



**DESCRIPTION**

The Gooee WIM-D2A provides a wireless interface between DALI systems and the Gooee Building Operating System (BoS).

It functions as a control device, acting as communications and sensing interface for a luminaire incorporating DALI device(s) where bus power is provided.

The WIM-D2A can be connected to a wireless network for control via Gooee's Bluetooth SmartMesh. The WIM-D2A provides switching, dimming and power monitoring capabilities using the DALI protocol.

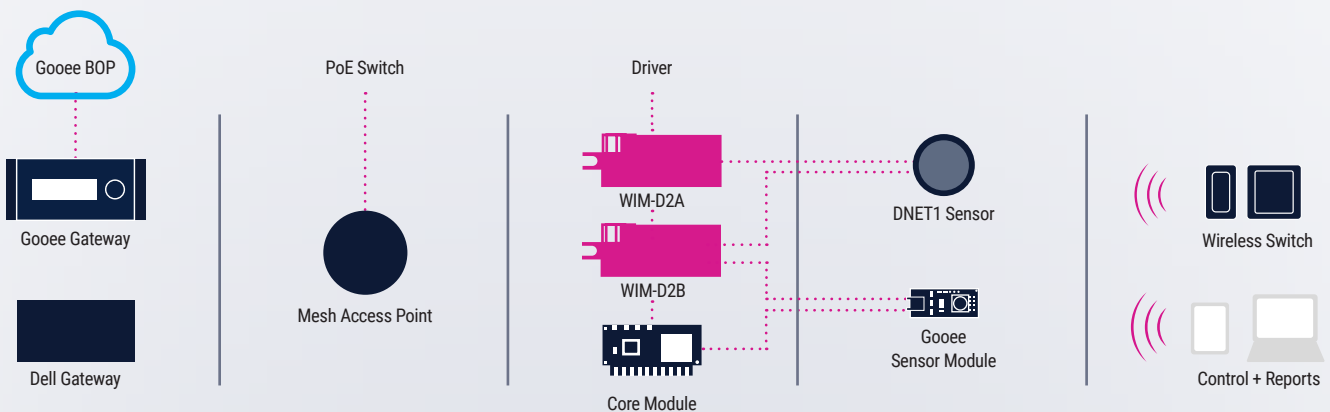
All data is encrypted locally and communication between WIMs and Gateways or MAPs is encrypted using AES128 within the mesh. The WIM-D2A supports addressed DALI communication with OSRAM DEXAL® or Philips SR drivers (max. total DALI bus current 250mA) These drivers will be controlled as a single group, but data such as power metering will be aggregated across all capable drivers.

The WIM-D2A supports additional DALI bus connection of CP Electronics DNET1 series sensors to support occupancy and ambient light sensing capabilities.

**FEATURES**

- DALI bus powered, single master controller
- Works with OSRAM DEXAL® Generation 1 & 2 drivers
- Compatible with Philips SR drivers (certification pending)
- Support for CP Electronics DNET1 sensor range
- Uses Gooee's Bluetooth SmartMesh
- Fully compatible with Gooee Building Operating System (BoS) and services
- Supports over-the-air updates of firmware

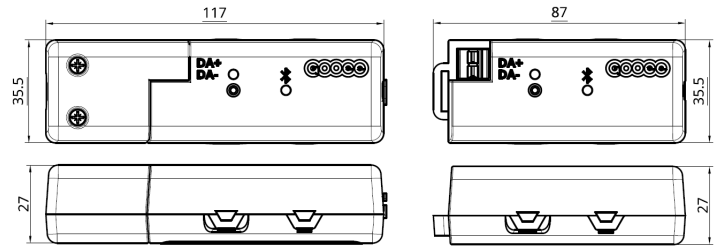
**ECOSYSTEM ARCHITECTURE**



## TECHNICAL SUMMARY

### Physical Characteristics

Dimensions with strain relief (mm)	117 x 35.5 x 27mm
Dimensions with strain relief (in)	4.6" x 1.39" x 1.06"
Dimensions without strain relief (mm)	87 x 35.5 x 27mm
Dimensions without strain relief (in)	3.42" x 1.39" x 1.06"
Mounting	M3 or M4 Screw
Weight	0.016 kg
Colour	White (RAL9016)
Connectors	DALI 0.25 - 2.5mm <sup>2</sup> (1.5mm <sup>2</sup> with ferrule)



### Environmental Requirements Intended for indoor use only!

IP rating	IP20
Ambient temperature (Celsius)	-20°C to 50°C
Ambient temperature (Fahrenheit)	-4°F to 122°F
Max case temperature (tc)	70°C / 158°F
Humidity	0-95% non condensing
Approvals	CE (RED), (ENEC, EMC) EN 61347-1, EN 61347-2-11 EN 301 489-1, EN 301 489-17, EN 300 328

### Electrical Supply

Supply voltage	DALI PSU according to IEC 62386 Part 101:2014
Voltage range	12 - 24V DC
Power requirements	Peak 20mA / Average 12mA

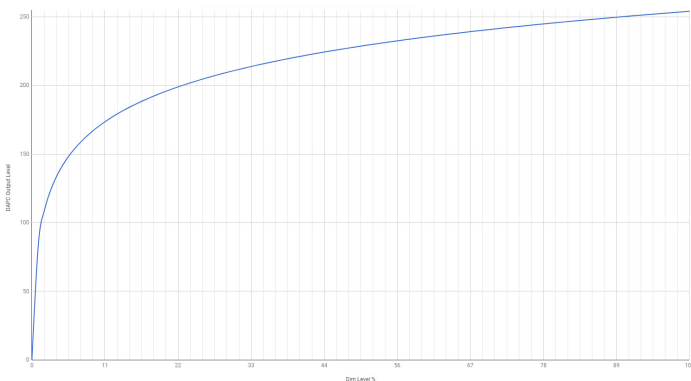
### Physical Interfaces (Wired)

DALI / Power	2 pole screwless terminal block
Insulation	Casing - DALI = functional isolation
Max DALI bus cable length	3m

### Wireless Interfaces (Communications Module)

Gooee Bluetooth SmartMesh  
Services (communications / control)

## DIMMING CURVE



### Reporting Luminaire Status

Reporting luminaire power usage (OSRAM DEXAL® Versions 1&2 and Philips SR)  
DALI dimming (Logarithmic dimming curve support only)  
Fault identification and node enumeration status

### Sensors

Compatible with CP Electronics DNET1 sensor range

### Supported DALI commands

Broadcast and addressed DALI messaging is supported. Further commands may be added in future firmware releases. The current command list is as follows:

BROADCAST ADDRESS DAPC	0xFE..... 0xXX (0-254)
BROADCAST ADDRESS COMMAND	0xFFXX
ADDRESSED / GROUP DAPC	0xYY..... 0xXX(0-254)
ADDRESSED / GROUP COMMAND	0xYYXX
OFF	0xYY00
SET DTR	0xYYA3
SET DTR1	0xYYC3
SET DTR2	0xYYC5
SET FADE TIME	0xYY2E
WRITE MEMORY LOCATION	0xYYC7
ENABLE WRITE MEMORY	0xYY81
QUERY DEVICE TYPE	0xYY99
QUERY ONOFF STATE	0xYY93
QUERY ACTUAL LEVEL	0xYYA0
QUERY POWER LEVEL	0xYYA3
QUERY STATUS	0xYY90
READ MEMORY LOCATION	0xYYC5
RESET	0xYY20
TERMINATE	0xA100
INITIALISE	0xA500
COMPARE	0xA900
WITHDRAW	0xAB00
SEARCH ADDRESS H	0xB1XX
SEARCH ADDRESS M	0xB3XX
SEARCH ADDRESS L	0xB5XX
PROGRAM SHORT ADDRESS	0xB7YY
QUERY SHORT ADDRESS	0xBB00
ADD TO GROUP	0xYY6X
QUERY GROUPS 0-7	0xYYC0