordance with EN 60598-2-22



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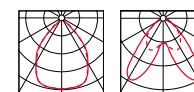
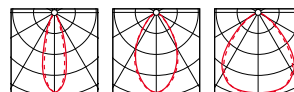
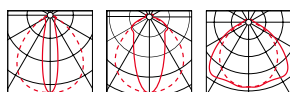
# Now even more flexible.

Expandable by integrating  
the latest inserts for lighting  
and sensors.



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	<b>Modario 31 Prismatic optics</b>	<b>Modario 31 Lens optics</b>	<b>Modario 31 Silica</b>
<b>Application</b>	General lighting in halls, retail spaces, schools, ...	General lighting in halls, retail spaces, schools, ...	Lighting for offices and retail spaces / cashier areas
<b>Distribution</b>	extremely narrow / narrow / wide	narrow / medium / wide	medium / double asym
<b>Light colors K</b>	4,000 / 6,500	4,000	4,000
<b>Glare control UGR</b>	$\leq 25 / \leq 28$	$\leq 25 / \leq 28$	$\leq 19 / \leq 22$
<b>Luminous flux lm</b>	7,600 to 26,560	6,820 to 25,500	max. 6,600
<b>Luminous efficacy max. lm/W</b>	> 180 lm/W	> 180 lm/W	> 170 lm/W
<b>Type of protection</b>	IP20 / IP50	IP20	IP20
<b>Ambient temp. max.</b>	+40 °C	+40 °C	+40 °C
<b>Service life</b>	70,000h	70.000h	70.000h





**Demand-oriented lighting control:  
Sensors for Modario**

- Safe detection of persons and vehicles
- Installation heights up to 14 m
- Flexibility through modularity for changes in use
- Open, future-proof interfaces
- Standalone solution for simple refurbishment



**For any atmosphere  
Monsun 31 Tube for Modario**

- Tubular luminaire insert for areas where harmful gases can be present, e.g. in tire warehouses
- Gas-tight with IP69 K
- Complies with the IFS (International Featured Standard) requirements for safety and quality in the food industry
- Wide range of applications thanks to high lumen packages

**More flexible thanks to state-of-the-art electronics.**

Luminaire inserts with **multilumen** can be used flexibly. If necessary, the luminous flux can be easily adjusted using a DIP switch, e.g. if the use of a room changes.

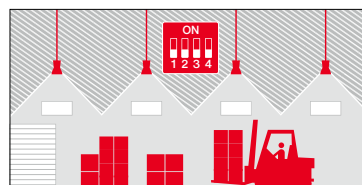
**Constant luminous flux** (CLOi) simplifies planning and saves energy.

**DALI 2** gives you the full flexibility of lighting control.

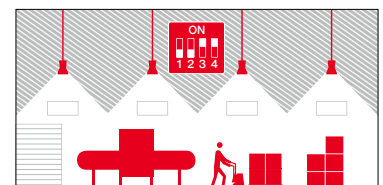
**Warehouse today, production tomorrow.**

With Modario 31 you remain flexible thanks to multilumen. If usage changes, you can easily adjust the illuminance levels using a DIP switch.

As in this case, for example, from 300 lx to 500 lx



Warehouse with 300 lx



Production with 500 lx

# DUS 31

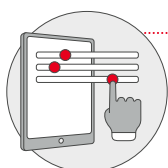
> 180  
lm/W

**The refurbishment solution for the trunking pioneer.**



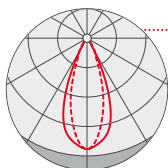
## Now even more efficient.

There is no more efficient and sustainable way to refurbish a conventional DUS lighting system. With up to 180 lm/W, you can easily increase your energy-saving potential and meet the latest energy efficiency standards.



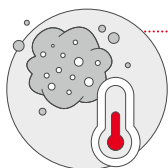
## Everything under control.

Can be integrated into all modern light management systems thanks to DALI 2-variants.



## Always the right light.

Prismatic frosted optics for low glare and high visual comfort. Luminous flux tracking and multilumen capability also with ON / OFF versions provide the basis for lighting solutions tailored to your requirements.



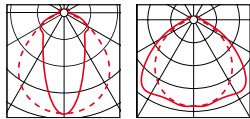
## As robust as ever.

Service life of 70,000 h, protection ratings up to IP50 and temperature resistance up to 40°C enable use even in demanding environments.



### DUS 31

<b>Application</b>	General lighting in halls, retail spaces, schools, ...
<b>Distribution</b>	narrow / wide
<b>Light colors K</b>	4000 / 6500
<b>Glare control UGR</b>	≤ 25 / ≤ 28
<b>Luminous flux lm</b>	7,600 to 12,400
<b>Luminous efficacy max. lm/W</b>	> 180 lm/W
<b>Type of protection</b>	IP20 / IP50
<b>Ambient temp. max.</b>	+40 °C
<b>Service life</b>	70,000h



#### More flexible thanks to state-of-the-art electronics.

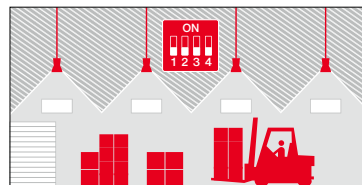
Luminaire inserts with **multilumen** can be used flexibly. If necessary, the luminous flux can be easily adjusted using a DIP switch, e.g. if the use of a room changes.

**Constant luminous flux (CLOi)** simplifies planning and saves energy.

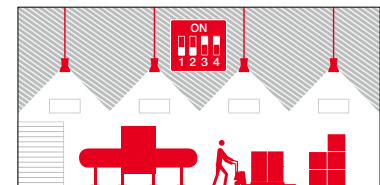
**DALI 2** gives you the full flexibility of lighting control.

#### Warehouse today, production tomorrow.

With DUS 31 you remain flexible thanks to multilumen. If usage changes, you can easily adjust the illuminance levels using a DIP switch. As in this case, for example, from 300 lx to 500 lx



Warehouse with 300 lx



Production with 500 lx

# Trunking Flex 31

> 180  
lm/W

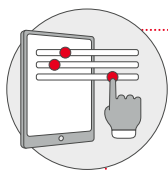
For all  
common  
systems

The refurbishment insert for all trunking systems.



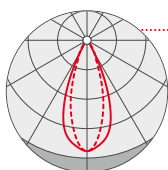
## Economical and efficient.

With the Trunking Flex 31, all common trunking systems can be refurbished in a particularly sustainable way. With > 180 lm/W, you can easily increase your energy-saving potential and meet the latest energy efficiency standards.



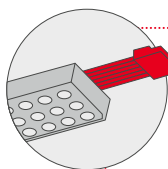
## Everything under control.

Can be integrated into all modern light management systems thanks to DALI 2-variants.



## Always the right light.

The large selection of light distributions enables simple refurbishment of trunking systems for a wide range of applications. Multilumen capability also with ON / OFF versions provides the basis for lighting solutions tailored to your requirements.



## Full flexibility.

Variants with and without through-wiring.

**Without through-wiring:** 1:1 replacement of existing inserts with through-wiring. Use of plug-in systems + end panel set. **With through-wiring:** Simple trunking installation in combination with dummy covers

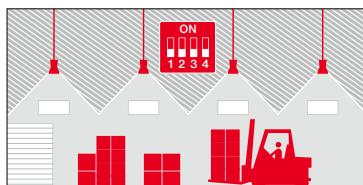
## More flexible thanks to state-of-the-art electronics.

Luminaire inserts with **multilumen** can be used flexibly. If necessary, the luminous flux can be easily adjusted using a DIP switch, e.g. if the use of a room changes.

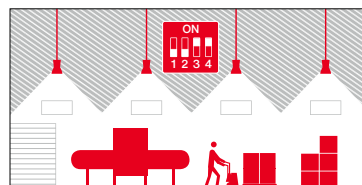
**DALI 2** gives you the full flexibility of lighting control.

### Warehouse today, production tomorrow.

With Trunking Flex 31 you remain flexible thanks to multilumen. If usage changes, you can easily adjust the illuminance levels using a DIP switch. As in this case, for example, from 300 lx to 500 lx.



Warehouse with 300 lx



Production with 500 lx

For the refurbishment of all common trunking systems

Trunking Flex 31 without through-wiring

Trunking Flex 31 with through-wiring

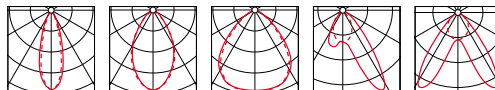


Discover now

### Trunking Flex 31 without through-wiring

### Trunking Flex 31 with through-wiring

<b>Application</b>	General lighting in halls, retail spaces, schools, ...	General lighting in halls, retail spaces, schools, ...
<b>Distribution</b>	narrow / medium / wide / asymmetrical / double asymmetrical	wide symmetrical
<b>Light colors K</b>	3,500 / 4,000 / 5,000 / 6,500	4,000
<b>Glare control UGR</b>	≤ 22 / ≤ 25 / ≤ 28	≤ 25
<b>Luminous flux lm</b>	6,400 to 11,500	7,200 to 9,100
<b>Luminous efficacy max. lm/W</b>	> 180 lm/W	> 180 lm/W
<b>Type of protection</b>	IP20	IP20
<b>Ambient temp. max.</b>	+40 °C	+40 °C
<b>Service life</b>	70,000h	70,000h



Made in

Traunreut



# Sustainability. Implemented without compromise.

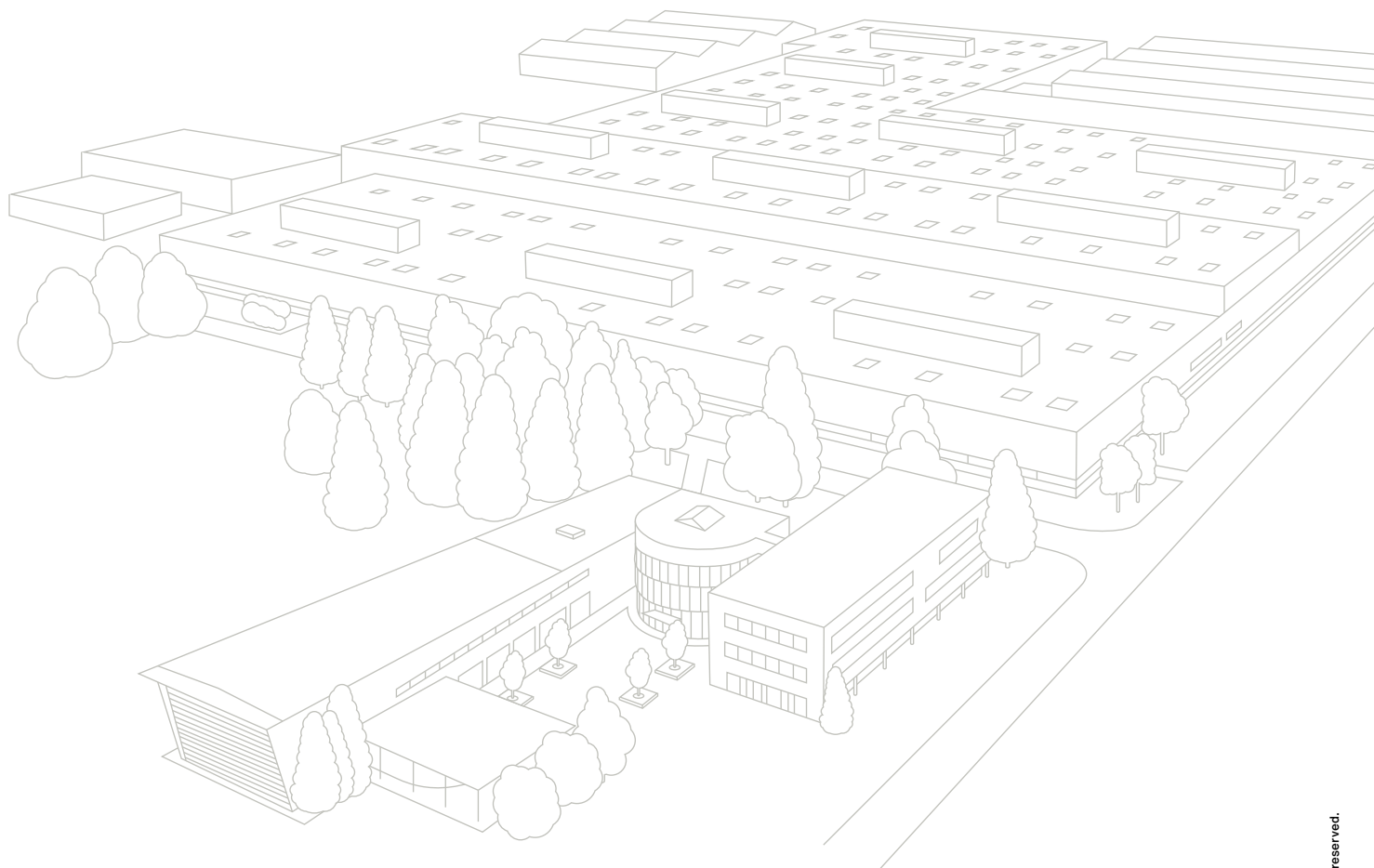
- **Made in Germany**
- **Short supply chains for fast availability**
- **Few, recyclable components**
- **Plastic-free packaging**

**A quantum leap for your sustainability.**

**100** % In-house development  
and local production

**100** % Customizability and  
interchangeability

Get in touch and discover the quantum leap in trunking systems.



## Contact.

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