

**PHILIPS**

Xitanium

SR Bridge



## Datasheet

# Reliable SR technology for connected LED applications

The SR Bridge can be used with existing DALI drivers to create an SR system. This is useful to connect e.g. multiple downlights to 1 sensor or to use 1 sensor for multiple trunking luminaires. It features all the elements of the SR interface like: sensor DALI power supply (0.5W), energy metering (1% accurate) and diagnostics. To an SR Certified sensor or module the SR bridge is transparent. The sensor is connected to the bridge via the SR interface and on the other side DALI drivers can be connected on the DALI interface.

### Benefits

- 1 sensor for multiple luminaires
- Can be used in applications where SR drivers are not yet available e.g. point/downlight
- Can be used to retrofit SR certified sensors to an existing DALI installation

### Features

- Full SR interface: DALI power supply, energy metering, diagnostics
- Built-in relay to avoid standby power in case multiple drivers are connected
- Independent and built-in versions for different applications

### Application

- Downlights
- Trunking
- Tracks

## Logistical data

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| Specification item | value                       |
|--------------------|-----------------------------|
| Product name       | Xitanium SR Bridge built in |
| Order code         | 8718 696 719824             |
| Logistic code 12NC | 9290 015 46406              |
| EAN3               |                             |
| Pieces per box     | 32                          |

## Logistical data

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| Specification item | value                          |
|--------------------|--------------------------------|
| Product name       | Xitanium SR Bridge independent |
| Order code         | 8718 696 719848                |
| Logistic code 12NC | 9290 015 46506                 |
| EAN3               |                                |
| Pieces per box     | 36                             |

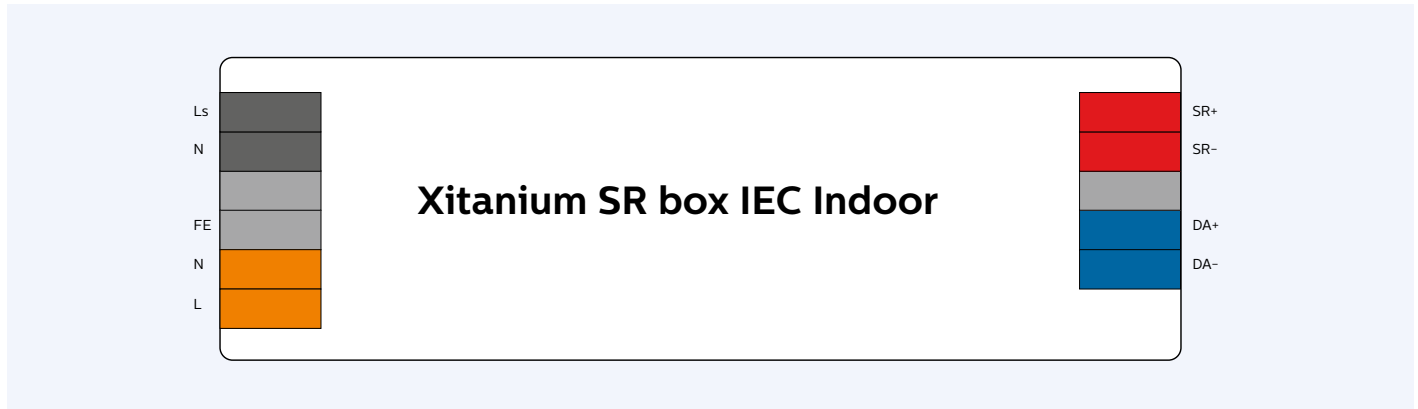
## Electrical input data

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| Specification item          | value       | Unit | Condition                        |
|-----------------------------|-------------|------|----------------------------------|
| Rated input voltage range   | 220 ... 240 | Vac  | Performance                      |
| Input voltage range         | 198 ... 264 | Vac  | Operational                      |
| Rated input frequency range | 50 ... 60   | Hz   | Performance                      |
| Input frequency range       | 45 ... 66   | Hz   | Operational                      |
| Rated input power           | 402         | W    | 230Vac, full load                |
| Power factor                | ≥ 0.9       |      | 22W upto max reference load      |
| Total harmonic distortion   | ≤ 20        | %    | 22W upto max reference load      |
| Standby power               | < 0.5       | W    | No load on SR or DALI, relay off |

## Wiring & Connections

| Specification item | value     | Unit            | Condition  |
|--------------------|-----------|-----------------|------------|
| Wire Type          | 0.2...1.5 | mm <sup>2</sup> | solid wire |
| Wire Strip Length  | 9...10    | mm              |            |



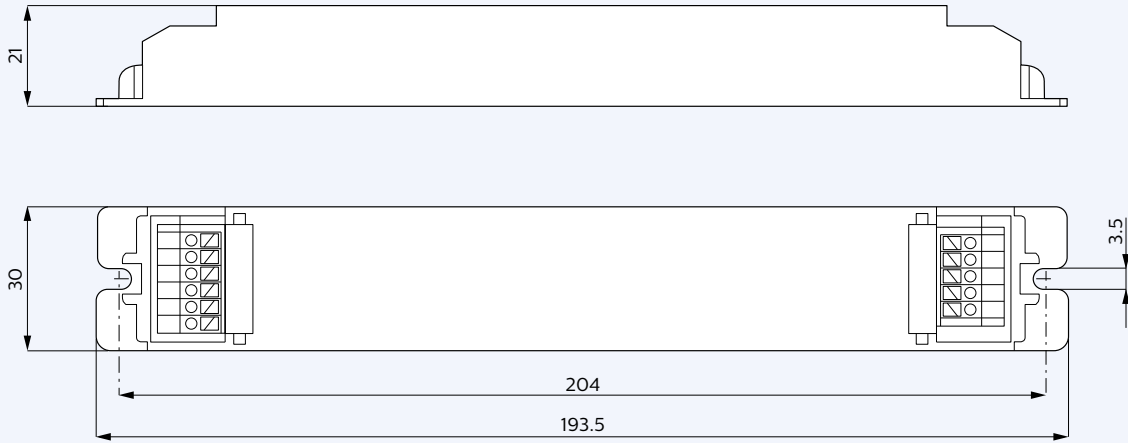
## Insulation

|                       | Mains  | FE     | SR     | DALI   | Switched Mains |
|-----------------------|--------|--------|--------|--------|----------------|
| <b>Mains</b>          | N/A    | Double | Double | Basic  | None           |
| <b>FE</b>             | Double | N/A    | Double | Double | Double         |
| <b>SR</b>             | Double | Double | N/A    | Basic  | Double         |
| <b>DALI</b>           | Basic  | Double | Basic  | N/A    | Basic          |
| <b>Switched Mains</b> | None   | Double | Double | Basic  | N/A            |
| <b>DALI</b>           | Basic  | Basic  | Basic  | Basic  | NA             |

## Dimensions and weight

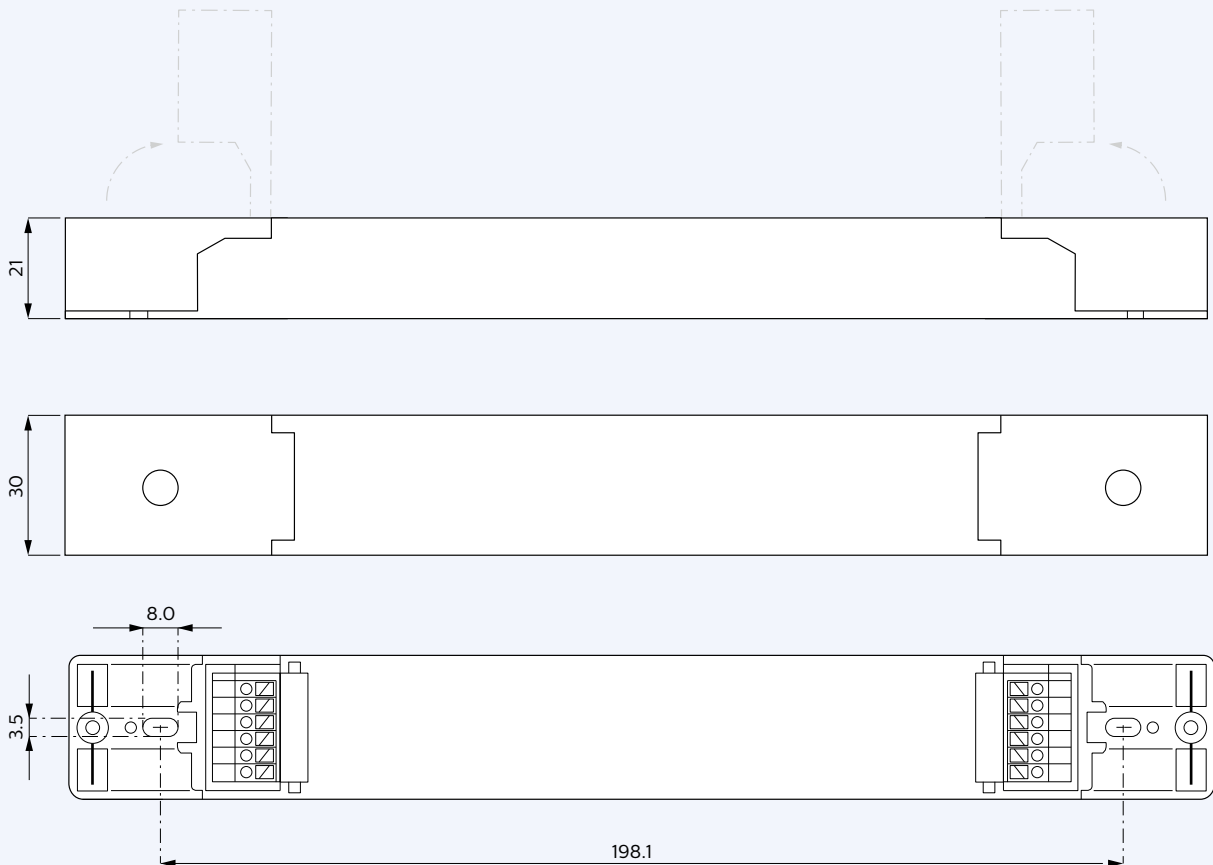
| Specification item   | Value | Unit | Condition |
|----------------------|-------|------|-----------|
| Weight (built in)    | 95    | gram |           |
| Weight (Independent) | 110   | gram |           |

### SR Bridge Built in



Dimensions in mm.

### SR Bridge Independent



Dimensions in mm.

## Operational temperatures and humidity

| Specification item         | Value     | Unit | Condition                           |
|----------------------------|-----------|------|-------------------------------------|
| Driver ambient temperature | -40...+60 | °C   |                                     |
| $T_{case} - max$           | +75       | °C   | Max. steady-state $T_{case}$        |
| $T_{case} - life$          | +65       | °C   | For rated driver lifetime           |
| Relative humidity          | 10...90   | %    | Non-condensing                      |
| Ingress Protection         | 20        |      | Suggested luminaire IP: $\geq$ IP54 |

## Storage temperature and humidity

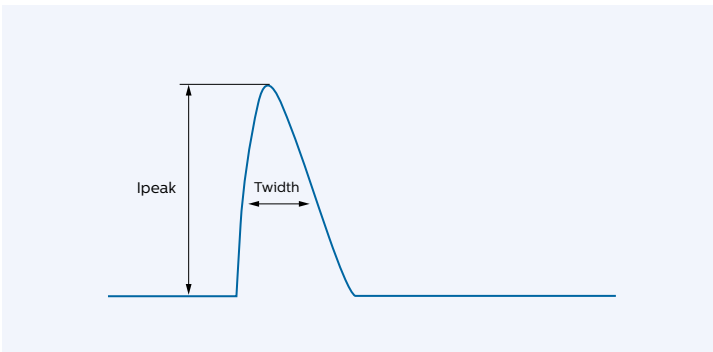
| Specification item  | Value     | Unit | Condition      |
|---------------------|-----------|------|----------------|
| Ambient temperature | -40...+85 | °C   |                |
| Relative humidity   | 5...95    | %    | Non-condensing |

## Lifetime

| Specification item    | Value   | Unit  | Condition   |
|-----------------------|---------|-------|---|
| Rated driver lifetime | 100,000 | hours | $T_{case} \leq T_{case} - life$ .<br>Maximum failures = 10% |

## Inrush current

| Specification item         | Value  | Unit    | Condition  |
|----------------------------|--|---------|--|
| Inrush current $I_{peak}$  | 12   | A       | Input voltage 230Vac                             |
| Inrush current $T_{width}$ | 200  | $\mu$ s | Input voltage 230Vac, measured at 50% $I_{peak}$ |
| Typical number of drivers  | Based on max power rating of 400VA or 20 (lesser of the 2 numbers) | pcs     | MCB 16A B type, mains impedance                  |



| MCB | Rating | Relative number of LED drivers |
|-----|--------|--------------------------------|
| B   | 10A    | 63%                            |
| B   | 13A    | 81%                            |
| B   | 16A    | <b>100%</b>                    |
| B   | 20A    | 125%                           |
| B   | 25A    | 156%                           |
| C   | 10A    | 104%                           |
| C   | 13A    | 135%                           |
| C   | 16A    | 170%                           |
| C   | 20A    | 208%                           |
| C   | 25A    | 260%                           |

## Surge immunity

| Specification item                  | Value | Unit | Condition  |
|-------------------------------------|-------|------|--|
| Mains surge immunity (comm. mode)   | 2     | kV   |  |
| Mains surge immunity (comm. mode)   | 4     | kV   |  |
| Control surge immunity (diff. mode) | 600   | V    | Between SR+ and SR-  |
| Control surge immunity (comm. mode) | 4     | kV   | Between SR+ and SR- and FE and between SR+ and SR- and mains |

## Energy Metering

| Specification item       | Value | Unit | Condition |
|--------------------------|-------|------|-----------|
| Energy Metering accuracy | <4    | %    |           |



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Data subject to change