

# LSS



## PowerDim 2

The LSS PowerDim 2 is a portable, decentralised thyristor dimmer with six Dim/NonDim circuits and a power range of 3 kVA. The dimmer circuits can be controlled via either Ethernet or DMX and offer full RDM support. The LSS PowerDim 2 features a switchable electronic base load for each circuit, adjustable fade-in/fade-out times and dimming values, an adjustable 8-bit/16-bit control, 16 dimming curves and a bypass circuit for the dimming circuits at 100% load. Each phase is monitored for current and can be automatically shut down in the event of an overload.

The LSS PowerDim 2 is housed in an anodised extruded aluminium profile, whose unique thermal conductivity enables fanless convection cooling. The dimmer can be fitted with all standard connectors. LSS dimmers automatically detect the mains frequency range (50 Hz / 60 Hz).

### Performance specifications:

- Up to 6 Dim/NonDim circuits
- Bypass circuit for reducing the power dissipation of the dimmer circuits at maximum load
- 8Bit/16Bit control
- Internal switchable base load
- 16 internal dimmer curves
- Adjustable fade-in / fade-out times
- Internal current measurement (single phase / sum) incl. voltage & frequency monitoring, automatic switch-off adjustable
- Control via Ethernet or DMX
- Control unit includes Ethernet / DMX node, remote configurable
- Useable as RDM proxy
- Housed in anodized aluminum extrusion profile
- Fanless cooling via housing

## Artikelnummer

| Item number | Configuration  |
|-------------|--|
| L02011-24   | 6x 3 kVA Dim/NonDim to Schuko and parallel multi-pin connectors, supply 400 V/32 A |

## Technical Specifications:

### PowerDim Processor

#### Generals

|                                   |  |
|-----------------------------------|--|
| Mechanical design                 | Ready-to-use unit in duct configuration  |
| Operation                         | local: Menu control with encoder and menu display<br>remote: Configuration using LSS 'ConfigStudio' software |
| RDM                               | RDM reporting of all settings and measured values  |
| Display                           | Text display with white backlighting<br>(4 lines of 20 characters each)                                      |
| Ambient temperature               | 0 °C – 40 °C   |
| Operating temperature             | 0 °C – 60 °C   |
| Device cooling                    | Passive via housing  |
| RoHS compliant                    | Yes  |
| Protection rating/protection clas | IP 20 / SK I   |
| Colour Housing                    | Aluminium, black anodised  |
| Dimensions (W x H x D)            | 770 x 210 x 250 mm   |
| Weight                            | 25.6 kg  |
| Scope of delivery                 | - Dimmer<br>- 2 m connection cable with CEE plug (H07RN-F5G 400V/32A)  |

#### Interfaces

|                             |  |
|-----------------------------|--|
| DMX                         | DMX-Out: 2x 5pin XLR<br>DMX-In: 1x 5pin XLR, HTP<br>DMX-THRU: 1x 5pin XLR<br>(ISOLATED according to ANSI E1.11 A1) |
| Ethernet                    | 1x RJ45 10/100 Mbit/s, Range and duplex mode manually adjustable   |
| Supported network protocols | sACN ANSI E1.31 R2018, sACN-DD, RDM-Net ANSI E1.33 (2019), Art-Net 4, AVAB-IPX, AVAB-UDP, ShowNet                  |

## Device function

|                 |  |
|-----------------|--|
| Operating modes | Dimmer: Phase-cut dimmers for all resistive and inductive loads encountered in practical operation   |
|                 | NonDim: Switching with an adjustable switching point (e.g. electronic ballasts for fluorescent lamps and other loads)  |
| Dimmer          | <ul style="list-style-type: none"><li>- Global or individual circuit settings</li><li>- Switchable base load</li><li>- Bypass circuit at 100% load</li><li>- 8-bit/16-bit control</li><li>- 16 dimming curves</li><li>- Adjustable fade-in and fade-out times</li><li>- Adjustable minimum and maximum dimming values</li><li>- Off, Hold and adjustable backup values in the event of a signal loss</li></ul> |
| NonDim          | <ul style="list-style-type: none"><li>- Bistable relays</li><li>- Off, Hold in the event of a loss of signal</li><li>- Adjustable switching points</li><li>- For all types of load</li></ul>   |

## Power supply

|               |   |
|---------------|---|
| 400 VAC/32 A  | <ul style="list-style-type: none"><li>- Multi-pin connector</li><li>- 2.0 m connection cable with CEE connector (400 V/32 A, 5-pin)</li></ul> |
| EMV-Standards | EN 55022, class B, FCC part 15, level B   |

## Equipment protection

|                                |  |
|--------------------------------|--|
| Coverage of the benefit groups | MCB (circuit breaker) or RCBO (RCD/circuit breaker) per circuit  |
| Power monitoring               | Overload protection with single-phase monitoring, manual setting of the maximum load per phase with adjustable cut-off thresholds, and maximum total load with an adjustable total cut-off threshold and prioritisation of individual circuits |

## Electrical specifications

|  |   |
|--|---|
| Power dissipation in dimmable circuits | Max. 30 W per power circuit at 100% duty cycle and rated load |
| Risetime                               | 180 $\mu$ s   |
| Mains frequency                        | 50 $\pm$ 3 /60 $\pm$ 3 Hz                                     |
| Minimum load                           | 0 VA (nicht erforderlich), für Stromüberwachung 150 W         |