

Brick Ex Wirepas

ATEX Wirepas Mesh 2.4GHz Anchor/Tag

Data sheet



Key features

- Wirepas router/non-router device for hazardous areas
- Explosive atmosphere (ATEX Zone 2/22)
- Based on Nordic nRF52832 and Wirepas libraries
- Configurable as low-energy anchor or tag
- Rugged IP66 enclosure
- 2x replaceable 3.6V lithium batteries
- Ultra-long operating life

Wirepas Specifications

Based on Wirepas Mesh 2.4GHz stack v5.x

Configuration and diagnostics: MeshCube, Wirepas API, Wirepas NMS

Anchor

Operating modes	Opportunistic anchor
BLE beaconing	Configurable

Tag

Operating modes	NRLS tag, Autoscan tag (configurable)
Tag states	Default, Motion, Alarm, Sleep
Positioning interval and timeout	15 secs to 18 hours (configurable for each state)
BLE beaconing	Configurable

Device specifications

Electrical specifications

Core module	Nordic nRF52832 SoC (MCU and radio transceiver)
MCU core	ARM Cortex-M4 32-bit CPU
Current consumption (25°C)	Radio ON: TX 7.1 mA (0 dBm TX); RX: 6.5 mA Idle mode: 4 µA, Idle mode with accelerometer ON: 8 µA

Radio specifications

Standard	Wirepas Mesh 2.4GHz (stack v5.x)
Frequency band	2.402 to 2.480 GHz
Channel spacing	2 MHz
BLE beaconing channels	CH37 (2.402 GHz), CH38 (2.426 GHz), CH39 (2.480 GHz)
TX power	Conducted: +4 dBm (max) EIRP (Equivalent Isotropic Radiated Power): +6 dBm (max)



BlueUp S.r.l.
Loc. Belvedere, Ingresso 2, 53034 Colle di Val d'Elsa (SI) - ITALY
Tel. +39 0577 043101 / +39 344 2030929, Fax +39 0577 043101
E-mail: info@blueupbeacons.com, Web: www.blueupbeacons.com
P.IVA/CF/N. iscr. CCIAA (SI). 01373980521, VAT n.: IT01373980521

Antenna	
Type	Integrated meandered planar inverted F-antenna (PIFA)
Gain	2 dB (max)
Radiation diagram	Omnidirectional
Battery	
Type	AA 3.6V Lithium Thionyl Chloride (LiSoCl ₂)
Model	EVE ER14505 (2700 mAh typ. capacity @ 25°C)
Quantity	2
Total capacity	5400 mAh
Replaceable	Yes
Sensors and interfaces	
Sensors	3-axis MEMS linear accelerometer Hall sensor
Interfaces	-
Mechanical specifications	
Material	Glass-Fiber Reinforced Polyester (Graphite added)
Color	Black (RAL 9011)
Size	80 x 75 x 55 mm
Weight	250 gr
Fastening	External mounting bracket (optional accessory) Silicone glue Double side tape
Opening	Front cover with four M4 captive screws
Protection	IP66
Flammability	UL94-V0
Environmental specifications	
Operating temperature	-20°C to +50°C
Storage temperature	+10°C to +30°C (with battery), -25°C to +75°C (without battery)
Certifications	
CE (RED) ATEX Zone 2/22 (Ex II 3G Ex ic IIC T6 Gc / 3D Ex ic IIIC T85°C Dc)	

Preliminary datasheet.

BlueUp reserves the right to change product specifications at any time without prior notice.

Wirepas is a trademark of Wirepas Oy, iBeacon is a trademark of Apple Inc., Eddystone is a trademark of Google Inc.,

Quuppa is a trademark of Quuppa Oy, ARM and Cortex are trademarks of ARM Inc.