

**BeanGateway 2.4GHz Indoor**

Wireless IIOT Sensors Coordinator Indoor-Version | Ethernet Link

PRODUCT VIDEO



USER GUIDE



MECHANICAL DRAWING



STEP FILE



**2year**  
Warranty

MADE IN GERMANY



R 207-132085



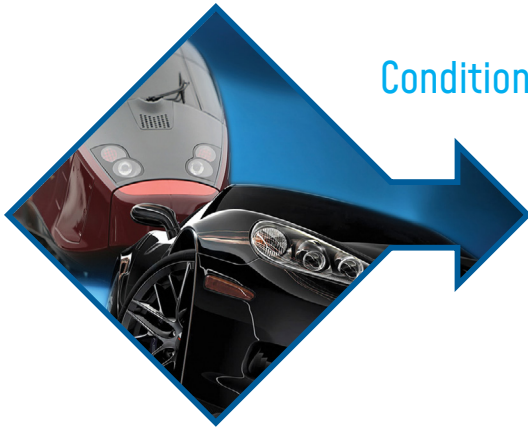
**MAIN FEATURES**

- Wireless technology IEEE 802.15.4
- Ethernet/LAN interface with a server
- Advanced UPS (Uninterruptible power supply) with integrated rechargeable Lithium battery
- Auto-Reboot : Periodic reboot at a specified time interval

**HOW DOES IT WORK ?**

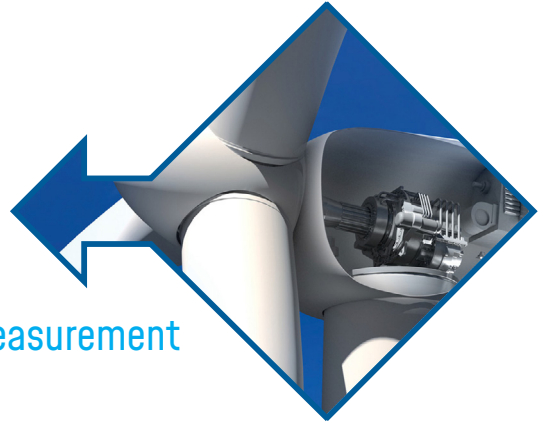


APPLICATIONS



Condition Monitoring

Test and Measurement



A MULTI-PROTOCOL WIRELESS IIOT SENSORS COORDINATOR

The **BeanGateway® 2.4GHz Ethernet** is used to build and manage **Beanair®** wireless IIOT sensors. It can manage queues for every network element ( **BeanDevice® 2.4GHz** ). As a gateway, it controls the external access to the network through a highly secured authentication procedure. It supports the conversion of data exchanged, compression and IP connectivity with the network thereby reducing the intelligence required in these platforms, maintenance and therefore the associated cost.

The **BeanGateway® 2.4GHz Ethernet** is also equipped with various communication interfaces with the customers IT infrastructure (RS232, Ethernet - TCP / IP / UDP / DHCP / DNS). With a client application TCP / IP, it can easily connect to a local application server (via the Ethernet).



RS232 for LAN Configuration

Ethernet LAN for Wireless IIOT Sensors Management

Data RX/TX on TCP/IP Transport layer

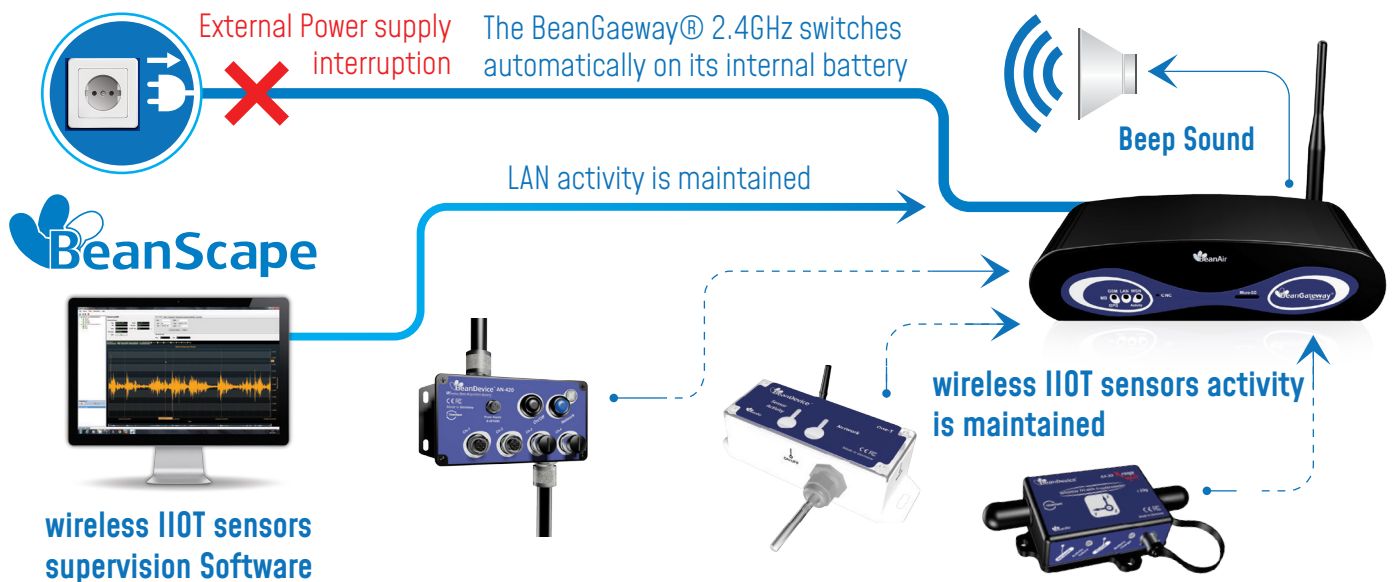


wireless IIOT sensors  
supervision Software

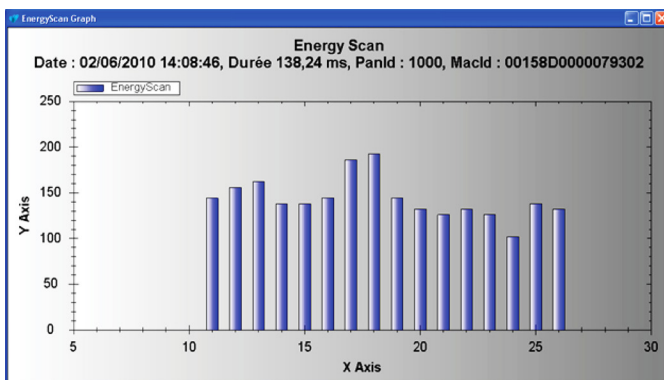


## ADVANCED UNINTERRUPTIBLE POWER SUPPLY (UPS)

The **BeanGateway® 2.4GHz Ethernet** operates with an external power supply (DC 8-28V). An integrated rechargeable battery with a capacity of 950mAh is used as an UPS battery (uninterruptible power supply). The internal battery provides instantaneous protection from external power supply interruptions, the Wireless IIOT Sensors activity & Ethernet LAN activity are maintained during this time (3h00 to 3h30 approximately). An internal buzzer emits a beep sound every 2 seconds in case the external power supply is disconnected.



## EMBEDDED WIRELESS IIOT SENSORS DIAGNOSTIC TOOL



The **BeanGateway® 2.4GHz Ethernet** provides a wireless IIOT sensors diagnostic tool useful for resolving some common networking troubleshooting :

- Energy Scan for choosing the more appropriate RF Channel
- **BeanDevice® 2.4GHz** PER (Packet Error Rate) calculation
- LQI (Link Quality Indicator) between the **BeanGateway® 2.4GHz Ethernet** and the **BeanDevice® 2.4GHz**

## TECHNICAL SPECIFICATIONS

### PRODUCT REFERENCE

#### BGTW-2.4GHZ-ETH-IND

#### WIRELESS IIOT SENSORS COORDINATOR

Wireless Technology	Ultra-Low Power and license-free 2.4Ghz radio technology (IEEE 802.15.4E)
WSN Topology	Peer-to-peer/ Star
Raw data rate	250 Kbits/s
RF Characteristics	ISM 2.4GHz – 16 Channels
RF Transmit power	+18 dBm
Receiver sensitivity	-104 dBm
Maximum Radio Range	1 km (Line of Sight) , 70-150m (Non Line of Sight)
Built-in WSN Diagnostic tool	<ul style="list-style-type: none"> <li>· Energy Scan for choosing a suitable RF Channel</li> <li>· BeanDevice® PER (Packet Error Rate) calculation</li> <li>· LQI (Link Quality Indicator) between the BeanGateway® and the BeanDevice®</li> <li>· RF channels Blacklist</li> </ul>

#### ETHERNET/LAN NETWORK

Network/Transport Protocol	Client TCP/IP, UDP, DNS, DHCP
Data Link Protocol	Ethernet / Fast-Ethernet with auto-uplink (MDI/MDI-X auto) - IEEE 802.3x
IP Addressing	Dynamic (DHCP) or static
IP configuration	LAN parameters (DNS, DHCP, Keep Alive...) are configurable from the BeanScape® (UDP/Ethernet Interface).

#### PHYSICAL & ENVIRONMENTAL

Dimensions (L x l x h)	200 mm x 88 mm x 48 mm
Enclosure/Finish	Polycarbonate Enclosure - Protection ULV94/Getex
Weight	370g
Operating temperature	-20 °C to +65 °C during battery discharge 0 to 45°C during battery charge
Norms and Radio Certifications	<ul style="list-style-type: none"> <li>· CE Labelling Directive R&amp;TTE (Radio) ETSI EN 300 328</li> <li>· FCC (North America)</li> <li>· ARIB STD-T66 Ver 3.6</li> <li>· ROHS - Directive 2002/95/EC</li> </ul>

## TECHNICAL SPECIFICATIONS

### POWER SUPPLY

Power Consumption	250 mA to 300 mA during wireless RX/TX and Ethernet activated
External power supply	8-28 VDC , integrated Lithium-Ion battery charger with high-precision battery monitoring
Integrated Lithium-Ion Battery	Lithium-Ion rechargeable battery 950 mAh (reference BAT0.95DMG) In case of external power supply failure, the BeanGateway® can switch on the internal battery

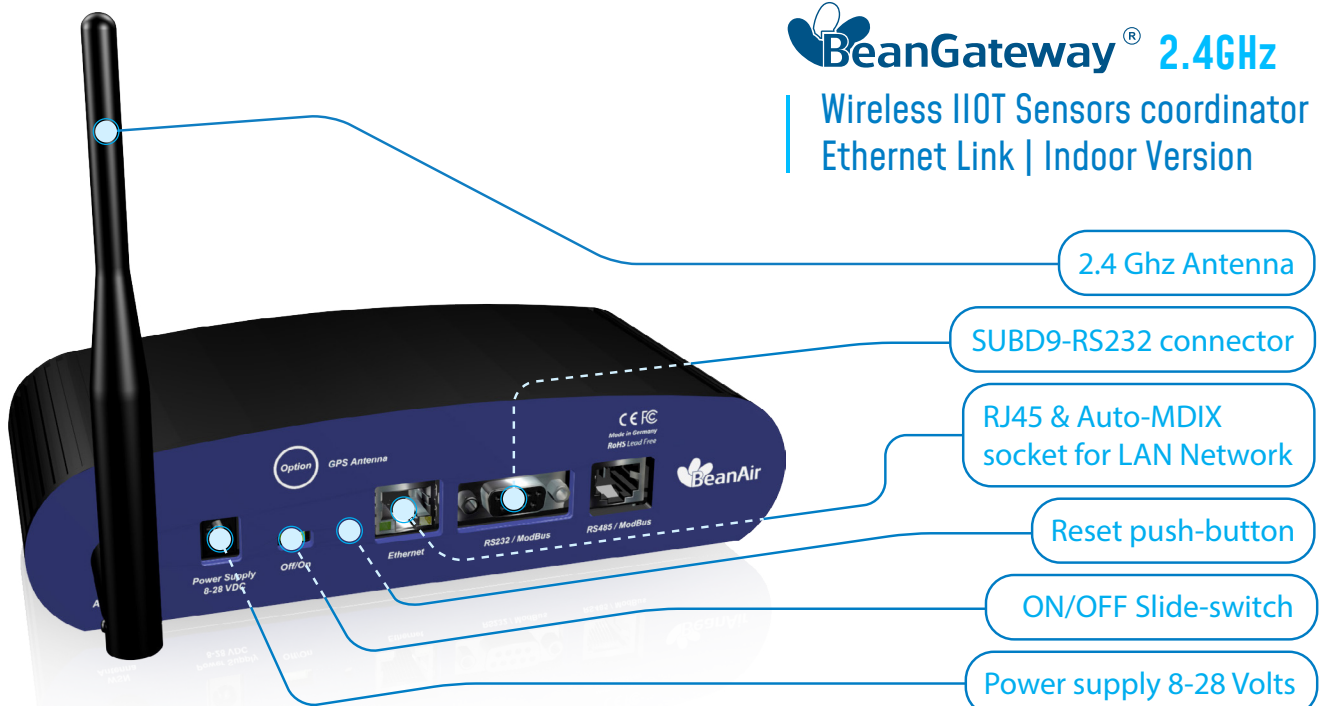
### INCLUDED ACCESSORIES

2.4 GHz Antenna	High gain antenna 5 dBi · V.S.W.R : 1.5 :1 · Connector : RPSMA
Ethernet Cable	· RJ45 Male · Cable length: 2 meter
Wall plug-in power supply	Wall plug-in, Switchmode power Supply 12V @ 1.25A

## OVERVIEW BEANGATEWAY® INDOOR

### BeanGateway® 2.4GHz

Wireless IIOT Sensors coordinator  
Ethernet Link | Indoor Version



**BeanGateway INDOOR**

**ACCESSORIES**

**Omnidirectional antenna  
5.5 dBi for indoor use only**

- Ref: HG\_OMNI\_5\_5\_DBI
- Freq Range 2400 - 2485 MHz
  - Ver Beamwidth : 90° Deg
  - VSWR : 1.5:1
  - Input Power: 10 W
  - Connector: SMA Male
  - Weight: 26 gr
  - . Gain @ 2400 MHz 5.5 dBi
  - . Hor Beamwidth : 360° Deg
  - . Impedance : 50 Ohm
  - . Operating Temp: -10 +60 Deg C
  - . Dimensions: 210 x 100 mm



**Omnidirectional antenna  
9 dBi for indoor use only**

- Ref: HG\_OMNI\_9\_DBI
- Freq Range 2400 - 2485 MHz
  - Ver Beamwidth : 90° Deg
  - VSWR : 1.5:1
  - Input Power: 10 W
  - Connector: RP-SMA Plug
  - Weight: 60 gr
  - . Gain @ 2400 MHz 9 dBi
  - . Hor Beamwidth : 360° Deg
  - . Impedance : 50 Ohm
  - . Operating Temp: -10 +60 Deg C
  - . Dimensions: 380 x 100 mm



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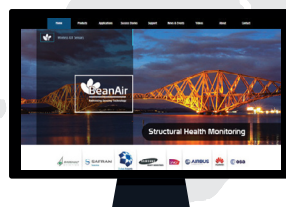
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