

**basicDIM Wireless passive SFI 40**

Casambi Ready wireless modules



Module without cover



Module without cover



Cover Zhaga 20, 44.2x17.2 mm

**Product description**

- \_ Can be integrated in Casambi systems (Casambi Ready)
- \_ Wireless controllable with an Android / iOS smart device
- \_ Forms automatically a wireless communication network with up to 250 nodes
- \_ Digital output to control IEC 62386 compatible drivers
- \_ Supplied via IEC 62386 compatible power supply
- \_ Zhaga Book 20 compatible with optional accessory
- \_ Additional mounting from the outside possible
- \_ Wireless firmware updates possible
- \_ Defined antenna position outside the luminaire body enables optimal radio distribution
- \_ Lifetime up to 50,000 h at  $t_c = 60^\circ\text{C}$
- \_ 5 years guarantee (Conditions at <https://www.tridonic.com/en/int/services/manufacturer-guarantee-conditions>)
- \_ We will provide security updates for the next five years after the date of purchase of this product

**Housing properties**

- \_ Casing: polycarbonate, black or white
- \_ Type of protection IP20

**Typical applications**

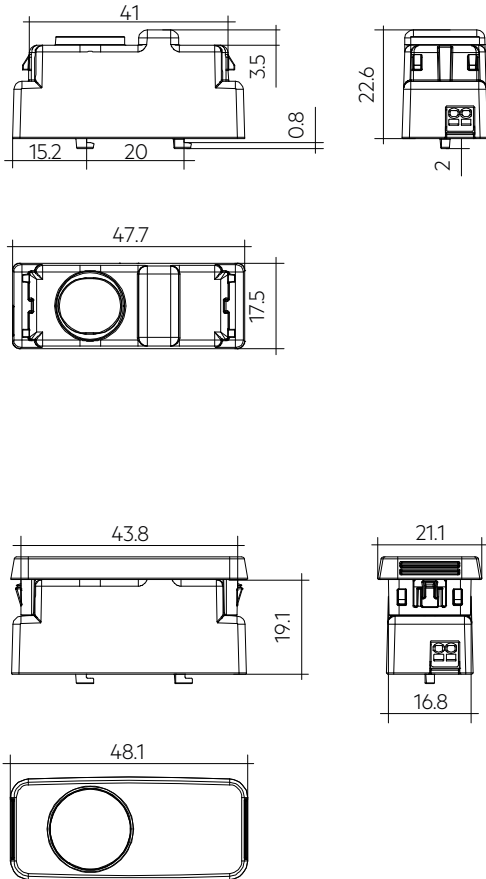
- \_ Indoor luminaire in-built

**Website**

<http://www.tridonic.com/28005977>



**basicDIM Wireless passive SFI 40**  
Casambi Ready wireless modules



**Ordering data**

Type	Article number	Packaging, carton	Weight per pc.
basicDIM Wireless passive SFI 40 BK	28005977	15 pc(s).	0.016 kg
basicDIM Wireless passive SFI 40 WH	28005978	15 pc(s).	0.016 kg

**Technical data**

Supply voltage <sup>①</sup>	9.5 – 22.5 V
Current draw	8 mA
Typ. power consumption <sup>②</sup>	0.13 W
Type of installation	Zhaga Book 20
Max. cable length	2 m
Radio transceiver operating frequencies	2.4 – 2.483 GHz
Max. output power radio transceiver (E.I. R.P.) <sup>③</sup>	< + 20 dBm
Radio protocol	Bluetooth 4.0
Capable for mesh network	Up to 250 nodes
Interface	Digital interface according to IEC 62386
Ambient temperature $t_a$	-20 ... +50 °C
$t_c$ point	60 °C
Storage temperature $t_s$	-20 ... +60 °C
Dimensions L x W x H	48.1 x 21.1 x 25.8 mm
Housing material body	Polycarbonate
Type of protection	IP20
Lifetime	up to 50,000 h
Guarantee (conditions at <a href="http://www.tridonic.com">www.tridonic.com</a> )	5 Year(s)

**Approval marks**



**Standards**

EN 55015, EN 61347-1, EN 61347-2-11, EN 61547, EN 62493, EN 62479, ETSI EN 300 328, ETSI EN 301 489-1, ETSI EN 301 489-17

- ① Use only IEC 62386 compatible power supply.
- ② At 16 V supply voltage.
- ③ E.I.R.P.: Equivalent Isotropically Radiated Power.

ACU BLIND COVER 60x22mm

Accessory



**Interfaces**

- \_ Plastic mounting accessories in white and black color: BLIND COVER 60 x 22 mm and MOUNTING ADAPTER 60 x 22 mm
- \_ Fit to 60 x 22 mm Zhaga Book 20 cut out
- \_ The BLIND COVER has a holder for luminaire plug connector LEX-LP according to Zhaga Book 20 standard
- \_ MOUNTING ADAPTER 60 x 22 mm establish possibility to install a shutter for preventing occupancy detection

**Housing properties**

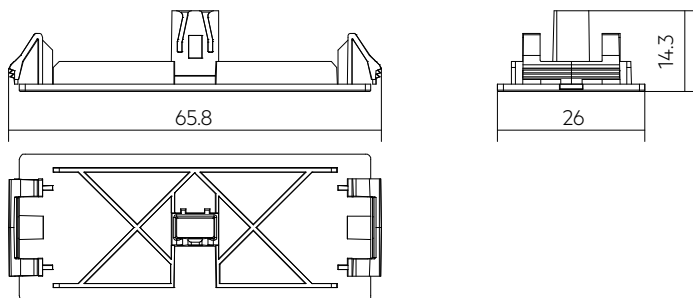
- \_ Casing: polycarbonate, black or white
- \_ Type of protection IP20

**Benefits**

- \_ Used for sensor integration to any lighting fixture which comply with Zhaga Book 20 standard
- \_ Simple retrofitting thanks to the option of mounting the sensor in the luminaire from the outside
- \_ No tools required for installation
- \_ Possibility to remove BLIND COVER 60 x 22 mm and MOUNTING ADAPTER 60 x 22 mm without opening of the lighting fixture

**Website**

<http://www.tridonic.com/28005056>

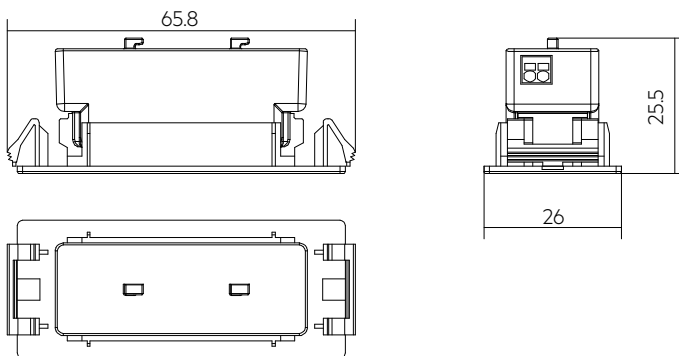
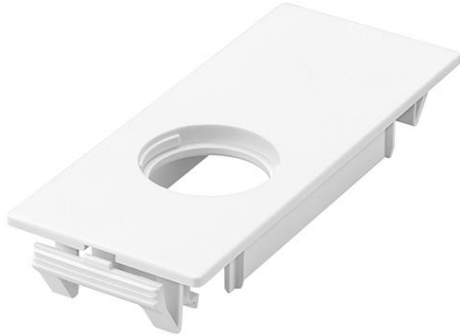


**Ordering data**

Type	Article number	Packaging, bag	Packaging, carton	Weight per pc.
ACU BLIND COVER 040 60x22 WH	28005056	10 pc(s).	100 pc(s).	0.004 kg
ACU BLIND COVER 040 60x22 BK	28005057	10 pc(s).	100 pc(s).	0.004 kg

ACU MOUNTING ADAPTER 60x22mm

Accessory



**Interfaces**

- \_ Plastic mounting accessories in white and black color: BLIND COVER 60 x 22 mm and MOUNTING ADAPTER 60 x 22 mm
- \_ Fit to 60 x 22 mm Zhaga Book 20 cut out
- \_ The BLIND COVER has a holder for luminaire plug connector LEX-LP according to Zhaga Book 20 standard
- \_ MOUNTING ADAPTER 60 x 22 mm establish possibility to install a shutter for preventing occupancy detection

**Housing properties**

- \_ Casing: polycarbonate, black or white
- \_ Type of protection IP20

**Benefits**

- \_ Used for sensor integration to any lighting fixture which comply with Zhaga Book 20 standard
- \_ Simple retrofitting thanks to the option of mounting the sensor in the luminaire from the outside
- \_ No tools required for installation
- \_ Possibility to remove BLIND COVER 60 x 22 mm and MOUNTING ADAPTER 60 x 22 mm without opening of the lighting fixture

**Website**

<http://www.tridonic.com/28005054>



**Ordering data**

Type	Article number	Packaging, bag	Packaging, carton	Weight per pc.
ACU MOUNTING ADAPTER 040 60x22 WH	28005054	10 pc(s).	100 pc(s).	0.005 kg
ACU MOUNTING ADAPTER 040 60x22 BK	28005055	10 pc(s).	100 pc(s).	0.004 kg

ACU 034 Z20 LEX-MR 150mm

Accessory



**Product description**

- \_ LEX-MR is optional accessory supporting the Zhaga 20 standard
- \_ Responding luminaire plug LEX-LP available from Amphenol Benelux to be specified by lighting OEM's depending on specific fixture design:
- \_ FLM-S23-00, FLM-S23-W0
- \_ P-FLM-S21-00, P-FLM-S21-W0
- \_ Further information:  
<https://www.zhagastandard.org/products.html>, product (zhagastandard.org) and supplier information:  
<https://www.amphenol-cs.com/product-series/zhaga-book-20-compliant-flm.html>

**Interfaces**

- \_ Supplies Zhaga Book 20

**Website**

<http://www.tridonic.com/28004616>



**Ordering data**

Type	Article number	Packaging, bag	Packaging, carton	Weight per pc.
ACU 034 Z20 LEX-MR 150mm	28004616	100 pc(s).	2,000 pc(s).	0.002 kg

## ACU MOUNTING ADAPTER 040 60x22 LED

Accessory

**Interfaces**

- \_ Plastic mounting accessories in white and black color: BLIND COVER 60 x 22 mm and MOUNTING ADAPTER 60 x 22 mm
- \_ Fit to 60 x 22 mm Zhaga Book 20 cut out
- \_ With hole for emergency light status LED (EM LED is not included and must be ordered separately - 28005763 & 28005769)
- \_ Special mounting bracket for EM LED fixation is included in the packaging
- \_ The BLIND COVER has a holder for luminaire plug connector LEX-LP according to Zhaga Book 20 standard
- \_ MOUNTING ADAPTER 60 x 22 mm establish possibility to install a shutter for preventing occupancy detection

**Housing properties**

- \_ Casing: polycarbonate, black or white
- \_ Type of protection IP20

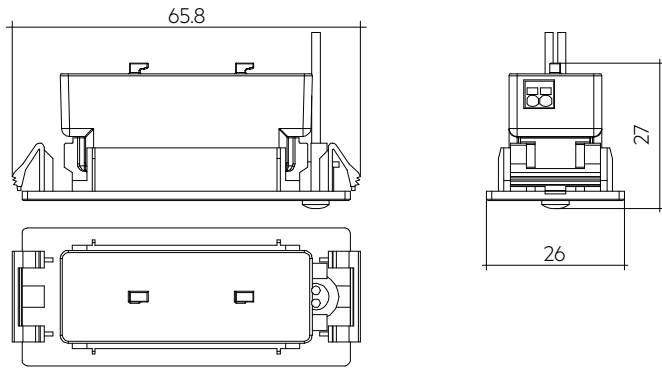
**Benefits**

- \_ Used for sensor integration to any lighting fixture which comply with Zhaga Book 20 standard
- \_ Simple retrofitting thanks to the option of mounting the sensor in the luminaire from the outside (not possible for 28001538 smartSWITCH 5DP 14f there the lighting fixture must be opened)
- \_ No tools required for installation
- \_ Possibility to remove BLIND COVER 60 x 22 mm and MOUNTING ADAPTER 60 x 22 mm without opening of the lighting fixture

**Website**

<http://www.tridonic.com/28005937>





**Ordering data**

Type	Article number	Packaging, bag	Packaging, carton	Weight per pc.
ACU MOUNTING ADAPTER 60x22 LED 1.3 WH	28005937	10 pc(s).	100 pc(s).	0.005 kg
ACU MOUNTING ADAPTER 60x22 LED 1.3 BK	28005938	10 pc(s).	100 pc(s).	0.005 kg

## 1. Standards

EN 55015  
 EN 61347-1  
 EN 61347-2-11  
 EN 61547  
 EN 62493  
 EN 62479  
 ETSI EN 300 328  
 ETSI EN 301 489-1  
 ETSI EN 301 489-17

### 1.1 Glow wire test

according to EN 61347-1 with increased temperature of 850 °C passed.

## 2. Common

### 2.1 Description

The basicDIM Wireless passive SFI 40 is one of the new generation of Tridonic Bluetooth modules. With this module, the customer gets a small sized wireless application controller for low height applications and a protection against environmental influence up to IP20.

The modul is powered by a IEC 62386 compatible power supply.

The modul can be connected to one or more DALI drivers, also in combination with a DALI XC G3.

All basicDIM Wireless devices can be controlled with the Tridonic app "4remote BT". The app can be downloaded free of charge from the Apple App Store and Google Play Store.

### 2.2 Operation

The basicDIM Wireless passive SFI 40 is fully compatible with networks which support up to 250 nodes (Evolution networks). If the modul is used with different types of basicDIM Wireless devices in an Evolution network, their compatibility has to be checked before.

Multiple devices automatically form a mesh network that can be controlled from any point. These networks communicate wirelessly directly with the smartphone or tablet. Therefore, an external gateway or wireless LAN network is not needed.

basicDIM Wireless devices have an integrated 2.4 GHz antenna. For optimum RF-performance, a special attention will have to be given when the device is integrated into a luminaire. See chapter 6.5 Placement for further instructions.

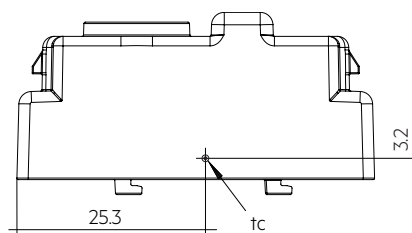
basicDIM Wireless devices can be used very flexible for different use cases. The operating modes (profiles) can be changed in the 4remote BT app.

## 3. Thermal details and lifetime

### 3.1 Expected lifetime

Expected lifetime		
Type	ta	50 °C
Passive SFI 40 bDW	tc	60 °C
	Lifetime	50,000 h

The device is designed for a lifetime stated above under reference conditions and with a failure probability of less than 10 %.



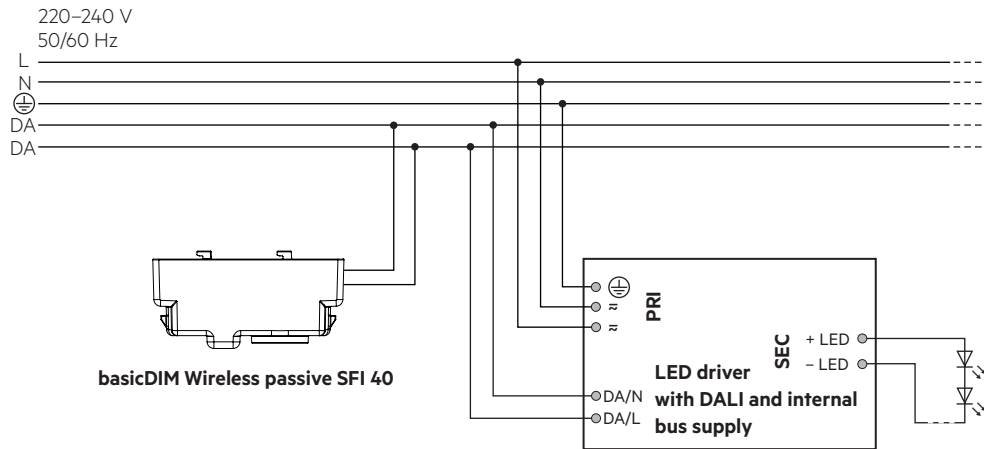
## 4. Interfaces / communication

### 4.1 Digital output

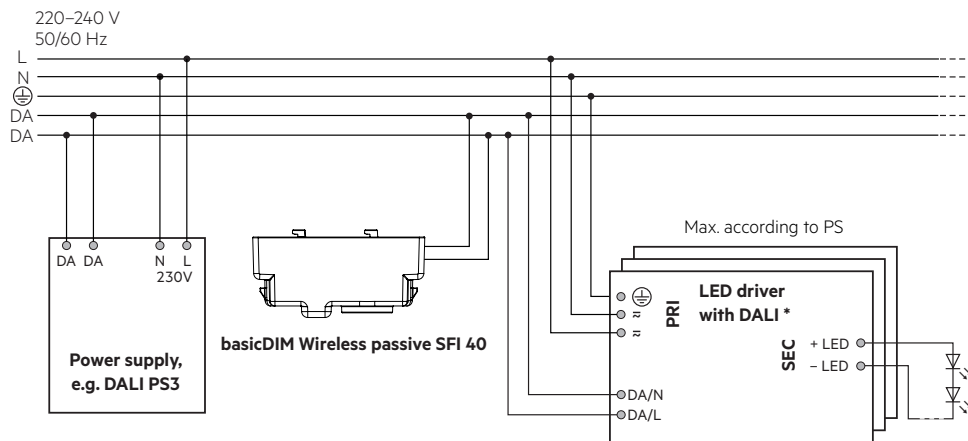
The basicDIM Wireless passive SFI 40 draws its operating power directly from the bus. Ensure the supply of the external bus with a IEC 62386 compatible power supply.

## 5. Installation / wiring

### 5.1 Wiring diagram with an internal bus supply



### 5.2 Wiring diagram with an external bus supply



\* Max. 4 single / group addresses (A0 ... A3 / G0 ... G3) controllable,  
depending on the device profile of the basicDIM Wireless passive SFI 40.  
The rest of the connected drivers can be controlled via broadcast – depending on the device profile.

## 6. Installation



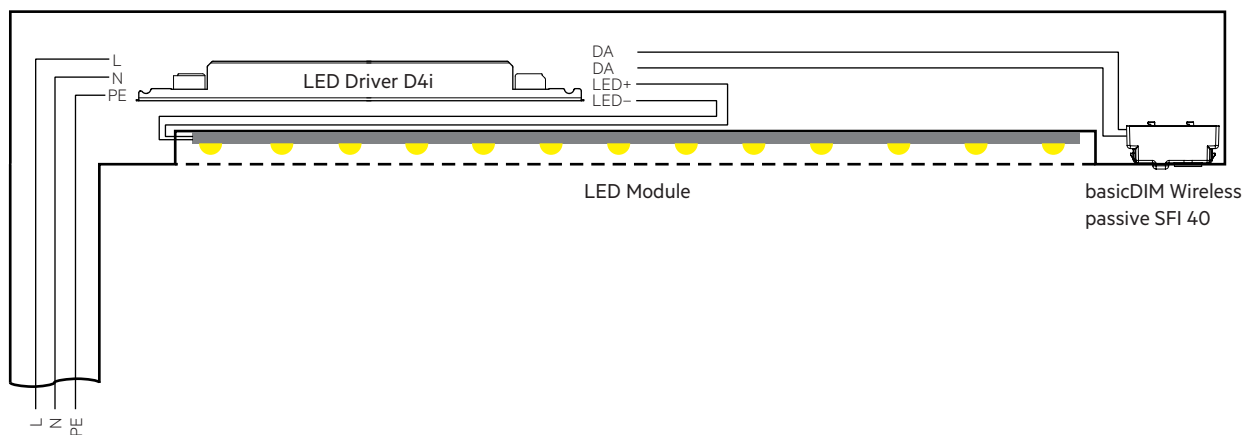
- It is supplied directly via the bus.
- The digital interface is not SELV.  
The installation instructions for mains voltage therefore apply.
- For a correct basicDIM Wireless passive SFI 40 operation use the device only within the ta window.
- Ensure correct assembly and locking of the basicDIM Wireless passive SFI 40.
- Other RF signals may cause disturbances to the basicDIM Wireless passive SFI 40 communication.

System overview:

The basicDIM Wireless passive SFI 40 is optimized to be used in combination with Tridonic LED driver PRE3 with internal power supply. The following illustration visualizes the wiring of the components inside the luminaire.

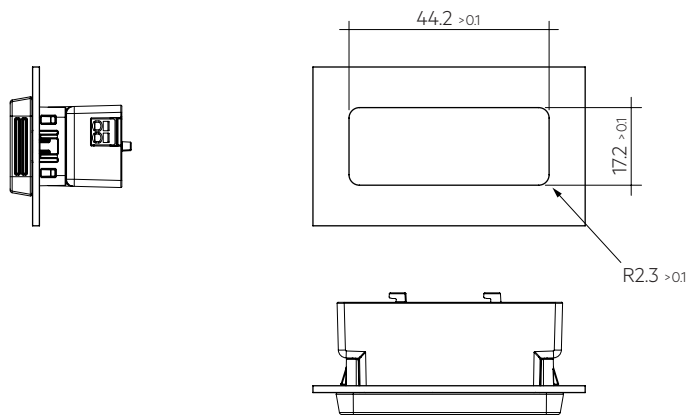


Maximum allowed wire-length for the bus is 2 m.

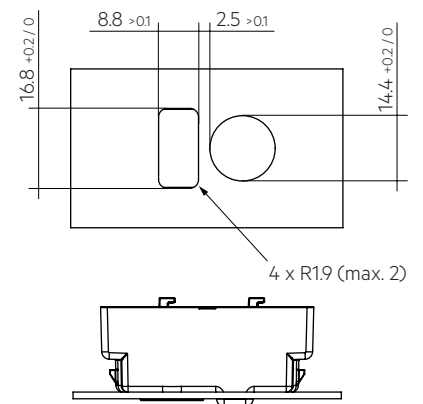


6.1 Mounting variants luminaire installation module

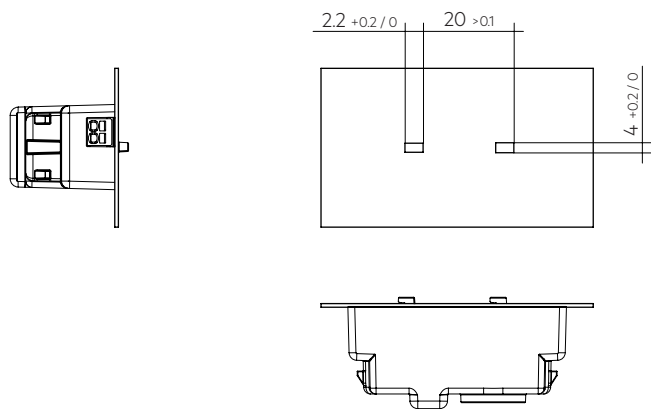
Variant 1 acc. to Zhaga Book 20, 44.2x17.2 mm:  
Size of the sheet: 0.4 – 1.5 mm



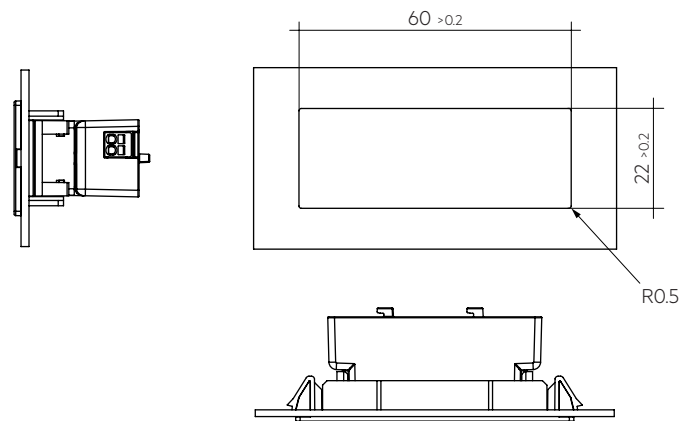
Variant 3, min. cutout:  
Size of the sheet: 0.4 – 1.5 mm



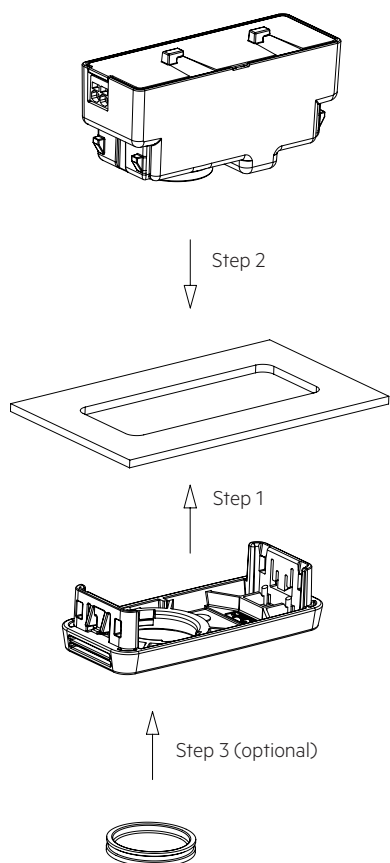
Variant 2 with brackets:  
Size of the sheet: 0.8 mm



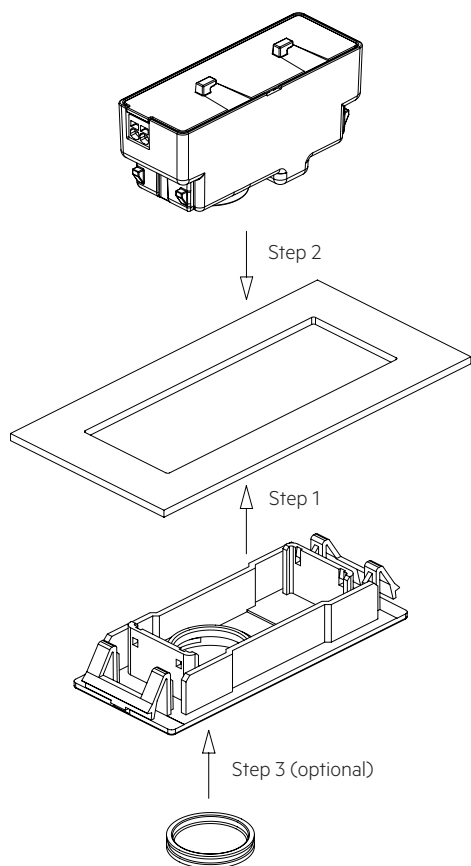
Variant 2 acc. to Zhaga Book 20, 60x22 mm:  
Size of the sheet: 0.4 – 1.5 mm



**6.2 Mounting Version 1 acc. to Zhaga Book 20, 44.2x17.2 mm**

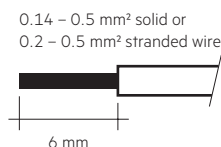


**6.3 Mounting Version 2 acc. to Zhaga Book 20, 60x22 mm**



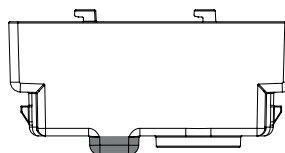
**6.4 Wiring type and cross section**

For wiring use stranded wire with ferrules from 0.2 to 0.5 mm<sup>2</sup> or solid wire from 0.14 to 0.5 mm<sup>2</sup>.



**6.5 Placement**

basicDIM Wireless devices have an integrated antenna for easy integration. In order to maximize the range in every direction some design guidelines should be taken into consideration when mounting the device. The optimal position of the antenna is determined by the design of the unit. Nevertheless, the underside of the module must not be covered by metal.



■ Antenna location

**!** The range of the communication signal is depending on the environment e.g. luminaire, construction of the building, furnitures or humans and needs to be tested and approved in the installation.

**!** To ensure a good radio connection, do not cover the basicDIM Wireless module completely with metal!

### 7. Miscellaneous

#### 7.1 Disposal of equipment



Return old devices in accordance with the WEEE directive to suitable recycling facilities.

#### 7.2 Conditions of use and storage

Humidity: 0% up to max. 90%,  
not condensed

Storage temperature: -20 °C up to max. +60 °C

The devices have to be acclimatised to the specified temperature range (ta) before they can be operated.

#### 7.3 Additional information

The Bluetooth® word mark and logos are registered trademarks owned by the Bluetooth SIG, Inc. and any use of such marks by Zumtobel Group AG is under license.

Tridonic GmbH & Co. KG is a subsidiary of Zumtobel Group AG.

Wireless Reference Plattform (WRP) is Tridonic's own wireless architecture which is build in this product.

Additional technical information at [www.tridonic.com](http://www.tridonic.com) Technical Data

Lifetime declarations are informative and represent no warranty claim.  
No warranty if device was opened.