

GENERAL INFORMATION

FCCID: DWNBEECON

1.1. Product description

EN

Box contents

The TaHoma BeeCon box is used in conjunction with RTS® and/or Zigbee radio equipment to control and program scenarios for your installations.



1 x TaHoma BeeCon



1 x Main Adapters
(According to the configuration)



1 x USB cable

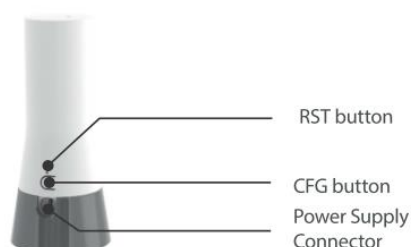


1 x Safety manual

Product description



Status Indicator



RST button

CFG button

Power Supply
Connector

The status indicator light displays the product's operating mode:

At boot:

- Fixed orange: the box is starting up
- Flashing orange: The product is initializing before normal operating mode
- Flashing red: updating
- Flashing red regularly: Error code

In normal operation mode:

- Fixed green : the box is connected to the cloud
- Fixed red: the box is not connected to the cloud

The buttons launch the following actions:

In normal operating mode:

- CFG : Pressing the button for 2 seconds switches to local mode pairing.

Pairing in local mode using Wi-Fi:

- Pressing the button for 2 seconds makes the TaHoma BeeCon ready for local mode pairing.
- Flashing blue slowly.
- Flashing blue quickly for 2 seconds if a pairing in local mode is established and switches to normal operating mode.
- The TaHoma BeeCon switches to normal operating mode if no pairing is established in 60 seconds, or after short pressing of CFG button.



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Box contents

The Smartkiz box is used in conjunction with RTS® and/or Zigbee radio equipment to control and program scenarios for your installations.



1 x Smartkiz



1 x Main Adapters
(According to the configuration)



1 x USB cable

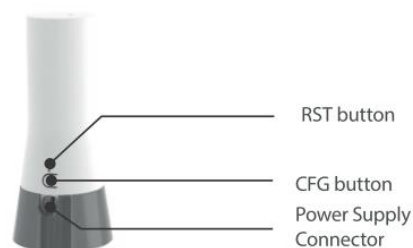


1 x Safety manual

Product description



Status Indicator



RST button

CFG button

Power Supply
Connector

The status indicator light displays the product's operating mode:

At boot:

- Fixed orange: the box is starting up
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In normal operation mode:

- Fixed green : the box is connected to the cloud
- Fixed red: the box is not connected to the cloud

The buttons launch the following actions:

In normal operating mode:

- CFG : Pressing the button for 2 seconds switches to local mode pairing.

Pairing in local mode using Wi-Fi:

- Pressing the button for 2 seconds makes the Smartkiz ready for local mode pairing.
- Flashing blue slowly.
- Flashing blue quickly for 2 seconds if a pairing in local mode is established and switches to normal operating mode.
- The Smartkiz switches to normal operating mode if no pairing is established in 60 seconds, or after short pressing of CFG button.

1.1. Tested System Details

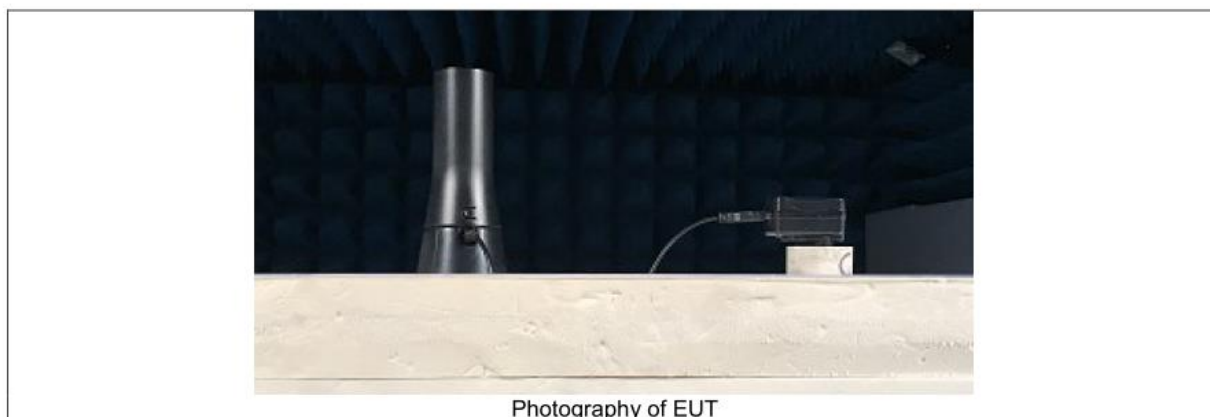
2. SYSTEM TEST CONFIGURATION

2.1. HARDWARE IDENTIFICATION (EUT AND AUXILIARIES):

Equipment under test (EUT):

Smartziz / TaHoma Beacon

Serial Number: O17196101F0106



Power supply:

During all the tests, EUT is supplied by V_{nom} : 230 VAC / 50 Hz or 100Vdc / 60Hz
 For measurement with different voltage, it will be presented in test method.

Name	Type	Rating	Reference / Sn	Comments
Supply1	<input checked="" type="checkbox"/> AC <input type="checkbox"/> DC <input type="checkbox"/> Battery	100-240V / 50-60Hz	BI12T-050200-IU	/

Inputs/outputs - Cable:

Access	Type	Length used (m)	Declared <3m	Shielded	Under test	Comments
Supply	DC Jack (secondary "Supply1")	2	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	/

Auxiliary equipment used during test:

Type	Reference	Sn	Comments
Laptop	DELL	/	Used to Launch command (zigbee & RTS)
Converter USB to Ethernet	TU2-ET100	RA1746U500119	Used to boot up Test firmware
Converter USB to Ethernet	D-LINK DUB-E100	908D78045C1D	Used to boot up Test firmware
HUB	NETGEAR GS105v2	1FD1815D04472	Used to boot up Test firmware



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Equipment information:

Type:	<input checked="" type="checkbox"/> ZIGBEE		<input type="checkbox"/> RF4CE	
Frequency band:	[2400 – 2483.5] MHz			
Spectrum Modulation:	<input checked="" type="checkbox"/> DSSS			
Number of Channel:	16			
Spacing channel:	5MHz			
Channel bandwidth:	2MHz			
Antenna Type:	<input checked="" type="checkbox"/> Integral	<input type="checkbox"/> External	<input type="checkbox"/> Dedicated	
Antenna connector:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Temporary for test	
Transmit chains:	1			
	Single antenna			
	Gain 1: 0dBi			
Beam forming gain:	No			
Receiver chains:	1			
Type of equipment:	<input checked="" type="checkbox"/> Stand-alone	<input type="checkbox"/> Plug-in	<input type="checkbox"/> Combined	
Ad-Hoc mode:	<input type="checkbox"/> Yes		<input checked="" type="checkbox"/> No	
Adaptivity mode:	<input checked="" type="checkbox"/> Yes (Load Based)	<input type="checkbox"/> Off mode	<input type="checkbox"/> No	
	Clear Channel Assessment Time:		Xµs	
Duty cycle:	<input type="checkbox"/> Continuous duty	<input checked="" type="checkbox"/> Intermittent duty	<input type="checkbox"/> 100% duty	
Equipment type:	<input type="checkbox"/> Production model		<input type="checkbox"/> Pre-production model	
Operating temperature range:	Tmin:	<input type="checkbox"/> -20°C	<input type="checkbox"/> 0°C	<input checked="" type="checkbox"/> -10°C
	Tnom:	20°C		
	Tmax:	<input type="checkbox"/> 35°C	<input type="checkbox"/> 55°C	<input checked="" type="checkbox"/> 40°C
Type of power source:	<input checked="" type="checkbox"/> AC power supply	<input type="checkbox"/> DC power supply	<input type="checkbox"/> Battery	
Operating voltage range:	Vnom:	<input checked="" type="checkbox"/> 230V/50Hz	<input type="checkbox"/> XVdc	
Geo-location capability:	<input type="checkbox"/> Yes (The geographical location determined by the equipment is not accessible to the end user as defined in section 4.3.2.12.2 of ETSI EN 300 328 V2.1.1 standard)		<input checked="" type="checkbox"/> No	
Minimum performance criteria for Receiver blocking test:	<input checked="" type="checkbox"/> PER less than or equal to 10%		<input type="checkbox"/> Alternative performance criteria (4)	

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CHANNEL PLAN	
Channel	Frequency (MHz)
Cmin: 11	2405
12	2410
13	2415
14	2420
15	2425
16	2430
17	2435
Cmid: 18	2440
19	2445
20	2450
21	2455
22	2460
23	2465
24	2470
25	2475
Cmax: 26	2480

DATA RATE		
Data Rate (Mbps)	Modulation Type	Worst Case Modulation
0.25	O-QPSK	<input checked="" type="checkbox"/>



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Equipment information: (Declared by provider)

TX Frequency band:	[433.05 – 434.79] MHz		
RX Frequency band:	None		
Number of channel:	1		
Channel separation:	None		
Channel bandwidth:	100 kHz		
Receiver bandwidth	None		
Channel tested:	F _{nom} : 433.42 MHz		
Spectrum Access Mechanism:	<input checked="" type="checkbox"/> Duty Cycle	<input type="checkbox"/> Polite spectrum access	
		CCA time:	ms
		Minimal unit of deferral period:	
		Deadtime T _{DIS} :	ms
Adaptive Frequency Agility:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Spread Spectrum Modulation:	<input checked="" type="checkbox"/> DSSS or None	<input type="checkbox"/> FHSS	
		Hop channel BW:	kHz
		Number of channels:	
		Return time to a hop channel:	Ms
		CCA implemented:	<input type="checkbox"/> Yes / <input type="checkbox"/> No
Type of equipment:	<input checked="" type="checkbox"/> Stand-alone	<input type="checkbox"/> Plug-in	<input type="checkbox"/> Combined
RF mode:	<input checked="" type="checkbox"/> TX	<input type="checkbox"/> TX /RX	<input type="checkbox"/> RX
Antenna Type:	<input type="checkbox"/> External <input checked="" type="checkbox"/> Internal		
Antenna connector:	<input type="checkbox"/> Permanent external	<input type="checkbox"/> Permanent internal	<input type="checkbox"/> None <input checked="" type="checkbox"/> Temporary (only for tests)
Antenna Gain:	0dBi		
Equipment type:	<input checked="" type="checkbox"/> Production model <input type="checkbox"/> Prototype		
Temperature range:	Tmin:	<input type="checkbox"/> -20°C	<input type="checkbox"/> 0°C <input checked="" type="checkbox"/> -10 °C
	Tnom:	20°C	
	Tmax:	<input type="checkbox"/> 35°C	<input type="checkbox"/> 55°C <input checked="" type="checkbox"/> 40 °C
Type of power source:	<input checked="" type="checkbox"/> AC power supply	<input type="checkbox"/> DC power supply	<input type="checkbox"/> Battery (Select type)
Test source voltage:	Vmin:	<input checked="" type="checkbox"/> 207V/50Hz	<input type="checkbox"/> VDC
	Vnom:	<input checked="" type="checkbox"/> 230V/50Hz	<input type="checkbox"/> VDC
	Vmax	<input checked="" type="checkbox"/> 253V/50Hz	<input type="checkbox"/> VDC

NC : Not communicated by customer



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1.2. Test Methodology

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4 or ANSI C63.10, FCC Part 15 Subpart C.

Radiated testing was performed at an antenna to EUT distance of 10 meters. During testing, all equipment's and cables were moved relative to each other in order to identify the worst case set-up.

1.3. Test facility

Tests have been performed **March 20, 2018 to March 26, 2018**.

This test facility has been fully described in a report and accepted by FCC as compliant with the radiated and AC line conducted test site criteria in ANSI C63.4 and ANSI C63.10 (registration number 94821).

This test facility has also been accredited by COFRAC (French accreditation authority for European Union test lab accreditation organization) according to NF EN ISO/IEC 17025, accreditation number 1-1633 as compliant with test site criteria and competence in 47 CFR Part 15/ANSI C63.4 and EN55022/CISPR22 norms for 89/336/EEC European EMC Directive application. All pertinent data for this test facility remains unchanged.