Q-Rail X - The trunking system

LUNUX Lighting GmbH, based in Leipzig, stands for professional LED outdoor and indoor lighting.

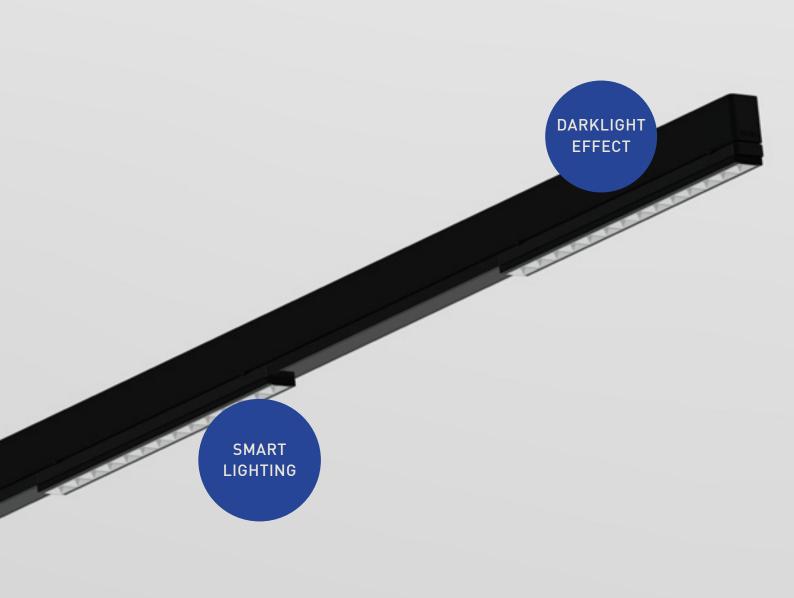
We develop and produce for municipalities, private project developers, industry, trade, office, logistics and rail transport. With the two brands HELLUX and LUNUX Lighting, a wide variety of customer needs can be satisfied.

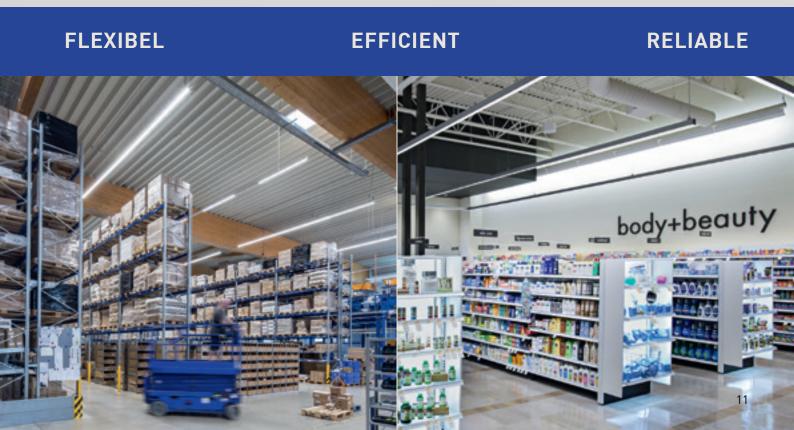
Our strength is the requirement mix of project specifications, required lighting efficiency and product quality.

Whether quickly available standard products with cutting-edge LED modules or small quantities with individual assembly in manufactory production we have solutions that set standards in design and economy in addition to their high functional maturity. To achieve this, we rely on a high level of vertical integration in Germany, with in-house lighting design, construction, assembly and painting.

LIGHTING SOLUTIONS FOR RETAIL, LOGISTICS AND INDUSTRY







Q-Rail X - The efficient allrounder

One system, many applications. The Q-Rail X system impresses with its high flexibility and application-oriented solutions for the most diverse areas.



ACCENT LIGHTING WITH SPOTS

ELEGANT SPOTS WITH DIFFERENT BEAM ANGLES FROM NARROW TO WIDE BEAM

- → SP-X Spots have got the same toolless "ClickFast" connection as the linear fittings.
- → Project-specific spots for powerful directed light, e.g. for wall wash or promotion areas.
- → 3-phase spots with typical 3-circuit adapters can be used with our integrated 2-phase power rail Q-Rail X units.



TRUNKINGS AS INFRASTRUCTURE

THE Q-RAIL X TRUNKING SYSTEM OFFERS MORE THAN THE BEST LIGHT

Not only electrical units, spots, sensors or emergency lighting units with self-test can be integrated into the electrical and mechanical infrastructure but also on customer request:

- > Switching and control device for central battery system
- → Cameras
- → Speakers
- → Exit sign luminaires



GENERAL AND ACCENT LIGHTING IN ONE UNIFORM DESIGN LANGUAGE

STYLISH - ATTRACTIVE LIGHTING SYSTEM FOR BOTH THE GENERAL AND THE ACCENT LIGHTING IN MINIMISED DIMENSIONS

- → The cross sectional area is only 25% of a conventional light line system
- → Visible continuous light line
- → LED driver, also for spots, hidden inside the trunk
- → Standard colours White RAL 9016, Silver RAL 9006 or Black RAL 9005





13 APPLICATION-OPTIMISED OPTICS

PERFECTLY SUITABLE FOR APPLICATIONS IN LOGISTICS, INDUSTRY AND RETAIL

- → Narrow, ultra narrow, medium, wide and ultra wide light beams and opalized optics
- → Asymmetrical and two versions of double-asymmetrical light beams
- Direct / Indirect Beam
- → Suitable for installation heights between <3 and 20 m





















13 application optimised optics **Maximum flexibility**



Very high and narrow racks

Installation height 10 - 20 m



Narrow Beam NB

High shelves and high halls

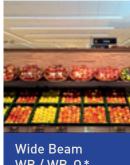
Installation height 6 - 12 m



Medium Beam MB / MB-0*

General lighting for medium installation hights

Installation height 5 - 7 m



WB / WB-0*

General lighting for low installation hights

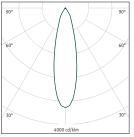
Installation height 3 - 5 m

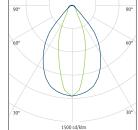


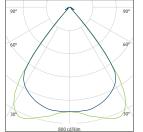
UWB

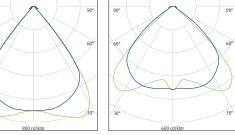
General lighting and wide shelf aisles

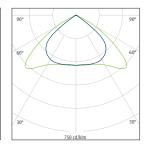
Installation height < 3 m











 * MB-0, DA-0, WB-0: in a slightly opalescent version for a homogeneus light emission surface

EASY INSTALLATION

- Toolless and fast insert of the light unit into the trunking thanks to the specially developed Lunux Lighting CLICKFAST-System
- Easy later change of position if necessary
- Light units for general lighting, spots, emergency lighting, daylight and motion sensors, light control



FAST ADJUSTMENT

- Flexibility in the wiring: versions with 5, 7, 9 or 11 cores available, 14 cores available on request
- Cost optimisation by using application-oriented wiring
- Large suspension distances up to 4 m for quick instal-
- Bracket for chain, steel cable, direct ceiling mounting or T-profile ceiling for easy installation



1 Connect trunking segments



2 Select electrical phase (L1, L2 or L3)

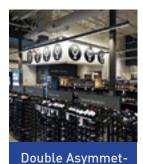


3 One-Click mounting of the light units



4 If required, all units can easily be moved to other positions

One system, many applications. Q-Rail X LED Light Line system offers the right lighting technology for every environment.

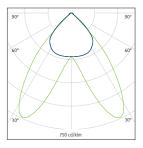


rical DA20/DA-0*

Retail

Shelf lighting

Installation height 3 - 3,5 m Aisle width ca. 2 m





Double Asymmetrical DA 40

Retail for well-balanced lighting of very high racks

Installation height 3 - 3,5 m Aisle width ca. 2,5 m



Asymmetrical Wall Washer - A20

Wallwasher

Installation height 3 - 3,5 m



Opal (Wide Beam)

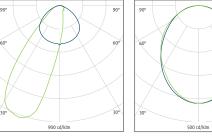
Fashion

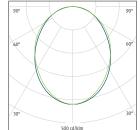
Installation height 3 - 4 m

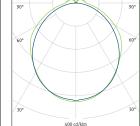


Retail and industry with ceiling brightness

Installation height 3 - 4 m







STEINEL-SENSORS WITH Q-RAIL X

- Extensive sensor range for optimal use of the lighting system
- Daylight & motion sensors integrated as plug & play solutions in the light lines
- \rightarrow Communication between master and slave sensors via pre-wired trunking
- Convenient set up via SteinelApp "Smart Remote"
- Different detection areas for high shelves, high halls, corridors & low areas
- DALI, Master/Slave or on/off



STEINEL SMART REMOTE for the smartphone

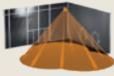
Easy cost reduction





IS 3360 Highbay

Round detection area for open halls, up to 14 m installation height



IS 3360

Extremely wide detection range, up to 4 m installation height



IS 345 MX Highbay

Rectangular detection area for high shelves, up to 14 m installation height



Low corridors, up to 4 m installation height

Q-Rail X - Darklight

The unique and high-quality design of the Darklight elevates the already stylish and attractive Q-Rail X trunking system to a higher design-oriented level.



PROGRAMM-MATRIX



| Light unit length | 1,124 mm (4 FT) | | | | | | | |
|----------------------------|--|--------|--------|--------|---------|----------|--|--|
| Luminous flux | 3200 lm | | 400 | 0 lm | 5000 lm | | | |
| Colour temperature | 3000 K | 4000 K | 3000 K | 4000 K | 3000 K | 4000 K | | |
| System power | 27.5 W | 26 W | 35 W | 32 W | 44 W | 42 W | | |
| Light unit length | 1,686 mm (6 FT) | | | | | | | |
| Luminous flux | 4800 lm | | 600 | 0 lm | 7500 lm | | | |
| Colour temperature | 3000 K | 4000 K | 3000 K | 4000 K | 3000 K | 4000 K | | |
| System power | 40.5 W | 38.5 W | 52 W | 49.5 W | 66 W | 62.5 W | | |
| Light unit length | 2,248 mm (8 FT) | | | | | | | |
| Luminous flux | 6400 lm | | 800 | 0 lm | 9500 lm | 10000 lm | | |
| Colour temperature | 3000 K | 4000 K | 3000 K | 4000 K | 3000 K | 4000 K | | |
| System power | 54 W | 51 W | 69.5 W | 65.5 W | 83.5 W | 83.5 W | | |
| LED degradation | 70,000 h (L 80) | | | | | | | |
| CRI | Ra > 80 (> 90 on request) | | | | | | | |
| Optic / Light distribution | Å | | | | | | | |
| Operating temperature | -20° C to +45° C | | | | | | | |
| Weight | ca. 3,8 kg/m (including trunking and accessories) | | | | | | | |
| Additional Options | emergency version with accu pack 3hours, Bluetooth control | | | | | | | |
| Driver | Standard on/off or DALI, DC-suitable | | | | | | | |

Q-Rail X - Professional

Q-Rail X Professional impresses with maximum flexibility and applicationoriented solutions for the various areas in retail, industry and logistics, but also for corridors and even offices.



PROGRAMM-MATRIX











| Light unit length | 1,124 mm (4 FT) | | | | | | | |
|---------------------------|--|-----------------|----------------|-----------------|----------|--|--|--|
| Luminous flux | 3200 lm 4000 lm | | 6000 lm | 8000 lm | | | | |
| System power* | 25.5 W | | 40 W | 53 W | | | | |
| LED degradation | 100,000 h (L80) | | | | | | | |
| Light unit length | 1,686 mm (6 FT) | | | | | | | |
| Luminous flux | 4800 lm | 6000 lm | 9000 lm | 12000 lm | 16000 lm | | | |
| System power * | 29 W | 36W | 56.5 W | 78.5 W | 99 W | | | |
| LED degradation | | 100,000 h (L80) | 80,000 h (L80) | 100,000 h (L80) | | | | |
| Light unit length | 2,248 mm (8 FT) | | | | | | | |
| Luminous flux | 6400 lm | 8000 lm | 12000 lm | 16000 lm | 21000 lm | | | |
| System power * | 37.5 W | 49 W | 73.5 W | 102 W | 127 W | | | |
| LED degradation | 100,000 h (L80) 80,000 h (L80) 100,000 h (L | | | | | | | |
| Colour temperature | 3000 K / 4000 K / 6500 K | | | | | | | |
| CRI | Ra > 80 (> 90 on request) | | | | | | | |
| Optic/ Light distribution | 1 6 A A A A A A A A | | | | | | | |
| Operating temperature | -20°C to +45°C | | | | | | | |
| Weight | ca. 3.2 kg/m (including trunking and accessories) | | | | | | | |
| Additional Options | emergency version with accu pack 3hours, daylight and presence sensors, Smart Lighting, blind cover (made of metal or plastic), integrated 3-phase power rails, Spots on Q-Rail X | | | | | | | |
| Driver | Standard on/off or DALI, DC-suitable | | | | | | | |

* min. with light color 4000 K

17

SPOTS For retail applications

Economical and efficient spotlight (1 or 2 spots per 562mm unit) with Click-fast-connection to Q-Rail X Trunking and LED-driver concealed in the trunking.



SP-X

- ightarrow economical and efficient spotlight
- → narrow- (15°), middle- (24°) and widebeam (42°) light distribution
- \rightarrow up to 3200 lm and 123 lm / W





SP-XWall

- → rectangular-widebeam light distribution for lighting of advertising spaces and walls
- \rightarrow up to 4500 lm and 113 lm / W

SPOTS ON Q-RAIL X



| FAMILY | SP-X | | | | | SP-XW | | |
|-----------------------|--|---------|----------|---------|----------|--|----------------------|----------|
| Light unit length | NB | | MB | | WB | | rectangular-widebeam | |
| Luminous flux | 2800 lm | 2300 lm | 3200 lm | 3200 lm | 3200 lm | 3200 LM | 4500 lm | 4500 lm |
| System power | 28 W | 28 W | 26 W | 34 W | 26 W | 28 W | 39 W | 41 W |
| Luminous efficacy | 100 lm/W | 82 lm/W | 123 lm/W | 94 lm/W | 123 lm/W | 94 lm/W | 115 lm/W | 110 lm/W |
| Colour temperature | 4000 K | 3000 K | 4000 K | 3000 K | 4000 K | 3000 K | 4000 K | 3000 K |
| CRI | Ra > 80 | Ra > 90 | Ra > 80 | Ra > 90 | Ra > 80 | Ra > 90 | Ra > 80 | Ra > 80 |
| LED degradation | 50,000 h (L 80) | | | | | | | |
| Operating temperature | - 20 °C to +30 °C | | | | | | | |
| Weight on Q-Rail X | 1.6 kg (1 x SP-X) 2.4 kg (2 x SP-X) | | | | | 1.9 kg (1 x SP-XW) 3.8 kg (2 x SP-XW) | | |

SMART LIGHTING Easy, wireless, intelligent

The most robust, cost-effective and future-proof wireless lighting control solution.



Lower installation costs

Compared to DALI lighting systems

- → Less wiring work since additional control leads e.g. DALI or DMX systems
- → Systems can be extended or changed without the need for wiring

-90%

Lower commissioning costs

Compared to DALI lighting systems

- → Light scenes can easily be changed with free App
- → Commissioning costs are reduced as neither PCs nor programming know-how is required
- → Lighting can be adapted to changing room purposes by Smartphone without a technician

-70%

Lower energy costs

Compared to T5 lighting systems

- → Costs are cut by presence-dependent and timer-controlled light management
- → Energy costs are lowered thanks to highest efficiency LED technology

Technical Possibilities

- → Control of up 64 DALI luminaires with one Casambi module using DALI repeater
- → Up to 127 groups of luminaires can be programmed individually. The number of parallel networks is unlimited and therefore the total quantity of luminaires is unlimited too.
- Management of groups and light scenes, calendar and timer function
- → Control of luminous colour and dimming
- ightarrow Integration of daylight and movement sensors











Mesh Network

Mesh network and algorithms ensure a balance between the luminaires, control elements and sensors within the network. Here information is passed on from each individual node. Each node also automatically serves as a repeater.

- → Low latency
- → Low power
- → Low cost
- → Good range
- → Robust
- ightarrow Auto-configuration



Lighting control via App

LUNUX LIGHTING OFFERS A WIRELESS LIGHTING CONTROL SYSTEM THAT IS EASY AND INTUITIVE TO OPERATE AND CAN BE EASILY CONFIGURED AND ADAPTED VIA A FREE APP.

YOU ACHIEVE MAXIMUM SAVINGS WITH MAXIMUM SAFETY.

SMARTPHONE BLUETOOTH OR IPAD/TABLET LOW ENERGY 4.0

IOS & ANDROID
APPS



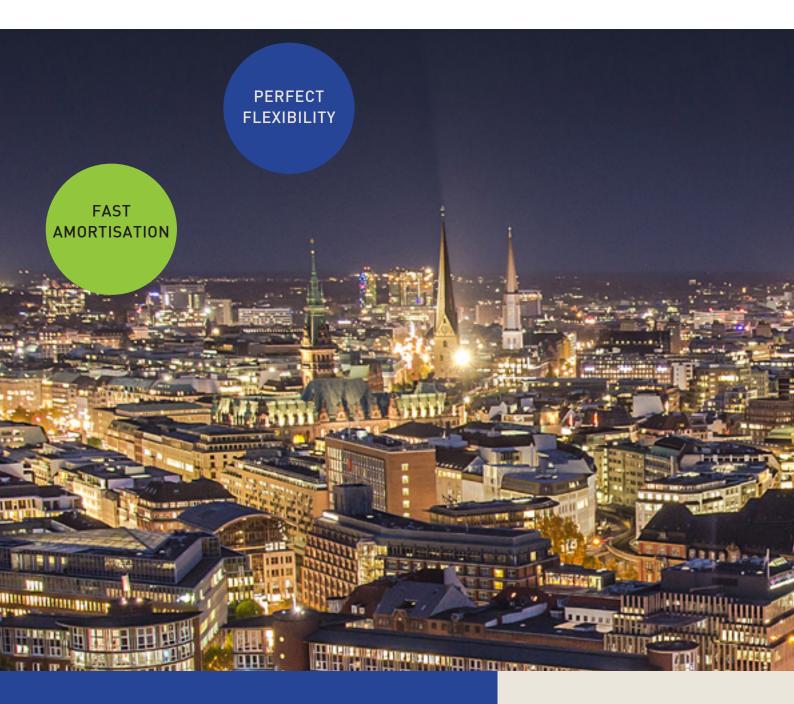


SENSORDATA, SW-UPDATES, CONFIGURATION

X-PRESS SWITCH
WIRELESS & MAGNETIC

SMART CONTROL FROM WALL SWITCHES





Q-RAIL X FAST FACTS

- → Ideal application flexibility
- → 13 light distributions
- → Combination with spotlights
- → Tooless Exchangeable lighting units
- → Individual customer solutions
- → High lifetime 100,000 h (L80)
- → Extremely high efficiency up to 180 lm/W

Lunux Lighting GmbH

Pittlerstraße 29 04159 Leipzig Germany T +49 341 241 872 0 info@lunux-lighting.com www.lunux-lighting.com

