

▪ Features

- Casambi to DALI control device for street lighting
- Small size in Zagha compatible base format.
- BLE 5.0 capable CBM module inside (compatible with Casambi Long range type networks)
- Powered from the DALI bus.
- Up to 64 DALI LED drivers can be controlled
- Individually control up to 8 DALI Short Addresses
- Individually control up to 8 DALI Groups
- Light sensor incorporated
- Supports external DALI-2 motion and light sensors
- Auxiliary output for external 24VDC relay or other loads
- Multiple Casambi fixture profiles available

▪ Description

CAS-ZG-40-DA controller enables easy control of DALI devices (drivers, electronic ballasts, etc.).

It is a bus powered DALI controller; this means that an external DALI bus power supply must be used (DALI PS, D4i Driver, etc.).

Setup and communication with other control devices is done using Bluetooth low Energy (BLE).

Configuration and control can be done from a mobile phone or tablet using the free CASAMBI APP.

Electrical connection and mechanical fixing are done through a Zagha compatible base by twist and lock, without tools. The enclosure is IP66, UV resistant.

Diverse operating modes are possible (on/off, dimming 0-100%, circadian control, tuneable white, RGB, RGBW, etc.).

Different profiles are available to match the DALI driver and luminary requirements (see profile list).

It is compatible with any other devices from other manufacturers which also incorporate CASAMBI inside and CASAMBI Ready products like luminaires, motion sensors, relays, actuators, push buttons, etc.

CAS-ZG-40-DA features a light sensor which can be configured in Casambi App to set specific illuminance levels for energy saving, or used in daylight controlled basic scenes for switching the lights on/off. Also an external DALI-2 motion/light sensor can be connected to the DALI bus and will appear as a Casambi sensor in the App (with some specific profiles).

The Auxiliary output can control a 24VDC Relay or other load types. Internal temperature can be monitored in the APP.

Range between controllers in outdoors with direct line of sight and without obstacles, is up to 70m in Balanced BLE4.0 type nets, and can be over 200m in BLE5.0 Long range type nets.

▪ **Casambi fixture profiles overview**




The factory default fixture is **#41631 DALI Lin* Broadcast**.

Over 30 fixtures are available for enabling different control modes and also adequate DALI command types, to suit different DALI driver types (DT6, DT8, TW, RGB, RGBW, etc.).

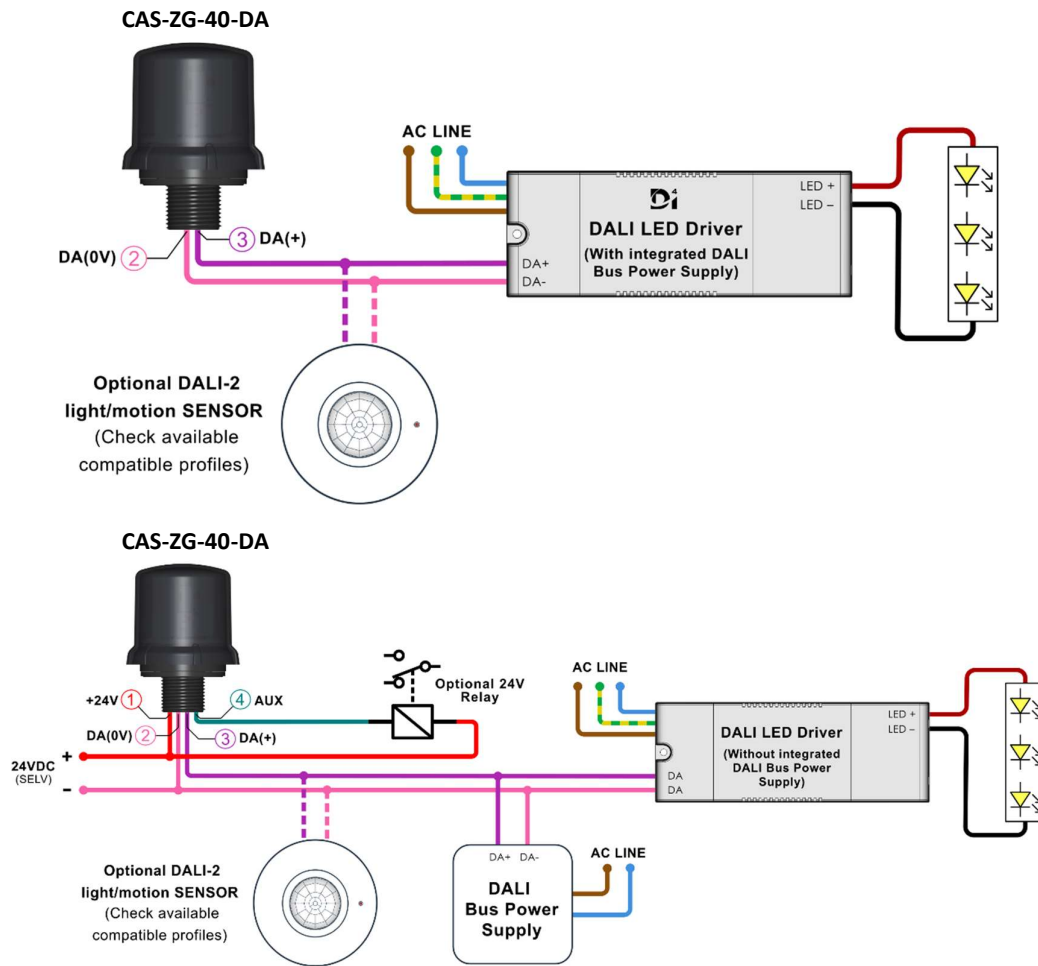
The full and detailed fixtures list can be accessed by checking the below QR code. Datasheet, manual, certificates and other useful information are also available there.



▪ **Technical data**

CAS-ZG-40-DA	
DALI voltage range	9,5-22,5V
DALI input current consumption	15mA@16V 20mA@22,5V
Power consumption	<0,5W
Control signal	Digital Addressable Lighting Interface (DALI)
DALI BUS power supply	The DALI bus must be powered by an external DALI power supply.
Dimming range	0-100%
AUXILIARY Output	Normally open collector type. 200mA sink. 30VDC max.
Light sensor range	20-2000Lx
RF communication interface	Bluetooth Low energy (BLE) 4.0 & 5.0
RF communication protocol	Casambi
RF spectrum	2402-2483 MHz
RF network	Self-healing, frequency-hopping, spread spectrum mesh technology
Maximum transmission power	+8 dBm
Wireless class	Class 2
Data security	AES128 bit encryption + elliptical cryptography
Firmware update	OTA (Over the air)
Time/date update	Internal counter. Updatable from APP or through Casambi gateway or by use of external timer Casambi device after power disconnection of all net devices.
Protections	Over temperature.
Temperature monitoring	Internal temperature is displayed in Casambi App
Operating temperature range	-40° to +70°C
Dimensions	Diameter 50mm. Height 50mm
Weight	130gr. (Carton box included)
Enclosure material	Plastic with anti-UV treatment
Enclosure isolation type	Reinforced isolation 
IP	66
IK	09
Connector	Zagha compatible base
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, 351. Part 303, 304 (supports DALI-2 Light and motion Sensors. Part 251-253 (supports luminaire, energy and diagnosis data)
Directives	(LVD) 2014/35/UE, (EMC) 2014/30/UE, (RED) 2014/53/UE, (RoHS) 2011/65/UE, (REACH) 1907/2006.
Warranty	3 years

▪ **Wiring diagrams**



Notes for use of optional 24V relay:

- A 24VDC power supply is required for powering the relay.
- Connection of the +24V to the pin 1 of the node is recommended only for protection purposes. There is an internal diode between Pins 1 and 4, useful for dissipating the typical back EMF caused by the relay coil or other inductive loads when they are switched off.



Bottom view

1	+24V
2	DA (0V)
3	DA (+)
4	Auxiliary

Note: CAS-ZG-40-DA is not DALI polarity sensitive. DALI bus polarity is only indicated to ensure compatibility with the wiring scheme of the ZG Book 18 socket.