

The trusted value of OSRAM Digital Systems continues with Inventronics Global – where experience meets innovation.

## OTi DALI 80/220-240/48 1CH (NEW)

Optotronic Intelligent - 48 V DALI



### Product family features

- Dimmable via Touch DIM
- 50 m load cable with EMI validated
- Dimming range: 0.1...100 %
- Line frequency: 0 Hz | 50 Hz | 60 Hz

### Product family benefits

- Intelligent power matching thanks to Smart power supply
- Form factor for mounting on the cove or in luminaires
- No stroboscopic effect thanks to patented high PWM frequency management (> 2 kHz)
- Suitable for installation in emergency lighting systems according to EN 60598-2-22
- DALI message detection "LED Module failure"
- DALI part 251-252-253
- IP rating: IP20

## Areas of application

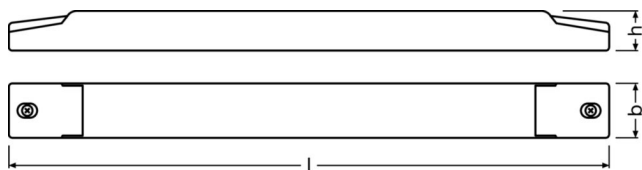
- Cove lighting, wall washer, corridor, handrail, luminous ceilings
- Suitable for use in luminaires of protection class I and II

## Technical data

### Electrical data

|                                          |             |
|------------------------------------------|-------------|
| Nominal input voltage                    | 220...240 V |
| Mains frequency                          | 50/60 Hz    |
| Input voltage AC                         | 198...264 V |
| Input voltage DC                         | 176...276 V |
| Total harmonic distortion                | < 5 %       |
| Power factor $\lambda$                   | > 0.98      |
| Efficiency in full-load                  | 93%         |
| Device power loss                        | 6.0 W       |
| Inrush current                           | 46 A        |
| Max. ECG no. on circuit breaker 10 A (B) | 9           |
| Max. ECG no. on circuit breaker 16 A (B) | 15          |
| Surge capability (L/N-Ground)            | 2 kV        |
| Surge capability (L-N)                   | 1 kV        |
| Nominal output voltage                   | 48.2 V      |
| U-OUT (working voltage)                  | 48.2 V      |
| Output PSTLM                             | <1          |
| Output SVM                               | <0.4        |
| Nominal output power                     | 0...80 W    |
| Maximum output power                     | 80 W        |
| Galvanic isolation                       | SELV        |
| Galvanic isolation DALI/mains            | Basic       |
| Galvanic isolation DALI/output           | Double      |
| Networked standby power                  | <0.30 W     |

## Dimensions & weight



|                                      |                           |
|--------------------------------------|---------------------------|
| Length                               | 346.0 mm                  |
| Width                                | 32.0 mm                   |
| Height                               | 22.0 mm                   |
| Mounting hole spacing, length        | 303.0 mm                  |
| Cable cross-section, input side      | 0.5...2.5 mm <sup>2</sup> |
| Cable cross-section, output side     | 0.2...1.5 mm <sup>2</sup> |
| Wire preparation length, input side  | 6.0 mm                    |
| Wire preparation length, output side | 5.0 mm                    |
| Product weight                       | 191.00 g                  |

## Colors & materials

|                 |         |
|-----------------|---------|
| Casing material | Plastic |
| Product color   | White   |

## Temperatures & operating conditions

|                                          |              |
|------------------------------------------|--------------|
| Ambient temperature range                | -20...+45 °C |
| Maximum temperature at tc test point     | 85 °C        |
| Max.housing temperature in case of fault | 110 °C       |
| Temperature range at storage             | -40...85 °C  |
| Permitted rel. humidity during operation | 5...85 %     |

## Lifespan

|              |         |
|--------------|---------|
| ECG lifetime | 50000 h |
|--------------|---------|

## Additional product data

|              |    |
|--------------|----|
| Encapsulated | No |
|--------------|----|

## Capabilities

|                                        |                        |
|----------------------------------------|------------------------|
| Programming interface                  | DALI - 2               |
| Dimmable                               | Yes                    |
| Dimming interface                      | DALI-2                 |
| Dimming range                          | 0.1...100 %            |
| Dimming method                         | Pulse Width Modulation |
| DALI-2 Diagnostic Data                 | Yes                    |
| DALI-2 Energy Data                     | Yes                    |
| Max. cable length to lamp/LED module   | 50 m                   |
| Suitable for fixtures with prot. class | I / II                 |
| Suitable for emergency lighting        | Yes                    |
| EL DC detection selectable             | Yes                    |
| EL EOFi – default value                | 0.15                   |
| Type of connection, input side         | Screw terminal         |
| Type of connection, output side        | Screw terminal         |
| Suitable for through-wiring            | No                     |
| Number of channels                     | 1                      |
| Overheating protection                 | Yes                    |
| Overload protection                    | Yes                    |
| Short-circuit protection               | Yes                    |
| Intended for no-load operation         | No                     |
| No-load proof                          | Yes                    |

## Programming

|              |     |
|--------------|-----|
| Tuner4TRONIC | Yes |
|--------------|-----|

## Programmable features

|                        |     |
|------------------------|-----|
| DALI Settings          | Yes |
| DALI-2 Luminaire Data  | Yes |
| TouchDIM + Sensor      | Yes |
| Corridor Functionality | Yes |

## Certificates & standards

|                           |                                                  |
|---------------------------|--------------------------------------------------|
| Approval marks – approval | CCC / CE / BIS / ENEC / EL / MM / RCM / VDE-ENEC |
| Type of protection        | IP20                                             |

## Environmental information

| Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH) |                                                                                                    |
|-----------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| Date of Declaration                                                   | 16-05-2025                                                                                         |
| Primary Article Identifier                                            | 6977770432475                                                                                      |
| Candidate List Substance 1                                            | Lead                                                                                               |
| CAS No. of substance 1                                                | 7439-92-1                                                                                          |
| Safe Use Instruction                                                  | The identification of the Candidate List substance is sufficient to allow safe use of the article. |
| Declaration No. in SCIP database                                      | dbaea445-2ffa-4c61-9582-c7c2f8cc825c                                                               |
| SCIP_ID                                                               |                                                                                                    |

## Equipment / Accessories

- Suitable for 48 V LED modules

## Ecodesign regulation information:

Intended for use with LED modules.

The forward voltage of the LED light source shall be within the defined operating window of the control gear in all operating conditions including dimming if applicable.

Separate control gear and light sources must be disposed of at certified disposal companies in accordance with Directive 2012/19/EU (WEEE) in the EU and with Waste Electrical and Electronic Equipment (WEEE) Regulations 2013 in the UK. For this purpose, collection points for recycling centres and take-back systems (CRSO) are available from retailers or private disposal companies, which accept separate control gear and light sources free of charge. In this way, raw materials are conserved and materials are recycled.

## Download Data

| File                   |     |                                                     |
|------------------------|-----|-----------------------------------------------------|
| Product Datasheet      | PDF | ▶ OTi DALI 50 80 48 1CH TDS 020425                  |
| Certificates           | PDF | ▶ OT VDE ENEC 40050684 290125                       |
| Mandatory Publications | PDF | ▶ OTi DALI 48V CE 4540294 040225                    |
| User instruction       | PDF | ▶ G15130368 UI_OTi DALI 50_80 48 1CH_4p_MiCh_INV v2 |

## Logistical Data

| Product code                  | Product description           | Packaging unit<br>(Pieces/Unit)  | Dimensions (length<br>x width x height) | Volume               | Gross weight |
|-------------------------------|-------------------------------|----------------------------------|-----------------------------------------|----------------------|--------------|
| 6977770432475<br>INVENTRONICS | OTi DALI 80/220-240/48<br>1CH | Shipping carton box<br>20 Pieces | 371 x 171 x 105 mm                      | 6.66 dm <sup>3</sup> | 199.44 g     |

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit