	Weightless Base Station (Indoor Version) Product Brief	Version ..... 1.1 Author ..... ubiik DOC Date..... 3/13/2018
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## Low-Power Long Range Weightless® Technology Base Station (Indoor)

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### General

- On-board Weightless™ protocol stack
- Ethernet
- Dimensions: 142 x 103 x 44 mm
- Weight: 220g
- Environmentally friendly, RoHS compliant
- Giteki, FCC, CE compliant
- Dual core ARM Cortex-A9 @667MHz running Linux



### Operational

- Power supply: AC Adaptor
- Uplink Data Rate: 100/50/12.5/6.25kbps single channel or 10/5/1.25/0.625kbps with 8 sub-channels
- Downlink Data Rate: 100/50/12.5/6.25kbps
- Memory: 1GB DDR3 SDRAM
- Temperature Range:  
Operating: -10°C to 50°C  
Storage: -20°C to 60°C

### RF/Analog Features

- Optimized for European ISM Band 863-870MHz
- Sensitivity: 0.625kbps@-129dBm
- EU Transmit Power Setting: 14 dBm
- U.S Transmit Power Setting: 27 dBm
- PSK/GMSK modulation

### Description

Ubiik's Indoor Weightless Base Station creates a low-power, long range network (LPWAN) suitable for IoT devices. The network can support bi-directional wireless communication of data between Weightless base station and high density of end-devices. The Base Station complies with the open, license-free Weightless protocol specifications defined by the Weightless SIG.

### Applications

- Automated Meter Reading
- Home and Building Automation
- Wireless Alarm and Security Systems
- Industrial Monitoring and Control
- Machine to Machine (M2M)
- Internet of Things (IoT)

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### TO OUR VALUED CUSTOMERS AND PARTNERS

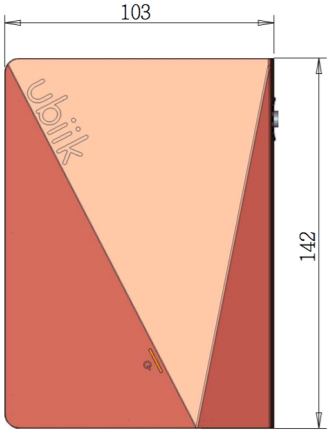
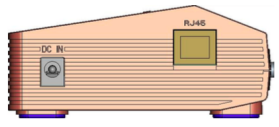
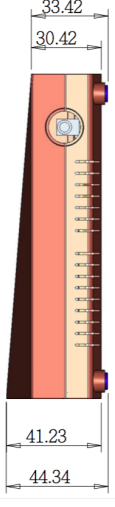
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## 1.0 General Specifications

Table 1-1 General Specifications

<b>Specification</b>	
Dimension/Weight	142 x 103 x 44mm/ 220g (Without Antenna)
Processor	Dual core ARM Cortex-A9 @667MHz running Linux
Interface	Ethernet
Memory	1GB DDR3 SDRAM
Power Supply	AC adaptor 5V/3A
Frequency	868/915MHz
DL Data Rate	100/50/12.5/6.25kbps
Sensitivity	-129dBm @ 0.625kbps
TX power	Adjustable up to 30dBm
Modulation	GMSK/PSK
Protocol	Weightless protocol stack

Table 1-2 Physical Specifications

<p>Top View</p> 
<p>Side View (DC / Ethernet)</p> 
<p>Side View (Antenna Port)</p> 

## 2.0 Notes on Antenna

Ubiik's standard indoor base station antenna achieves a maximum peak gain of 0.7dBi . The antenna data sheet is available upon request. Please acquire the highest antenna gain to achieve optimal range (Note: max antenna gain regulations differ by region). If you have trouble sourcing the antennas locally, please contact your Ubiik representative.

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