



newslight

Brilliant Light with VS



Dear Customers, dear Business Partners,

At present, the entire lighting world is talking about "Smart Lighting", a term that describes intelligent lighting systems that constantly tailor lighting to suit the respective requirements while at the same time facilitating convenient and easy operation. This is naturally based on efficient LED technology and intelligent light control systems.

This approach is reflected in our latest developments for indoor use in offices, shops, homes and industrial settings as well as for outdoor use in the form of street and architectural lighting. Highly efficient LED systems, combined with intelligent light control solutions, guarantee the right kind of light for almost any application when and where it's needed. And to round our systems off, highly precise optics made of PC, PMWA or silicone are also available. Thanks to our state-of-the-art development and manufacturing processes we can even provide customer-specific optics of up to 2 metres in length.

While the topic of human-centric lighting is a current area of special focus, we are also putting increasing importance on systems for livestock and greenhouses, for which innovative lighting solutions can equally be provided.

Let us surprise you on a "round trip" of our world of product and system innovations.

Yours

Setsuo Mizusawa, CEO

Wlauy Brisch
Klaus Breisch

newsLIGHT CONTENTS

| Office | Enabling bright ideas at the workplace | 4-5 |
|--------------------------|--|-------|
| Street | Excellent visibility ahead | 6-7 |
| Industry | Robust and marvellously efficient | 8–9 |
| Retail | Perfect shopping atmosphere | 10-11 |
| Residential | Ideal comfort light | 12-13 |
| Human Centric | New life-sustaining light | 14-15 |
| Greenhouse & Animal Farm | Optimised yield and wellbeing | 16-17 |
| Smart Lighting | Intelligent light – At any time | 18-19 |



LED Line SMD L14/28/56 W2

The standard for office lighting, ZHAGA-compliant

- Standard and high-brightness with on-board push-in terminals
- Luminous flux from 150 lm to 4600 lm
- Colour temp.: 3000 K, 4000 K, 5000K, 6500 K, CRI ≥ 80
- Efficiency: up to 156 lm/W

LUGA Line RX

Linear COB modules for creating homogeneous light ribbons

- \bullet Luminous flux from 700 lm to 2200 lm
- Colour temp.: e.g. 2700 K, 3000 K, 4000 K, 6500 K
- Service life: 50,000 h (L90/B10)
- Efficiency: up to 148 lm/W

Tuneable White Linear

With adjustable light temperatures for increasing wellbeing

- Two-channel system
- Colour temperature blends from 2700 K to 6000 K, CRI > 80
- Colour tolerance: 4 SDCM
- Efficiency: > 100 lm/W



Programmable intelligent drivers for maximum versatility

- Suitable for Tuneable White Linear
- Output current programmable in 1 mA steps
- Suitable for use with DC* and dimmable via DALI, PUSH
- Current range: 350 700 mA at 42 84 W*
- Service life: up to 100,000 h

ComfortLine

Convenient drivers with selectable current

- Current range selectable via resistor (LEDset standard), output terminal or dipswitch*
- SELV as well as non-SELV solutions
- Suitable for use with DC*, dimmable via DALI, PUSH, 1–10 V*
- Current range: 60 700 mA* at 15 140 W*
- Service life: up to 100,000 h

EasyLine

Cost-efficient driver with a focus on core functions

- Current range selectable via the output terminal*
- SELV as well as non-SELV solutions
- Current range: 150 700 mA at 6 60 W
- Service life: up to 50,000 h

LEDLine SMD Kit 1R and 3R

Highly adjustable 1- and 3-row built-in LED modules

- Flexible light distribution thanks to various optics attachments
- Output ratings: standard and high-brightness
- ZHAGA-compliant fixing dimensions
- Luminous flux: up to 3000 lm
- Colour temp.: 3000 K, 4000 K, 5000 K, 6500 K, CRI ≥ 80
- Service life: 50,000 h (L80/B10)
- Efficiency: up to 174 lm/W

LED Light Panels SMD

Efficient and affordable surface lighting

- Two module dimensions: 250 x 250 mm, 270 x 270 mm
- Luminous flux: up to 2600 lm
- Colour temp.: 3000 K, 4000 K, 5000 K, 6500 K CRI ≥ 80
- Service life: 50,000 h (L80/B10)
- Efficiency: up to 174 lm/W



Dim ONE Bluetooth SMART

Intelligent dimmer system

- Variable light scenarios (e.g. Zone, Scene, Timer, Away, Holiday)
- Suitable for halogen and LEDs, control via Bluetooth
- Adjustable minimum light level to counter flickering; phase-cutting trailing-edge dimmer
- Output range: 3 to 450 W

Light Controller XSW-E6

Wireless multi-talent for luminaire integration

- Suitable for standalone, network and mesh network operation
- Integration in IP/DALI networks for up to 6 DALI luminaires or sensors

Light Controller XSW-E64

Wireless multi-talent for network integration

- EnOcean DALI router (broadcast) without the need for additional software
- Suitable for network operation with easy integration into IP/ DALI networks

^{*}model-dependent



LED Light IP67 Gen. 2

Encapsulated LED module with a high degree of protection

- Built-in module with IP and IK degrees of protection (IP67, IP69, IK08)
- Optics material: silicone
- Luminous flux: 2200 lm to 7900 lm
- Colour temperatures: 3000 K, 4000 K, 5000 K, CRI ≥ 65, ≥ 70, ≥ 80
- Colour tolerance: 5 SDCM
- Service life: > 60.000 h (L80/B10)
- Efficiency: up to 154 lm/W
- Surge protection: 4 kV
- Optimum installation ratio: 4.5:1 (M class optics)

COB Silicone Optics M-Class M1 and Area

Optimum light distribution with integrated protection factor

- Excellent translucency
- Suitable for COB modules with an LES of up to 23 mm
- Degrees of protection: IP65, IK08
- Optical efficiency: up to 95%
- High temperature stability (up to 150 °C)



PrimeLine (



- Programmable functions (e.g. MidNight)*
- Output current programmable in 1 mA steps (DALI) via dipswitch*
- Integrated power reduction*
- Dimmable via 1-10 V
- Very low output ripple and flicker
- Protection classes: IP65, IP20*
- Current range: 350 to 1400 mA* at 75 to 150 W*
- Service life: up to 100,000 h

ComfortLine

Convenient drivers

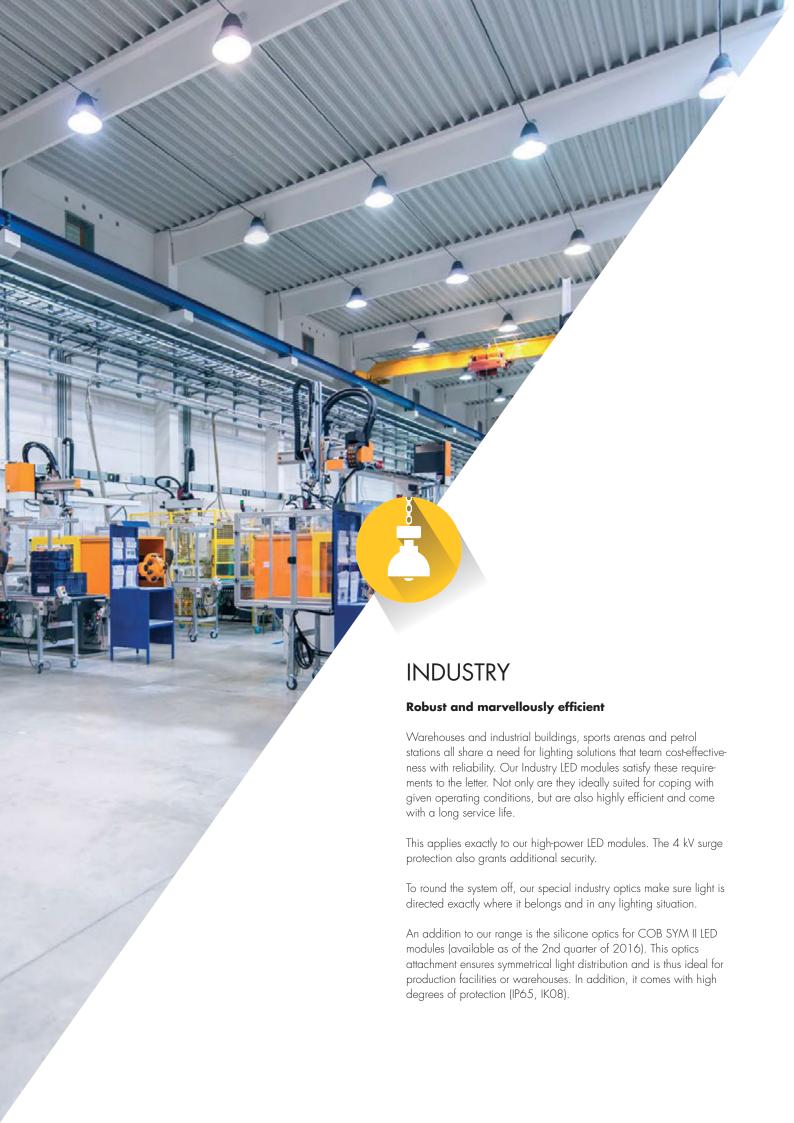
- Integrated power reduction
- Dimmable via 1–10 V*
- Protection classes: IP67, IP65, IP20*
- \bullet Current range: 350 to 1050 mA* at 40 to 150 W*
- Service life: up to 100,000 h

LiCS Outdoor

Intelligent, modular light management

- Smart Night configurable controller with two lighting profiles as well as detection of changing day-night cycle in the summer and winter
- $\bullet\,$ Flex Night controller configurable in groups via the supply line
- Managed Night integrated control solution with an online communications centre

^{*}model-dependent



LED Modules IP20

Highly efficient modular solution

- LED modules with 4, 8, 16, 32 and 64 high-power LEDs
- \bullet Luminous flux: 500 lm to 31500 lm
- Colour temperatures: 3000 K, 4000 K, 5000 K
- Colour rendering: CRI \geq 65, \geq 70, \geq 80
- Colour tolerance: 5 SDCM
- Service life: > 60,000 h (L80/B10)
- Efficiency: up to 154 lm/W
- Surge protection: 4 kV

COB Silicone Optics SYM II

Optimum light distribution with integrated protection factor

- Excellent translucency
- Suitable for COB modules with an LES of up to 23 mm
- Protection classes: IP65, IK08
- \bullet Optical efficiency: up to 95 %



ComfortLine

Convenient drivers with selectable current

- Current range selectable via dipswitch*
- SELV as well as non-SELV solutions
- Very low output ripple and flicker
- Suitable for use with DC*
- Dimmable via DALI, PUSH and 1–10 V*
- Current range: 350 to 1400 mA* at 20 to 126 W*
- Service life: up to 100,000 h

EasyLine

Cost-efficient driver with a focus on core functions

- Protection class: IP67
- Low output ripple and flicker
- Current range: 700 to 3200 mA* at 50 to 230 W*
- Service life: up to 50.000 h

Light Controller XSW Smart

All-in-One EnOcean DALI Controller

- EnOcean DALI control
- Suitable for up to 10 DALI luminaires, incl. sensors
- Simple software-based configuration of individual luminaires and groups
- Suitable for connection to EnOcean daylight and motion sensors
- \bullet Direct connection to 220–240 V mains voltage

^{*}model-dependent



ReadyLine COB

Innovative LED modules for compact spots for direct connection to 220-240 V mains voltage

- Colour temperatures: 2700 K, 3000 K, 3500 K, 4000 K,
- Service life: 50,000 h (L70/B50) • Efficiency: up to 95 lm/W

Readyline DL 160 / Readyline DL 250 / Readyline DL 250 EM (Emergency Lighting)

Highly efficient built-in LED modules for direct connection to 220-240 V mains voltage

• Colour temperatures: 3000 K, 4000 K, 5000 K, CRI 80

• Service life: 55,000 h (L70/B50) • Efficiency: up to 110 lm/W



LUGA Shop Gen 5

The latest generation of retail lighting perfection

- Luminous flux: 500 lm to 16,000 lm
- Standard colour temperatures: 2700 K to 4000 K
- Special light temperatures for fashion and food
- Service life: 50,000 h (L90/B10)
- Efficiency: up to 170 lm/W



PrimeLine



Programmable intelligent drivers for maximum versatility

- Output current programmable in 1 mA steps
- Very low output ripple and flicker
- Suitable for use with DC* and dimmable via DALI, PUSH
- Current range: 350 700 mA at 24 W 37 W*
- Service life: up to 100,000 h

ComfortLine

Convenient drivers

- Very low output ripple and flicker
- \bullet Suitable for use with DC*, dimmable via DALI, PUSH, 1–10 V*
- \bullet Current range: 350 1050 mA* at 24 60 W*
- Service life: up to 100,000 h

EasyLine

Cost-efficient drivers with a focus on core functions

- Current range selectable via the output terminal*
- Current range: 250 1050 mA* at 10 45 W*
- Service life: up to 50,000 h

Dim ONE Bluetooth SMART

Intelligent dimmer system

- Variable light scenarios (e.g. Zone, Scene, Timer, Away, Holiday)
- Suitable for halogen and LEDs, control via Bluetooth
- Adjustable minimum light level to counter flickering; phase-cutting trailing-edge dimmer
- Output range: 3 to 450 W

Light Controller XSW-E6

Wireless multi-talent for luminaire integration

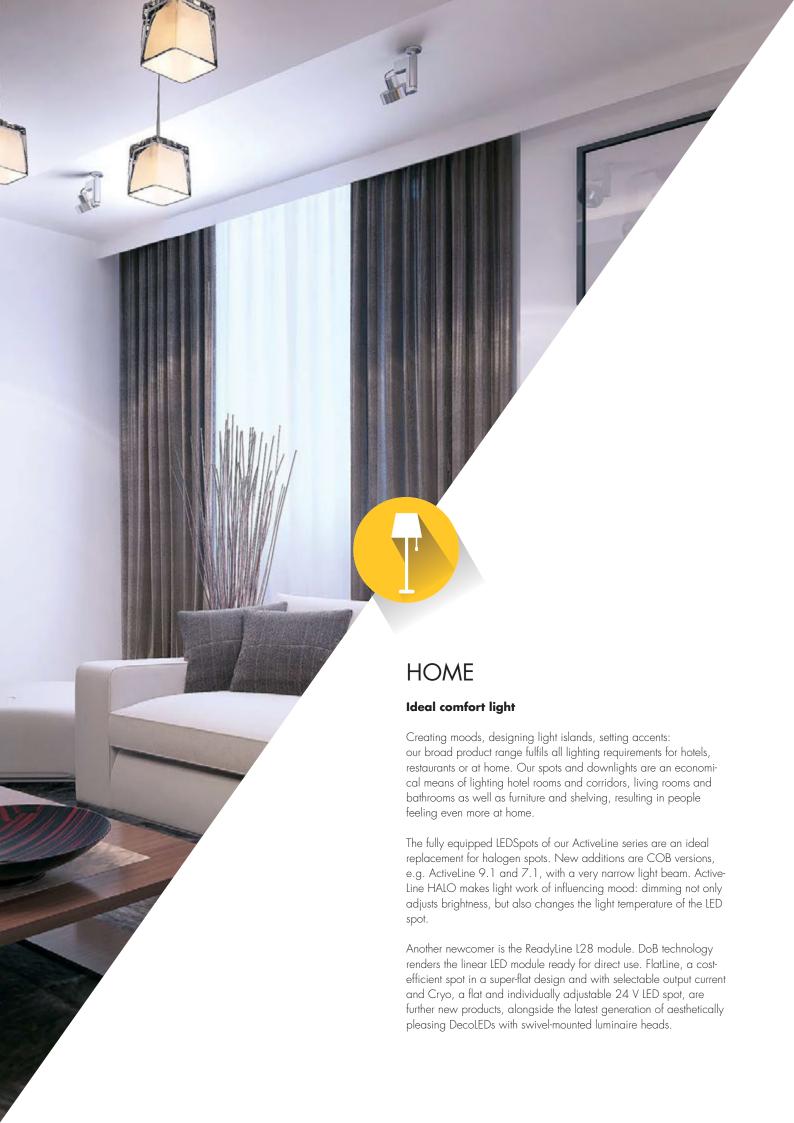
- Suitable for standalone, network and mesh network operation
- Integration in IP/DALI networks for up to 6 DALI luminaires or sensors

Light Controller XSW-E64

Wireless multi-talent for network integration

- EnOcean DALI router (broadcast) without the need for additional
- Suitable for network operation with easy integration into IP/ DALI networks

^{*}model-dependent



ActiveLine 9.1 / 7.1 with extra narrow beam angle

Highly efficient MR16 halogen replacement

- New extra narrow beam angle: 10°
- Architectural and retail lighting

ActiveLine HALO

The MR16 halogen replacement

- Same behaviour of halogen lamps: dim down colour temperature shift from 3000 K to 2000 K
- Colour rendering: CRI 90

LED module Cryo

Slim-line LED module with a customisable length

- 24 V system
- Modular system with segments of 200 mm length
- Luminous flux: 250 lm (600 mm), 500 lm (1,200 mm)
- Power consumption: 2.15 W/4.3 W

DecoLED 7W

Elegant LEDSpot

 Fully equipped with optics, heat sink, leads and metal frame for direct connection to 230 V mains voltage

• Swivel-mounted luminaire head

- Beam angle: 38°
- Power consumption: 7 W
- Efficiency: up to 80 lm/W



ComfortLine

Convenient drivers

- Very low output ripple and flicker
- Suitable for use with DC*
- Dimmable with phase-cutting leading- and trailing-edge dimmer*
- \bullet Current range: 350 1050 mA* at 8 40 W*
- Service life: up to 100,000 h

EasyLine

Cost-efficient drivers with a focus on core functions

- \bullet Current range: 150 1,050 mA* at 5.6 60 W*
- Service life: up to 50,000 h

ReadyLine L28/8.7 W

Built-in LED module for direct connection to 230 V mains voltage

- Aluminium PCB for optimum thermal management
- Integrated push-in connector: 0.2 0.75 mm² (24 18AWG)
- Module dimensions (L x W): 280 mm x 30 mm
- Luminous flux: 780 lm
- Colour temperature: 3000 K, 4000 K

FlatLine

Cost effective LEDSpot in a flat design

- With a constant current driver (700 mA) or a constant voltage driver (12 V)
- Fully equipped with optics, leads and frame
- Beam angle: 40°
- For cut-out: Ø 56 mm
- Colour temperatures: 3000 K, 4000 K



Dim ONE

The stylish dimmer

- Elegant dimmer with state-of-the-art technology
- Suitable for halogen and LEDs
- Adjustable minimum light level to counter flickering
- Dimming: phase-cutting trailing-edge
- Output range: 3 to 450 W

Dim ONE Bluetooth SMART

The intelligent dimmer system

- Variable light scenarios (e.g. Zone, Scene, Timer, Away, Holiday)
- Suitable for halogen and LEDs, control via Bluetooth
- Adjustable minimum light level to counter flickering; phasecutting trailing-edge dimmer
- Output range: 3 to 450 W

^{*}model-dependent



Our human-centric lighting product with 20 highly efficient COB LED chips permits infinite adjustment of light temperatures as well as targeted modification of biologically effective spectrums. In workspaces, this means light can be adjusted to suit the biorhythms of the employees. Nearly the same effect can be achieved in the fields of education and medicine.

The built-in human-centric LED module can thus contribute to improving health and cognitive performance.

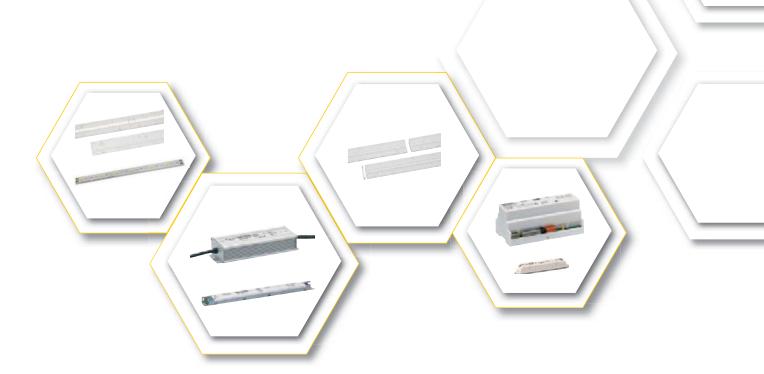
Typical Fields of Application:

- Residential care and nursing homes
- Private homes, hotels
- Kindergartens, schools, universities
- Offices and industrial workspaces

Built-in LED Module for Human-centric Lighting

Optimised and efficient COB technology

- 20 highly efficient LED chips
- 4 light channels
- Ceramic PCB
- On-board push-in terminal
- Customer-specific solutions



A Perfect Match: Our PrimeLine Driver



 $\label{programmable} Programmable intelligence for maximum versatility$

- 4-channel output- each independently dimmable, DALI
- Suitable for DC operation
- Output: max. 188 W
- Output current: selectable between 350 and 700 mA
- Very narrow output current tolerance
- Practically free of inrush current
- Very low output ripple and flickering
- Degree of protection: IP65
- Service life: up to 100,000 h

Light Controller IP

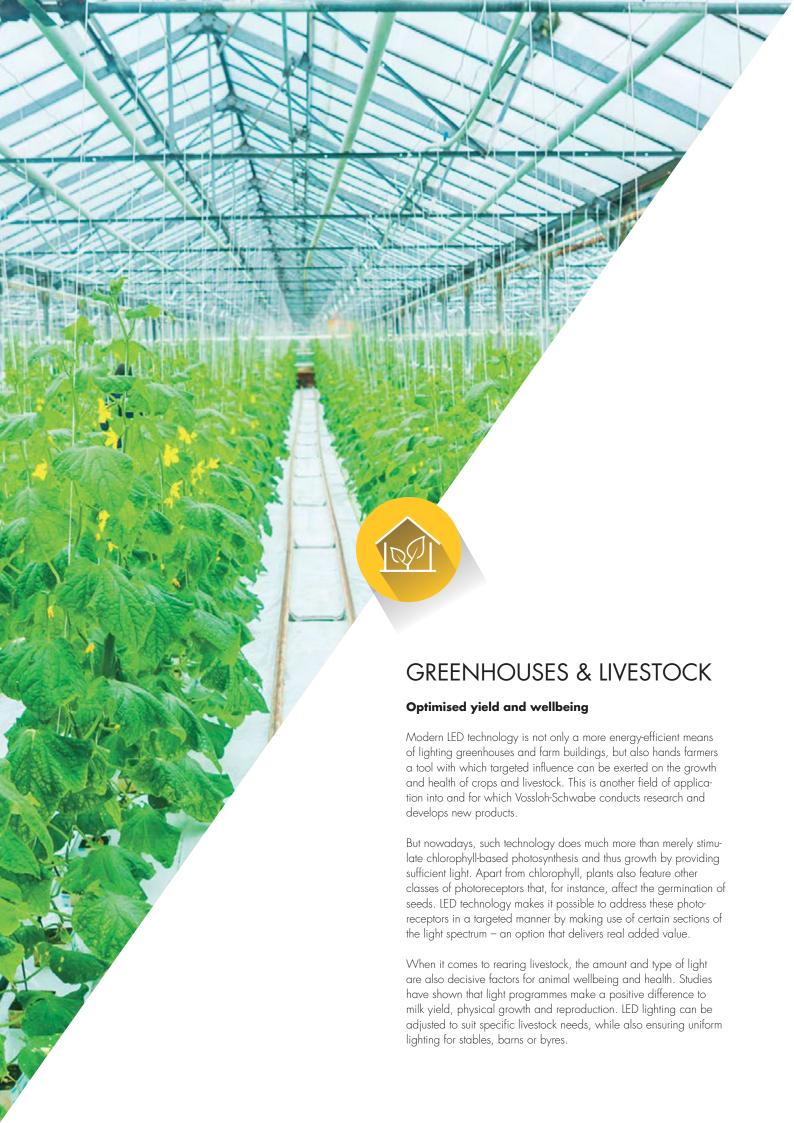
Network-capable DALI light control (2 DALI lines), ideal for new projects and retrofits

- Energy savings thanks to daylight- and occupancy-based control
- Touch4Light via tablet (browser-based)
- EnOcean wireless operation

Light Controller XSW-E6

Wireless multi-talent for luminaire integration

- Suitable for standalone, network and mesh network operation
- Integration in IP/DALI networks for up to 6 DALI luminaires or sensors



LED System Solution for Greenhouses and Livestock

Highly efficient LED system in an elegant aluminium profile with a driver-installation-box

- Optimised COB technology for plants and livestock
- 4 light channels, individually addressable via DALI
- Optimised light spectrum
- Protection class I
- Degree of protection: IP65

Built-in LED module for Greenhouses and Livestock

Optimised and efficient COB technology

- 20 highly efficient LED chips
- 4 light channels
- Ceramic PCB
- On-board push-in terminal
- Customer-specific solutions



A Perfect Match: Our PrimeLine Driver



 $\label{programmable} Programmable intelligence for maximum versatility$

- 4-channel output each independently dimmable, DALI
- Suitable for DC operation
- Output: max. 188 W
- Output current: selectable between 350 and 700 mA via resistor
- Very narrow output current tolerance
- Practically free of inrush current
- Very low output ripple and flickering
- Degree of protection: IP65
- Service life: up to 100,000 h

Light Controller IP

Network-capable DALI light control (2 DALI lines), ideal for new projects and retrofits

- Energy savings thanks to daylight- and occupancy-based control
- Touch4Light via tablet (browser-based)
- EnOcean wireless operation

Light Controller XSW-E64

Wireless multi-talent for network integration

- EnOcean DALI router (broadcast) without the need for additional software.
- Suitable for network operation with easy integration into IP/ DALI networks



Dim ONE

Dimmer with style

- Elegant dimmer, suitable for halogen and LED
- Adjustable minimum light level to counter flickering; phase-cutting trailing-edge dimmer
- Output range: 3 to 450 W

Dim ONE Bluetooth SMART

Intelligent dimmer system

- Variable light scenarios (e.g. Zone, Scene, Timer, Away, Holiday)
- Suitable for halogen and LED, control via Bluetooth
- Adjustable minimum light level to counter flickering; phase-cutting trailing-edge dimmer
- Output range: 3 to 450 W

Light Controller XSW-E6

Wireless multi-talent for luminaire integration

- Suitable for standalone, network and mesh network operation
- Integration in IP/DALI networks for up to 6 DALI luminaires or sensors

Light Controller XSW-E64

Wireless multi-talent for network integration

- EnOcean DALI router (broadcast) without the need for additional software
- Suitable for network operation with easy integration into IP/ DALI networks



VS MediaServer

Synchronising a cohesive light ambience with music or videos is as easy as child's play with our new MediaServer.

Flexible DALI/DMX control for an ambience of harmonised light, audio and video

- Light, audio and video synchronisation for shops, museums or facades
- Super-easy browser-based configuration
- Simple creation of light scenarios with audio-visual integration
- Open and flexible interfaces (DMX, DALI, IP network, EnOcean, audio)
- Combinable with Panasonic Space Player

XSW Router

EnOcean DALI control made easy

- EnOcean DALI router (broadcast)
- Integrated DALI current supply (20 mA)
- No additional software needed

Light Controller XSW Smart

All-in-One EnOcean DALI Controller

- EnOcean DALI control
- Suitable for up to 10 DALI luminaires, incl. sensors
- Simple software-based configuration of individual luminaires and groups
- Suitable for connection to EnOcean daylight and motion sensors

All devices suitable for direct connection to 220–240 V mains voltage



Intelligent, modular light management

- Smart Night configurable controller with two lighting profiles as well as detection of changing day-night cycle in the summer and winter
- Flex Night controller configurable in groups via the supply line
- Managed Night integrated control solution with an online communications centre

Perfectly matched: our LED drivers with a DALI interface

- PrimeLine programmable, for maximum flexibility
- ComfortLine convenient driver with selectable current

Whenever an electric light goes on around the world, Vossloh-Schwabe is likely to have made a key contribution to ensuring that everything works at the flick of a switch.

Headquartered in Germany, Vossloh-Schwabe has been a member of the global Panasonic group since 2002 and counts as a technology leader within the lighting sector. Top-quality, high-performance products form the basis of the company's success.

Vossloh-Schwabe's extensive product portfolio covers all lighting components: LED systems with matching control gear units, highly efficient optical systems, state-of-theart control systems (LiCS) as well as electronic and magnetic ballasts and lampholders.

The company's future is Smart Lighting.

A member of the Panasonic group Panasonic



5 LIGHTING SOLUTIONS

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