

# OT Wi DIM 12-48 5CH CA

## 12-24-48 V Bluetooth Dimmer CASAMBI

### Benefits

- 5 independent channel outputs
- 12, 24, 48 V DC input
- CASAMBI wireless control
- High power handling in slim form factor.
- Smooth dimming operation down to 0,8%.

### Applications

Hospitality, museums, shops, residential.  
Suitable for indoor CLASS I and CLASS II luminaires.

### Approvals



When not printed on product label, they are under evaluation.



Housing material: plastic, white

\* image for information purpose only

|   |          |              |
|---|----------|--------------|
| L | 186.2 mm | Total length |
| B | 28.8 mm  | Width        |
| H | 21 mm    | Height       |

## Product Features

- 5 independent channels
- Very small and linear shape
- 5 A/ch max (max 12 A in multichannel)
- Minimum dimming level 0.8%
- 12, 24, 48 V DC input compatible
- 2.5 kHz PWM dimming frequency
- 2x normally open dry contacts
- Over voltage, reverse polarity protection
- 50'000 h lifetime at max T<sub>C</sub>: 75°C
- 5 years guarantee
- IP20 independent housing (with cable clamps)
- Ambient temperature -10...+60°C

## Electrical specifications

|               | Item  | Value  | Unit            | Remarks  |
|---------------|---|--|-----------------|--|
| INPUT         | Nominal voltage                               | 12 - 24 - 48   | V <sub>DC</sub> |  |
|               | Mains frequency                               | 0  | Hz              |  |
|               | Maximum voltage                               | 48   | V <sub>DC</sub> |  |
|               | Efficiency in full load                       | 98   | %               | At 230 V, 50 Hz  |
|               | Networked stand-by power                      | <0,50  | W               |  |
|               | Protection class                              | III  |                 |  |
|               | Suitable for fixtures with prot Class         | I / II   |                 |  |
| OUTPUT        | Nominal output voltage                        | 12 - 24 - 48   | V               |  |
|               | Nominal output power                          | 240 W per channel @48 V<br>120 W per channel @24 V<br>60 W per channel @12 V |                 | 576 W max @48 V (5 A max per CH)<br>288 W max total @24 V (5 A max per CH)<br>144 W max total @12 V (5 A max per CH) |
|               | Galvanic isolation                            | n/a  |                 |  |
|               | U-OUT (working voltage)                       | 48   | V               |  |
|               |   |  |                 |  |
| DIMMING       | Dimming interface                             | Bluetooth Low Energy   |                 | Use CASAMBI APP  |
|               | Operating frequencies                         | 2.402...2.483  | GHz             |  |
|               | Dimming range                                 | 0,8 – 100  | %               |  |
|               | Dimming method                                | PWM  |                 |  |
|               | PWM frequency                                 | 2500   | Hz              |  |
|               | Dimming resolution                            | 1000   | steps           |  |
|               | Galvanic Isolation                            | n/a  |                 |  |
| ENVIRONMENTAL | Ambient temperature range                     | -10...+60  | °C              |  |
|               | Max. temperature at T <sub>c</sub> test point | 75   | °C              | Measured on T <sub>c</sub> point indicated of the prod label, T <sub>a</sub> not exceeded                            |
|               | Max. case temp. in fault condition            | 115  | °C              |  |
|               | Storage temperature range                     | -40...+60  | °C              |  |
|               | Permitted rel. humidity during operation      | 5 – 85   | %               | Not condensing   |
|               | Environmental rating                          | Indoor   |                 |  |
|               | IP protection class                           | IP 20  |                 |  |
|               | ECG lifetime                                  | 50000  | h               | T <sub>c</sub> = 75°C %  |
|               | No-load proof                                 | Tbc  |                 |  |
|               | Intended for no-load operation                | No   |                 |  |
|               | Overheating protection                        | Yes  |                 | In combination with OPTOTRONIC   |
|               | Overload protection                           | Yes  |                 |  |
|               | Short-circuit protection                      | Yes  |                 | In combination with OPTOTRONIC   |
|               | Type of connection, output side               | Push-in terminal   |                 |  |
|               | Length  | 186.2  | mm              |  |
|               | Width   | 28.8   | mm              |  |
|               | Height  | 21   | mm              |  |
|               | Mounting hole spacing, length                 | 174  | mm              |  |
|               | Product weight                                | 71   | g               |  |
|               | Cable cross-section, input side               | 0,2...1,5  | mm <sup>2</sup> | (24...16 AWG) Push-in terminal   |
|               | Cable cross-section, output side              | 0,2...1,5  | mm <sup>2</sup> | (24...16 AWG) Push-in terminal   |
|               | Wire preparation length, input side           | 9...10   | mm              |  |
|               | Wire preparation length, output side          | 9...10   | mm              |  |
|               | Casing material                               | Plastic  |                 |  |

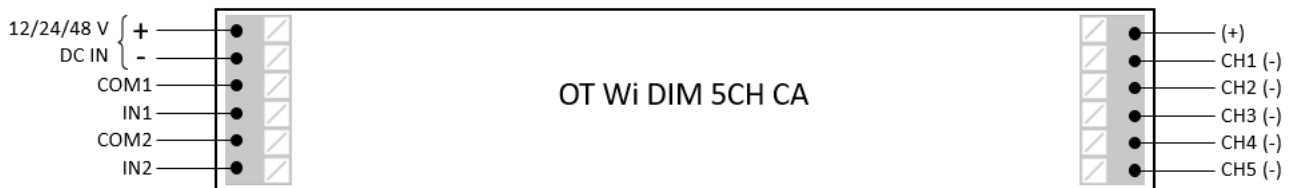
## Protection

Input undervoltage, Input overvoltage, Output overvoltage. Reversible.

## Programming

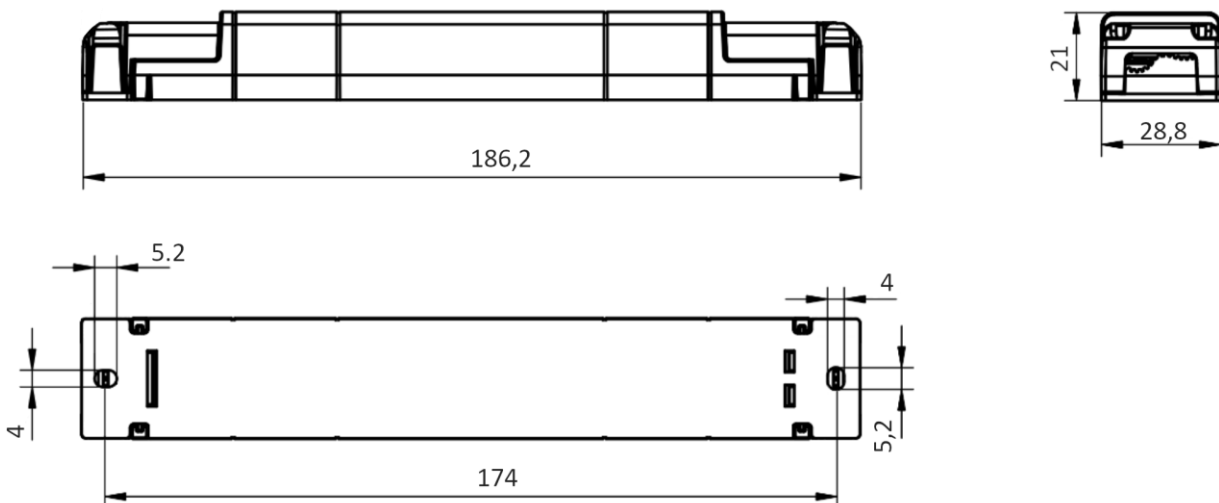
Set the preferred Profile by the CASAMBI APP available at [www.casambi.com](http://www.casambi.com)\*:

- 5 synchronised channels (32645)
- 5x independent dimming (32644)
- TW (CH1: WW, CH2: CW) 2200-3500K (33402), 2500-4000K (33540), 2700-5700K (33540), 2700-6500K (33541)
- 2x TW (CH1: WW1, CH2: CW1, CH3: WW2, CH4: CW2) 2200-3500K (33543), 2500-4000K (33544), 2700-5700K (33545), 2700-6500K (33546)
- 2x 2TW (CH1: WW1, CH2: CW1, CH3: WW2, CH4: CW2) 2200-3500K (33556), 2500-4000K (33557), 2700-5700K (33558), 2700-6500K (33559)
- RGB (CH1: R, CH2: G, CH3: B) (32643)
- RGBW / RGB+W (CH1: R, CH2: G, CH3: B, CH4: W) (32647 / 32646)
- RGB+TW (CH1: R, CH2: G, CH3: B, CH4: WW, CH5: CW) 2200-3500K (33760), 2500-4000K (33761), 2700-5700K (33762), 2700-6500K (33763)
- DTW (33561)



\*: Download Casambi app from App store or Google play. For the correct functioning of the Casambi app refer to the Casambi website: <http://www.casambi.com>. The Casambi App is provided to you by Casambi. Inventronics shall have no liability for the Casambi app and does not make any representations, express or implied, about the availability and/or functionality of the Casambi app. Inventronics shall have no liability for and does not make any representations, express or implied, about the connectivity of Casambi ready products of Inventronics with any other Casambi ready products.

## Dimension



## Dry contacts

Connect normally open push buttons to the “INPUT 1” and “INPUT 2” terminals with “” symbol.

Do not connect live parts or any voltage carrying signals to “input” terminals.

Length of cables from OT Wi DIM 5CH CA to push buttons or other dimming controls must be shorter than 10 m.

Cables must be properly dimensioned and must be insulated from any non-SELV wiring or voltage.

It is recommended to use double insulated cables or shielded cables.

## Remarks

- **No load operation:** do not put a switch between OT Wi DIM 5CH CA and load.
- The product must be installed in a vertical or horizontal position with the label/top cover facing upwards or vertically. Other positions are not permitted.
- Keep 230Vac (LV) circuits and not SELV circuits separated from safety extra low voltage (SELV) circuit and from any connection with this product. It is absolutely forbidden to connect, for any reasons whatsoever, directly or indirectly, the 230Vac mains voltage to the product terminal blocks.
- The product must be dissipated correctly. The use of the product in harsh environments could limit the output power.
- Always ensure proper thermal management (i.e. correct mounting of the device, air flow etc.) so that the  $T_c$  point temperature does not exceed the  $T_c$  maximum limit.
- Only use correctly dimensioned SELV power supplies with short circuit protection.
- In the case of power supplies equipped with ground terminals, it is mandatory to connect ALL protective ground points (PE= Protection Earth) to a properly and certified protection earth.
- The connection cables between the very low voltage power source and the product must be properly dimensioned and must be insulated from any wiring or part at non-SELV voltage. Use double insulated cables.
- Dimension the power of the power supply in relation to the load connected to the device. In case the power supply is oversized compared to the maximum absorbed current, insert a protection against over-current between the power supply and the device. OPTOTRONIC LED power supplies are strongly suggested.
- Load cable length must be shorter than 10 m. Cables must be properly dimensioned do avoid voltage drop and must be insulated from any wirings or circuits working at non-SELF voltages. It is recommended to use double insulated cables. For load cables longer than 10m, installer must guarantee the correct operation of the system. In any case it is not suggested to exceed the length of 30 m.
- **Ecodesign regulation information:**  
Intended for use with LED modules only. Separated 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 centers 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.

## Standards

EN 55015  
EN 61547  
EN 61347-1  
EN 61347-2-13

## Ordering information

| Product name     | EAN 10        | EAN 40        | Pieces / Box |
|------------------|---------------|---------------|--------------|
| OT Wi DIM 5CH CA | 4062172382274 | 4062172382281 | 20           |

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OSRAM Digital System is now Inventronics