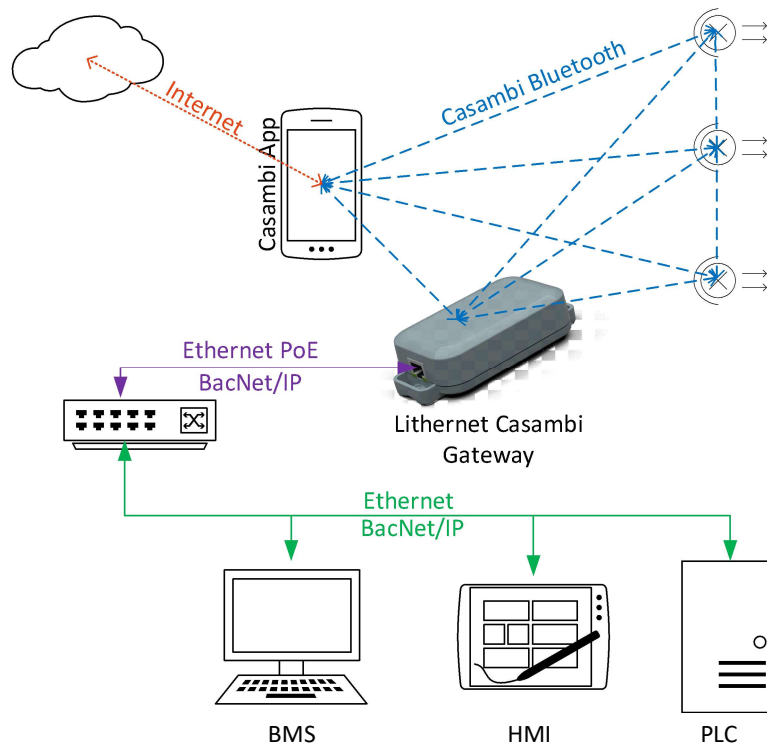


## Casambi Gateway – BacNet/IP



In the "BacNet/IP" operating mode, a Casambi Bluetooth network can be addressed via BacNet/IP. Ideally this is used with a Casambi system in Evolution mode with Casambi firmware greater than v34. Classic is supported, but lacks many features that the Evolution system can provide.

In this document we only refer to the gateway with the Evolution Firmware 34.1.

There are also limitations on the BacNet system side. The commands "Multiple\_Write", "Multiple\_Read" and "Segmentation" are currently not supported. Likewise, a COV subscription is not possible. The values must therefore be queried in the classic way.

Our Vendor ID is 1287.

The gateway itself has a PoE power supply, so it does not need any other connections apart from the network cable.

For configuration, it has a web interface that is secured by user/password and can be accessed with a current browser.

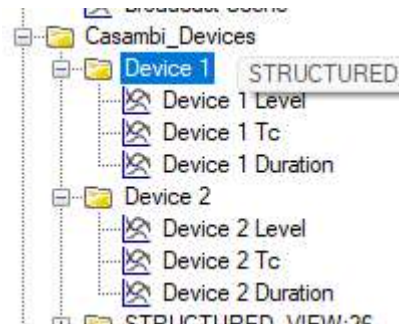
More information is available in the associated manual.

The following functions can be used in the Casambi system:

- Adjust the level or color temperature of all devices (broadcast) at the same time



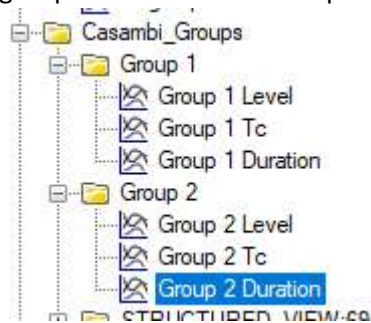
- Adjust individual devices in level or color temperature



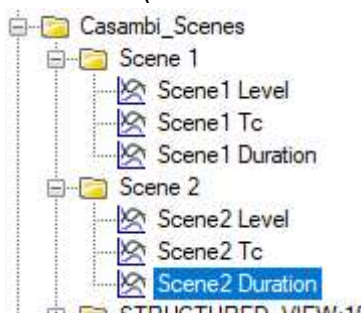
- Adjust all ungrouped devices in level or color temperature



- Adjust groups in level or color temperature



- Call scenes (with or without fade time) and adjust the level or color temperature



The LitherNet Gateway cyclically queries the devices specified in its settings and also provides corresponding feedback when certain events occur:

- The level of the scenes and whether they are active. If not active, the level is 0.

- The level of a group
- The level of the broadcast object

In this way it can also be noticed if, for example, a scene was called up by a button.

Control System Wizard

|                     |          |
|---------------------|----------|
| Type                | BacnetIP |
| Local Device ID     | 400001   |
| UDP-Port            | 47808    |
| Use Broadcast       | 0        |
| Use Devices         | 0        |
| Use Ungrouped       | 0        |
| Use Groups          | 0        |
| Use Scenes          | 0        |
| Use Scenes (Active) | 0        |

step back

reboot..

On the website you can set the number of entries that are to be displayed in BacNet and queried cyclically in Casambi. You can also adjust the DeviceID here.

With that it is possible to address several gateways in different Casambi Bluetooth networks via a common BacNet control.

250 devices, 255 groups and 255 scenes are supported per gateway.

Depending on the number of devices selected here, querying the values will take longer or shorter, as we do not want to overload the Casambi system with this.

In the Casambi network itself, the gateway uses a Casambi address and is displayed as a "lamp" as well as a "brightness sensor" and "PIR sensor".

The gateway can also serve as a daylight sensor or presence detector in the Casambi network.

For this purpose, the gateway provides 2 values via which a brightness value can be transferred to and a presence value can be transferred to the PIR part of the gateway.

Address Space : 14 objects

- Casambi Gateway
  - TO\_CASAMBI\_index
  - TO\_CASAMBI\_optional\_data\_1
  - TO\_CASAMBI\_optional\_data\_2
  - TO\_CASAMBI\_optional\_data\_3
  - TO\_CASAMBI\_optional\_data\_4
  - FROM\_CASAMBI\_timestamp
  - FROM\_CASAMBI\_index
  - SENSOR\_VALUE\_TO\_CASAMBI\_Light\_Sensor\_Value
  - SENSOR\_VALUE\_TO\_CASAMBI\_Presence\_Detection\_State
  - TO\_CASAMBI\_run
  - TO\_CASAMBI
  - FROM\_CASAMBI
  - SENSOR\_VALUE\_TO\_CASAMBI
    - SENSOR\_VALUE\_TO\_CASAMBI\_Light\_Sensor\_Value
    - SENSOR\_VALUE\_TO\_CASAMBI\_Presence\_Detection\_State

Properties

**Bacnet Property**

|                   |                         |
|-------------------|-------------------------|
| Object Identifier | OBJECT_ANALOG_VALUE:12  |
| Object Name       | Light Sensor Value      |
| Object Type       | 2 : Object Analog Value |
| Present Value     | 0                       |
| Property List     | 85                      |

Properties

**Bacnet Property**

|                   |                          |
|-------------------|--------------------------|
| Object Identifier | OBJECT_ANALOG_VALUE:13   |
| Object Name       | Presence Detection State |
| Object Type       | 2 : Object Analog Value  |
| Present Value     | 0                        |
| Property List     | 85                       |

In the gateway itself, a correction factor for the brightness can be set via the web interface.

**Lightsensor**

|                                     |                                       |
|-------------------------------------|---------------------------------------|
| Lightsensor                         | <input type="text" value="inactive"/> |
| Raw Value                           | <input type="text" value="0"/>        |
| Factor                              | <input type="text" value="1,00"/>     |
| Value                               | <input type="text" value="0"/>        |
| <input type="button" value="Save"/> |                                       |

Further information:

**Assembly and installation instructions:**

- Mounting on a wall, mast or in a false ceiling or floor box
- Power supply via PoE

**Technical specifications:**

|                       |                       |
|-----------------------|-----------------------|
| Dimensions:           | 120x65x35 mm          |
| Weight:               | ca. 95g               |
| Ambient temperature.: | 0 ... +40°C           |
| Mounting:             | Mast, Wand, Einwurf   |
| Power supply:         | PoE(802.3af, 802.3at) |
| Protection class:     | IP20                  |
| EMC:                  | EN55015, EN 61000-3-2 |

Website: <https://casambi.lithernet.de/>

Manual: <https://lither.net/man>

Mail: [gateway@l-manufaktur.de](mailto:gateway@l-manufaktur.de)