

Up to **50 x DALI LED drivers**Up to **8 x DALI Short Addresses**Up to **8 x DALI Groups****CASAMBI**

## ■ Features

- Casambi to DALI control device
- DALI-2 certified
- Input voltage: 110-277 Vac
- AC loop: Duplicated mains terminals for easy integration into lighting fixtures
- Dedicated push button input for controlling Casambi devices
- Integrated CBM-003 module (it can be paired to Casambi Long Range networks)
- Integrated DALI bus power supply with 100 mA guaranteed current
- Possibility to control up to 50 DALI LED drivers
- Possibility to individually control up to 8 DALI Short Addresses
- Possibility to individually control up to 8 DALI Groups
- Supports DALI-2 motion & light sensors
- More than 45 different Casambi fixture profiles available

## ■ Description

CBU-DA-1P is a Casambi to DALI control device. CBU-DA-1P controller uses Bluetooth Low Energy communication to receive a command signal from the Casambi APP and convert it into DALI commands according to the selected fixture profile.

CBU-DA-1P has an integrated DALI Bus Power Supply with 100mA guaranteed current, which means that it can control up to 50 DALI LED drivers.

There are many Casambi fixture profiles available for CBU-DA-1P that include different control modes: Broadcast, Short Address, Groups, DT6, DT8, TW, RGBW, XY...

CBU-DA-1P also integrates a dedicated push button input for controlling Casambi devices.

Configuration and control can be done from a mobile phone or tablet using the free CASAMBI APP (available for iOS and Android).

In order to access the most updated manuals and information, consult our website:  
<https://www.olver.com/olver-cbu-da-1p.html> or QR code



## ■ Technical data

CBU-DA-1P		
Nominal input voltage		110 ... 277 Vac
Input voltage range		99 ... 305 Vac
Input frequency		47 ... 63 Hz
Input current <sup>1)</sup>		≤ 40 mA
Power consumption <sup>1)</sup>		≤ 2,5W
Power consumption standby <sup>2)</sup>		< 0,3W
AC loop max. current <sup>3)</sup>		5 A
Push Button input <sup>4)</sup>		Normally open push button (N.O.)
Output control interface		DALI
Max. number of drivers connected <sup>5)</sup>		50 pcs
DALI	Bus voltage	12-14 VDC
	Guaranteed current	100 mA
	Maximum current <sup>6)</sup>	250 mA
RF	Communication interface	Bluetooth Low Energy (BLE) 4.0 / 5.0
	Communication protocol	Casambi
	Operating frequencies	2402–2483 MHz
	Max. transmission power	+7 dBm
Firmware update		OTA (Over The Air)
Protections		Line permanent over voltage (non replaceable fuse), line surge over voltage, over temperature.
Temperature monitoring		Internal temperature is displayed in Casambi App
Operating temperature range		-20°C ... +50°C
Connector		Screw terminals (Max. torque: 4 Lb.In / 0,5 Nm)
Wiring	Solid size	0,2 ... 3,3 mm <sup>2</sup> / 30 ... 12 AWG
	Stranded size	
	Wire strip length	6,5 mm
IP		IP20
Enclosure material		Plastic (UL94-V0)
Dimensions		44 x 57 x 25 mm
Weight		58 g (carton box included)
Standards		EN 61347-1:2016, EN 61347-2-11:2003, EN 55015:2013, EN 61547:2011, EN 61000-3-2, EN 61000-3-3, EN 301489-1, EN 301489-17
DALI standards		IEC 62386 part 101, 103. Supports DALI-2 light and motion sensors (IEC62386 parts 303-304). Supports luminaire, energy and diagnosis data (IEC62386 parts 251-252-253)
Directives		(LVD) 2014/35/UE, (EMC) 2014/30/UE, (RED) 2014/53/UE, (RoHS) 2011/65/UE, (REACH) 1907/2006.

<sup>1)</sup> Values measured at maximum DALI bus load (100mA).

<sup>2)</sup> Measured with one DALI driver connected to the DALI bus (2mA).

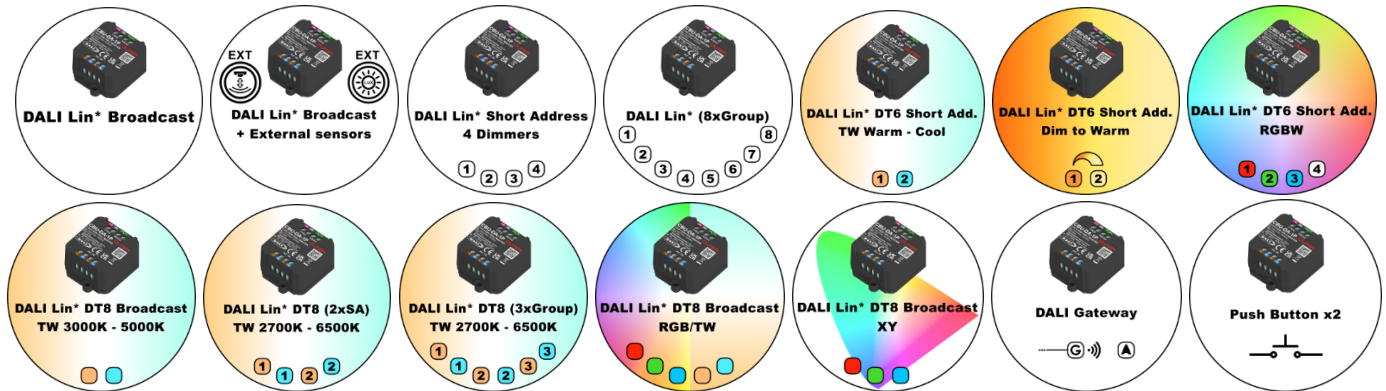
<sup>3)</sup> Maximum current when attached LED drivers are powered through CBU-DA-1P free L/N terminals (see wiring diagram section).

<sup>4)</sup> Push button input is only ready to connect a normally open push button. Make sure not to connect live parts to the PUSH terminals.

<sup>5)</sup> Certified DALI drivers with < 2mA current consumption in the DALI part. Using non-certified drivers could reduce this max. number.

<sup>6)</sup> CBU-DA-1P has an integrated DALI Bus Power Supply with 250mA maximum current. Before connecting CBU-DA-1P to a DALI line, please make sure that no other DALI Bus Power Supply is powering the bus.

## ■ Casambi fixture profiles




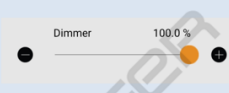





Factory default fixture profile is **#33477 DALI Lin\* Broadcast**.

There are more than 45 Casambi fixture profiles available that include different control modes:

- Broadcast
- Broadcast + sensors
- DT6 and DT8
- DALI Short Address (1 to 8)
- DALI Groups (1 to 8)
- Tunable White (TW), RGB, RGBW, RGB/TW, XY and XY/Tc
- DALI gateway
- Push Buttons...

To access the full fixture profiles information, consult below URL:

<https://www.olfer.com/olfer-cbu-da-1p.html>

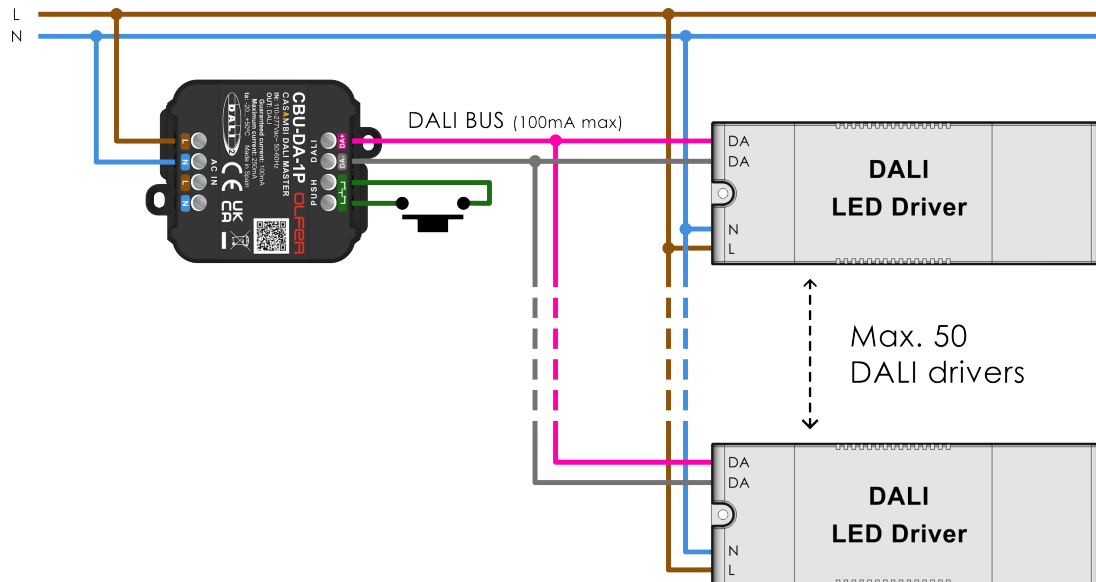
Type	Profile				Description	Manual App Control	
	Fixture ID	Model / Name	Icon	Fixture mode			
	33477**	DALI Lin* Broadcast		DALI/BC/Dim{OHI,H WTemp}	DALI Broadcast. Linear dimming curve. Factory default profile.	Dimmer: BC	
	33478	DALI Log Broadcast		DALI/BC/Dim{OHI,H WTemp}	DALI Broadcast. Logarithmic dimming curve.	Dimmer: BC	
	33479	DALI Lin* BC + Ext. Presence		DALI/BC/Dim{OHI,H WTemp,Presence}	DALI Broadcast. Linear dimming curve. A DALI-2 motion sensor connected to the DALI bus will appear as a Casambi sensor in the App.	Dimmer: BC	
					DALI Broadcast. Linear dimming curve. A		

Our fixtures profiles perform an automatic configuration of attached DALI drivers and sensors.  
Other fixture profiles available on request.

## ■ Wiring diagram

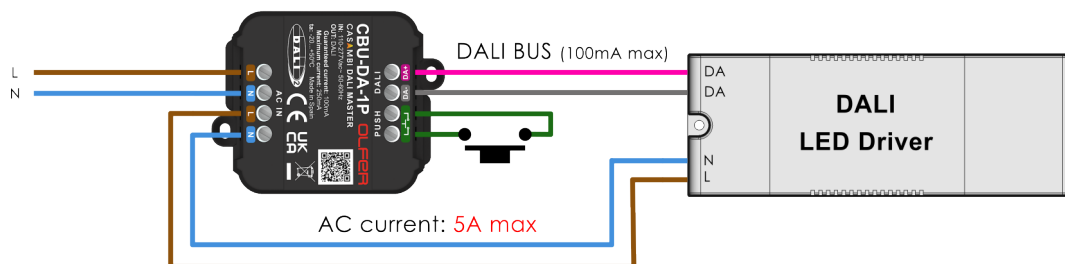
### ➤ Control of one or multiple DALI devices as external control device:

- No limit for AC current consumption of attached LED drivers.
- Recommended.




### ➤ Integration into lighting fixtures:

- Limit for AC current consumption of attached LED driver/s -> **5A max.**
- Not allowed when AC current consumption of LED driver/s is unknown or above 5 A.
- Not recommended unless you need to save space/terminals by using AC loop feature.



- When attached LED drivers are powered through CBU-DA-1P free L/N terminals (AC loop feature), make sure that total AC current consumption of attached LED drivers is below 5A.

- Connect the normally open push button to the PUSH terminals marked with the symbol "  ". Make sure not to connect live parts to the PUSH terminals.

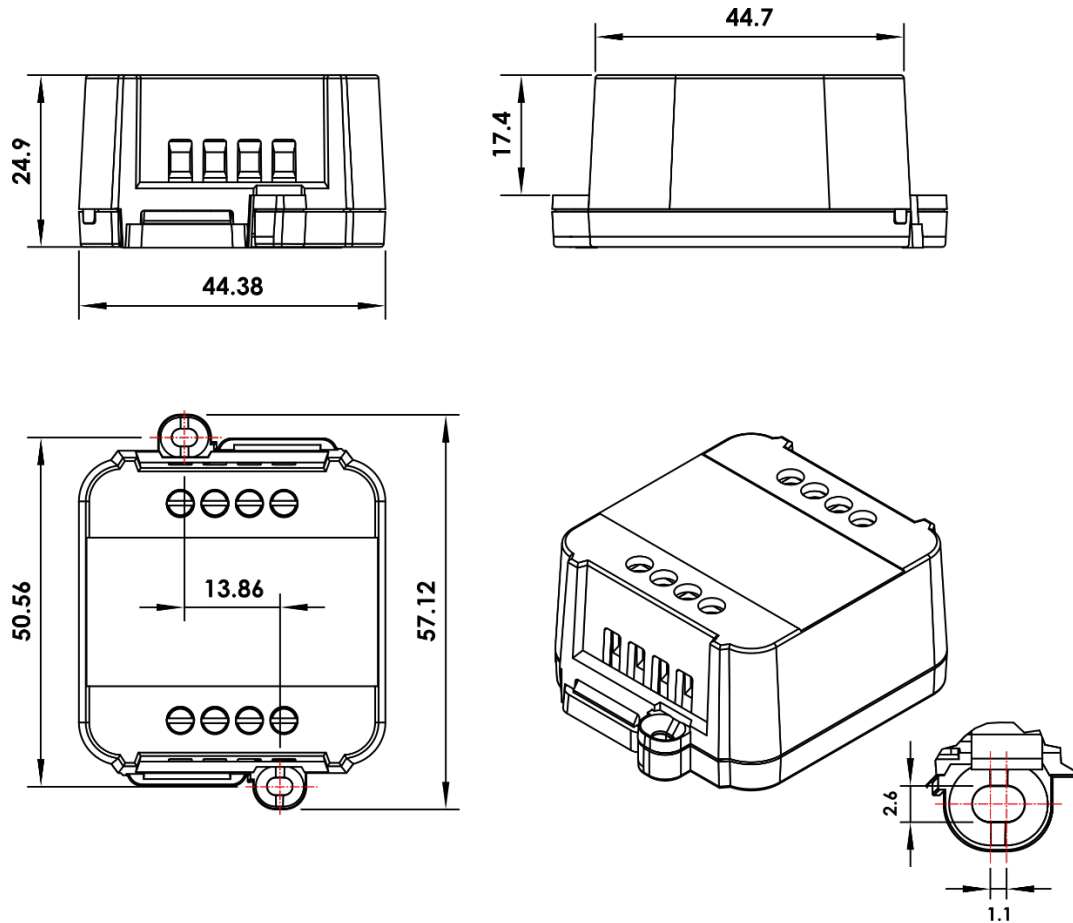
- Max. DALI bus current consumption allowed is 100mA which means that the max. number of certified DALI drivers that can be connected is 50 pcs. Using non-certified drivers could reduce this max. number.

- Some fixture profiles allow that an optional DALI-2 motion & light sensor can be connected to the DALI bus (its DALI current consumption will reduce the max. number of DALI LED drivers that can be connected).

To access the full wiring diagrams information, consult below URL:

<https://www.olfer.com/olfer-cbu-da-1p.html>

## ■ Mechanical dimensions



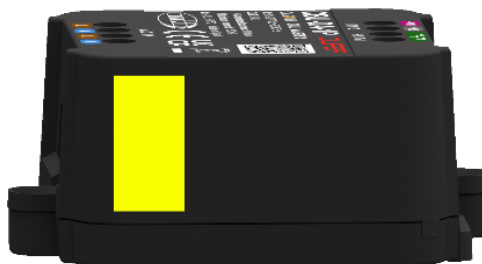
## ■ Placement and antenna location

Like any other Casambi product with Bluetooth control, be sure not to place the product inside a metal case or placed near large metal structures. Metal will significantly obstruct the radio signal, which is crucial for the proper functioning of the device.

When the product is mounted inside a metal case (e.g. integrated into a metal light fixture), a cut-out around the antenna may be needed for allowing the RF signal to exit the structure. The cut-out area should be as large as possible. Also the device should be placed as far away from any vertical structures as possible.

Effective range is also highly dependent on the surrounding and obstacles, such as walls and building materials.

CBU-DA-1P's antenna is placed in the right side of the device (below location marked in yellow):



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