

# SAL-1016 | SAL-1032 | SAL-1064

Salvador Series 1000













## Warning!



Only qualified professionals should make the connections. Disconnect the mains from DALI power supply and verify its absence prior to installation.

### PRODUCT DESCRIPTION

The Salvador Series 1000 product family includes three models: SAL-1016, SAL-1032 and SAL-1064.

- SAL-1016: Can address up to 16 DALI driver addresses.
- SAL-1032: Can address up to 32 DALI driver addresses.
- SAL-1064: Can address the maximum allowed 64 DALI driver addresses.

The Salvador Series 1000 seamlessly integrates wired DALI drivers into the Casambi system. When integrated, DALI luminaires appear as virtual luminaires in the Casambi network. Notably, this product supports industry standards such as DALI D4i, DALI DT6, and DALI DT8.

Lighting controls designers should note that DALI controls, such as switches and sensors, must not be connected to Salvador Series 1000 products.

An external power supply for the DALI bus is required for Salvador Series 1000 operation.

# TECHNICAL DATA

#### Input

Voltage: 9,5-22,5 VDC
Input current when idle, I<sub>idle</sub>: 5 mA
Peak input current, I<sub>peak</sub>: 30 mA
Max. DALI bus current: 250 mA
Standby power: < 0,2 W</li>

## **DALI Output**

SAL-1016 product variant: 16 DALI addresses
 SAL-1032 product variant: 32 DALI addresses
 SAL-1064 product variant: 64 DALI addresses

#### Radio transceiver

Operating frequencies: 2402...2480 MHz
 Maximum output power: +8 dBm

## Operating conditions

Ambient temperature, t<sub>a</sub>: -20 °C to +55 °C
 Max. case temperature, t<sub>c</sub>: +65 °C
 Storage temperature: -25...+75 °C
 Max. relative humidity: 0...80 %, non-cond.

# Mechanical data

Dimensions: 40,4 x 36,3 x 14,0 mm
 Weight: 15 g

Degree of protection: IP20 (indoor use only)

#### Connectors

• Wire range, solid: 0,5–1,5 mm², 16–20 AWG

• Wire strip length: 6-8 mm

# Insulation

Casing to DALI: Reinforced

#### Certifications

CE

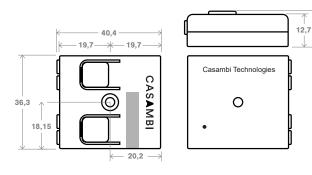
#### **Disposal Instructions**

In line with EU Directive 2002/96/EC for waste electrical and electronic equipment (WEEE), this electrical product must not be disposed of as unsorted municipal waste.





### **DIMENSIONS (IN MM)**

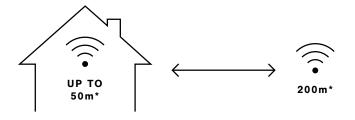


- \*t<sub>c</sub> point is on bottom side •

  Antenna location
- Mounting hole diameter 3,5mm

## **RANGE**

The communication range in radio technology may ultimately vary depending on the design of the product in which the antenna is housed and on the environment in which it operates. In practice, this means a well-designed product from a radio point of view, with a good line of sight connection between nodes, can achieve radio coverage up to 50 meters indoors, and, in theory, up to 200 meters in the open air. Casambi uses a mesh network technology, whereby each Casambi unit, or Casambi Ready product, also acts as a repeater. Hence, longer ranges can be achieved by using multiple Casambi products within the network.



\*The wireless range of a Casambi unit is dependent on several factors; how it has been integrated into a luminaire, where it has been installed; taking into consideration surrounding obstacles such as walls and other building materials that may block signals.

#### **CASAMBI MESH-NETWORK COMPATIBILITY**

There are different radio modes that can be selected when creating a network in the Casambi App: 'Balanced', 'Better Performance' and now 'Long Range' options. The Salvador Series 1000 enables long-range capabilities only when the long-range radio mode has been selected and all the other devices within the network are long-range capable. It will revert to the shorter, standard range when deployed in networks set to 'Balanced' or 'Better Performance' modes.

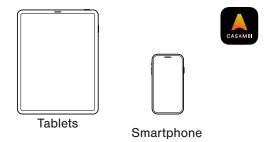
#### COMPATIBLE DEVICES





Compatible devices: iOS Operating Systems. Android OS support coming in Q3 2024.

We support the latest OS versions for Android (starting from Q3 2024) and iOS, and their last two major versions respectively.



#### INSTALLATION

A Salvador Series 1000 device draws its operating power directly from the DALI bus. For this reason, it is important to make sure that the DALI bus is externally powered. If a Salvador Series 1000 device is connected directly to a DALI driver, the driver must have an integrated DALI bus power supply.

A Salvador Series 1000 device draws 5 mA in idle mode with a 30 mA peak current from the DALI bus. Use 0,5-1,5 mm2 solid conductor electrical wires. Strip the wire 6-8 mm from the end. Press the buttons on top of the dimmer case and insert the wires into the corresponding holes. The DALI bus connection to the terminals DA1 and DA2 can be made regardless of polarity.



A Salvador Series 1000 device has two sets of connectors. These connectors are internally connected in parallel with each other; this way the DALI bus can be routed through the product for easy installation.

A Salvador Series 1000 device, like any other Casambi product, should not be placed in a metal enclosure or next to large metal structures. Metal will effectively block radio signals, which are crucial to the operation of the product. Thorough connectivity testing is strongly recommended at the installation site.

### DALI BUS CONNECTIONS

The Salvador Series 1000 allows the addressing, programming and control of wired DALI drivers individually from the Casambi App. It enables the creation of hybrid networks consisting of both Casambi Ready and DALI devices. All DALI drivers connected to a Salvador can be easily programmed and controlled in the same way as Casambi Ready devices via the Casambi App. This eliminates the need for a specific DALI controller, complex DALI configuration software, or a DALI specialist. The Salvador SAL-1016 is ideal for low-budget renovations, replacing multiple standalone DALI networks, while the Salvador SAL-1064 is designed for larger hybrid network setups.

The Salvador does not permit the discovery and addressing of more DALI drivers than the capabilities of the specific Salvador Series 1000 model you are using.

Physically connecting more DALI drivers than the particular Salvador Series 1000 product can discover and address is possible. However, during the discovery process, you will be prompted that too many drivers are connected, and the process will terminate. However, multiple Salvadors can be wirelessly connected to form a single Casambi mesh network.

One Salvador is one Casambi node. Each addressed wired DALI driver is one Casambi node. A Casambi network can contain up to 250 nodes, regardless of whether they are wired DALI drivers or Casambi Ready devices.

Wired DALI luminaires appear in the Casambi App in the same way as Casambi Ready luminaires. They can be individually controlled, grouped, or used in scenes that combine both Casambi Ready and wired DALI luminaires.

Only DALI drivers can be physically connected to a Salvador. DALI controls (such as switches and sensors) must not be connected. If DALI controls are required to be part of the Casambi network, they must be converted to be Casambi Ready using a suitable Casambi CBU or device from one of our Ecosystem partners.

Salvador Series 1000 devices are compatible with Casambi Evolution networks only.

## Warning!



When designing the DALI power system, ensure the total DALI line current from all connected DALI power supplies does not exceed 250mA. Exceeding this limit may cause DALI system components malfunction or permanent damage.





## **FIXTURE PROFILES**

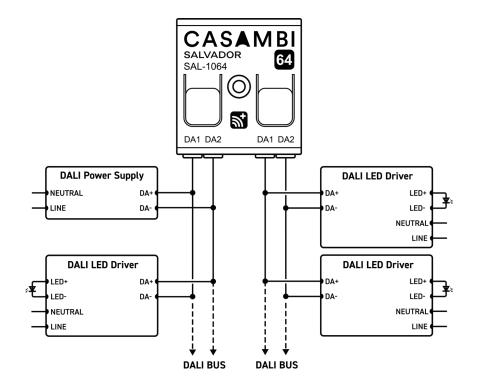
Profile#	Profile name / in app description	Description	Wiring diagram
1064*	Salvador 1000	Generic profile for Casambi SAL-1016, SAL-1032 and SAL-1064 DALI controller products.	1,2,3

<sup>\*</sup> Default profile

# DALI CONFIGURATIONS

ADR#	Description	Remarks
16	Salvador 1000 product with sixteen (16) addressable devices configuration.	SAL-1016
32	Salvador 1000 product with thirty two (32) addressable devices configuration.	SAL-1032
64	Salvador 1000 product with sixty four (64) addressable devices configuration.	SAL-1064

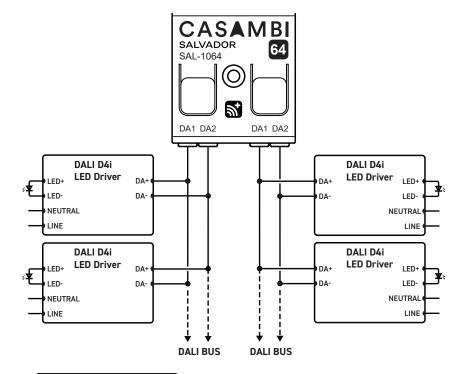
## WIRING DIAGRAMS



#### www.casambi.com



## WIRING DIAGRAMS



Do not exceed 250 mA bus current. Observe bus polarity.



# WIRING DIAGRAMS

