

Everything in the proper light

Controlling light through simple and economical innovation

## LSM6 light scene module



Creating light scenes

Dimming the lighting

Includes conventional non-dimmable lighting

Includes light and movement sensors

Modules for extension

Easy installation and application without further software and hardware

Economical implementation

**protronic**  
INNOVATIVE STEUERUNGSELEKTRONIK

## Light Controlling

### The alternative to bus systems Innovative lighting control with LSM6

With LSM6, we have developed a lighting control system that allows users to implement individually adapted lighting solutions simply and economically.

Are you an electrician, lighting designer, architect or private user looking for a solution to implement your lighting concept in an economically viable way? You want to create light scenes easily, dim light, also depending on presence and daylight, and thus design light ergonomically, create atmosphere and save costs?

You don't need a bus system with KNX and DALI that can do a lot but also costs a lot. LSM6 offers you all this! You will be amazed at how simply LSM6 works and what advantages it brings for you, whether installer or user. And that goes far beyond the favourable costs:

Advantages:

- clear operation in push-button dimming and / or light scene mode
- self-explanatory intuitive programming of light scenes with visual feedback
- easy modification or reprogramming of the light scenes directly at the LSM6 or in the room
- Simple installation without additional hardware and software
- Can be operated with smartphone and tablet
- modular expandability of the LSM6 from 6 to 18 channels
- Low energy consumption
- Integration of existing lighting via relays on LSM6
- Simple parameterisation via multifunction tool
- Fast copying of light scene parameters via SD card

#### description

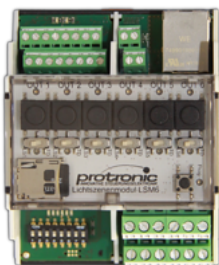
#### article



Light scene module LSM6 + supply-module

1017000020

- light controlling and power converter for top-hat rail installation
- 6 channel lightbus-outputs for DALI-compatible operating devices, 6 potential-free contacts (230V 6A relay), 8 pushbutton inputs, Ethernet-connection RJ45
- Out- and input-channel display
- max. 0,2A (3,3V), max. 0,75A (24V)
- L x W x H 90mm x 90mm x 61mm (5TE)
- including Supply-Modul



Light scene module LSM6

1017000012

- light controlling for top-hat rail installation
- 6 channel lightbus-outputs for DALI-compatible operating devices, 6 potential-free contacts (230V 6A relay), 8 pushbutton inputs, Ethernet-connection RJ45
- Out- and input-channel display
- max. 0,2A (3,3V), max. 0,75A (24V)
- W x H x D: 90mm x 90mm x 61mm (4TE)

**description**

**article**



Light scene module LSM6, supply-module w/o network

1017000023

- light controlling and power converter for top-hat rail installation
- 6 channel lightbus-outputs for DALI-compatible operating devices, 6 potential-free contacts (230V 6A relay), 8 pushbutton inputs
- Out- and input-channel display
- max. 0,2A (3,3V), max. 0,75A (24V)
- L x W x D: 90mm x 90mm x 61mm (5TE)
- including Supply-Modul



LSM6 light scene module w/o network

1017000022

- light controlling and power converter for top-hat rail installation
- 6 channel lightbus-outputs for DALI-compatible operating devices, 6 potential-free contacts (230V 6A relay), 8 pushbutton inputs
- Out- and input-channel display
- max. 0,2A (3,3V), max. 0,75A (24V)
- W x H x D: 90mm x 90mm x 61mm (4TE)



Light scene module LSM6-K + supply-module

1017000029

- Light scene module for easy control of switchable and dimmable lighting via DALI ECG
- 4 channel light bus outputs for DALI-compatible control gear, (2xAV & 2xSV 4KV isolated from each other)
- Operation via 8 inputs/push-buttons or switches for operating (ON/OFF/DIMM) the lighting scenes/channels, simple programming of lighting scenes via the push-buttons on the switchgear or the push-buttons on site or via application multifunction tool
- Integration of light and motion sensor via light bus for 1-4 channels
- Operating voltage of additional classic non-dimmable luminaires etc. can be switched via 4x potential-free relay outputs
- Operating application directly accessible via LAN with web browser
- Programming transfer via SD card to additional light scene modules possible
- Evaluation of central switching signals via light scene input, TCP/IP
- For mounting on top-hat rail, 2 x 24 VDC operating voltage
- Output and input channel display
- max. 0.2A (3.3V), max. 0.75A (24V)
- L x W x H 72mm x 90mm x 61mm (4HP)
- incl. supply module

**description**

**article**



Light scene module LSM4-K

1017000028

- Light scene module for easy control of switchable and dimmable lighting via DALI ECG
- 4 channel light bus outputs for DALI-compatible control gear, (2xAV & 2xSV 4KV isolated from each other)
- Operation via 8 inputs/push-buttons or switches for operating (ON/OFF/DIMM) the lighting scenes/channels, simple programming of lighting scenes via the push-buttons on the switchgear or the push-buttons on site or via application multifunction tool
- Integration of light and motion sensor via light bus for 1-4 channels
- Operating voltage of additional classic non-dimmable luminaires etc. can be switched via 4x potential-free relay outputs
- Operating application directly accessible via LAN with web browser
- Programming transfer via SD card to additional light scene modules possible
- Evaluation of central switching signals via light scene input, TCP/IP
- For mounting on top-hat rail, 2 x 24 VDC operating voltage
- Output and input channel display
- max. 0.2A (3.3V), max. 0.75A (24V)
- L x W x H 72mm x 90mm x 61mm (4HP)



LSM6-relay module REL

1017000039

- The LSM6-REL is used as a parameterisable digital input/output device for expanding a main unit (LSM6 or LSM4-K/ESA-SLD). It expands the main unit by four digital inputs/outputs each. The digital outputs are power relays for switching loads (ECG, power supply unit, motors).
- Extension module for LSM6
- 4 inputs
- 4 relay outputs make contact 16A (AC1 400VA / AC3230VAC 0.55 kW / AC15 230VAC 750VA)



light scene module LSM2 flush installation

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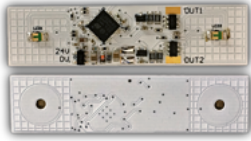

- 2 channel light bus outputs for DALI-compatible operating devices
- Control of channels via capacitive touch keys



light scene module LSM2-K (flush installation)

1017000032

- light scene module for flush installation, easy controlling of switch- and dimmable lighting via DALI-EVG
- 2 channels to control 10 DALI-devices per channel
- standard-conforming, safe 4 KV separation of the 2 channels (AV/SV separation)
- switches for changing the light-scenes / - channels (on/off/dimm)
- alternatively operation with electrical potentiometer or Protronic-4-scene touch module
- no configuration necessary, pre-configuration on customer request
- inclusion of light- and motion sensors via lightbus for 1-2 channels
- analysis of central switch signals possible
- 24 VDC operating voltage, power supply unit included in scope of delivery

description	article
 <p>2-channel-PWM touch-dimmer</p> <ul style="list-style-type: none"> <li>• 2 channels, each channel can be set separately</li> <li>• Feedback - LED for keystroke and programming</li> <li>• Orientation light</li> <li>• different functions for short and long pressing of button</li> <li>• Setting of maximum dimming value</li> <li>• setting of start value after voltage recovery</li> <li>• high switch frequency, no flickering</li> </ul>	002800002
<p>4 functions: e.g.</p> <ul style="list-style-type: none"> <li>• monostable relay,</li> <li>• 1 NO contact for 16 A,</li> <li>• contact material AgSnO<sup>2</sup>,</li> <li>• max. inrush current 120 A-5 ms,</li> <li>• lamp loads: LED (230 V AC) 400 W,</li> <li>• supply voltage 12-24 V AC/DC,</li> <li>• relay protection class IP 20</li> </ul>	0310020044
 <p>mounting rail HBUS 71,6-16P-1S BK</p> <ul style="list-style-type: none"> <li>• HBUS Mounting rail extension</li> <li>• operation of several LSM6 with one supply module</li> </ul>	023500012
 <p>Supply-Modul with watchdog for LSM6</p> <ul style="list-style-type: none"> <li>• power converter module for top-hat rail installation</li> <li>• input voltage: 24V (max. 2,5A)</li> <li>• output voltage: 24V, 5V(0,6A), 3,3V(1,2A)</li> <li>• W x H x D: 90mm x 90mm x 61mm (1TE)</li> <li>• toggle switch: manual, automatic, off</li> <li>• ports: HBUS (bottom, top-hat rail)</li> <li>• clamps: 24V, combined fault, manual operation</li> </ul>	101700013

## Control Units and Accessories

**description**

**article**



extraction tool for miniature terminals  
SMDflat WKZ

- for the comfortable extraction of mini terminals on the RZ-24-05
- prevents damages to terminals and connectors

0912000002

**Sensors**

**description**

**article**



light-motion-detector LBM with socket

- sensor for light intensity regulation and motion- / presence detection
- illumination 0 - 25.000 lux
- PIR sensor at height of 2,5m = 3m detection radius
- joint socket GU10 white
- input for lightbus, input voltage 11,5 - 22,5 VDC, 4mA

1017000015



light-motion-detector LBM with GU10 frame

- sensor for light intensity regulation and motion- / presence detection
- illumination 0 - 25.000 lux
- PIR sensor at height of 2,5m = 3m detection radius
- socket GU10 white
- input for lightbus, input voltage 11,5 - 22,5 VDC, 4mA

1017000034

light sensor LS

- sensor for light intensity regulation
- illumination 0 - 25.000 lux
- input for lightbus, input voltage 11,5 - 22,5 VDC, 4mA

1017000017



light sensor LS

- sensor for light intensity regulation
- illumination 0 - 25.000 lux
- joint socket GU10 white
- input for lightbus, input voltage 11,5 - 22,5 VDC, 4mA

1017000016

description	article
	<p>light-motion-detector LBM for industry</p> <ul style="list-style-type: none"> <li>• sensor for light intensity regulation and motion- / presence detection</li> <li>• illumination 0 - 25.000 lux</li> <li>• PIR sensor at height of 2,5m = 3m detection radius</li> <li>• plastic casing with transparent cover IP65</li> <li>• inputs: lightbus, input for extern motion detectors</li> <li>• input voltage 11,5 - 22,5 VDC, 4mA</li> </ul>
	<p>light sensor LS for industry</p> <ul style="list-style-type: none"> <li>• sensor for light intensity regulation in industrial environments</li> <li>• illumination 0 - 25.000 lux</li> <li>• plastic casing with transparent cover IP65</li> <li>• inputs: lightbus, input for extern motion detectors</li> <li>• input voltage 11,5 - 22,5 VDC, 4mA</li> </ul>
	<p>Light-motion detector LBM-i-HDLD</p> <ul style="list-style-type: none"> <li>• Sensor for light intensity control and motion / presence detection</li> <li>• Illuminance 0 to 25,000 lux</li> <li>• PIR sensor up to 12m height 16x16m detection radius</li> <li>• Plastic housing with transparent cover IP65</li> <li>• Connection for light bus, input voltage 11.5 to 22.5 VDC, 4mA</li> </ul>

## Accessories

description	article
	<p>DIN top hat rail power supply Phoenix 24V 0,5A</p> <ul style="list-style-type: none"> <li>• STEP-PS / 1AC / 24DC / 0,5 A</li> <li>• Primary switched-mode power supply STEP POWER for</li> <li>• Carrier rail mounting</li> <li>• Input: single-phase</li> <li>• Output: 24 V DC / 0,5 A</li> </ul>
	<p>top hat rail power supply Phoenix 24V 0,75A</p> <ul style="list-style-type: none"> <li>• STEP-PS / 1AC / 24DC / 0,75 A</li> <li>• Primary switched-mode power supply STEP POWER for</li> <li>• Carrier rail mounting</li> <li>• Input: single-phase</li> <li>• Output: 24 V DC / 0,75 A</li> </ul>

**description**

**article**



top hat rail power supply Phoenix  
24 V 1,3 A

- STEP-PS / 1 AC / 24 DC / 1.3 A
- Primary switched-mode power supply STEP POWER for
- Carrier rail mounting
- Input: single-phase
- Output: 24 V DC / 1,3 A

0044000010



top hat rail power supply Phoenix 24V 1,75A

- STEP-PS / 1AC / 24DC / 1,75 A
- Primary switched-mode power supply STEP POWER for
- Carrier rail mounting
- Input: single-phase
- Output: 24 V DC / 1,75 A

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**Presentation Systems**

**description**

**article**



Sample case LSM6

- sample case for light scene module LSM6
- Functions: light scenes, motion detection, brightness control
- Inhalt: LSM6, 24V-power supply, LBM, triple-touch actuators, 3 x LED-Spots
- Input: 230V

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