



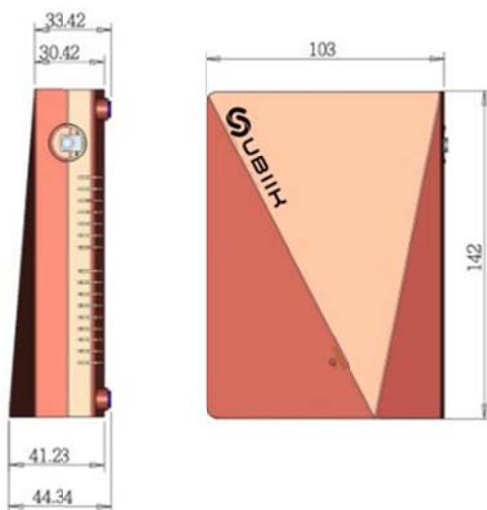
Weightless Base Station User manual:

The **Weightless Base Station** creates a low-power, long range network (LPWAN) suitable for IoT devices. The network can support bidirectional wireless communication of data between Weightless base station and a high density of end-devices.



Product name & Model Name	WBUX8125-XF900
Dimension	142 x 103 x 44mm
Weight	220g (without antenna)
Processor	Dual core ARM Cortex-A9 @667MHz running Linux
Memory	1GB DDR3 SDRAM
Power Supply	DC 12V/2A (AC/DC Adapter)
Frequency	902-928MHz
DL Data Rate	100/50/12.5/6.25kbps
UL Data Rate	100/50/12.5/6.25kbps single channel; or 10/5/1.25/0.625kbps with 8 sub-channels
Sensitivity	-129dBm @ 0.625kbps
TX power	Adjustable up to 28dBm
Protocol	Weightless protocol stack

Mechanical dimensions:





Main components:

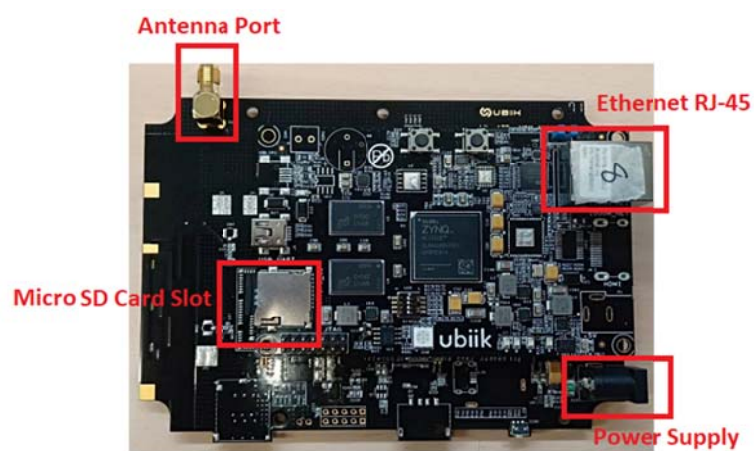
Antenna:



Base station power adapter:



PCBA RF board & Z-Turn board:



Plastic casing:



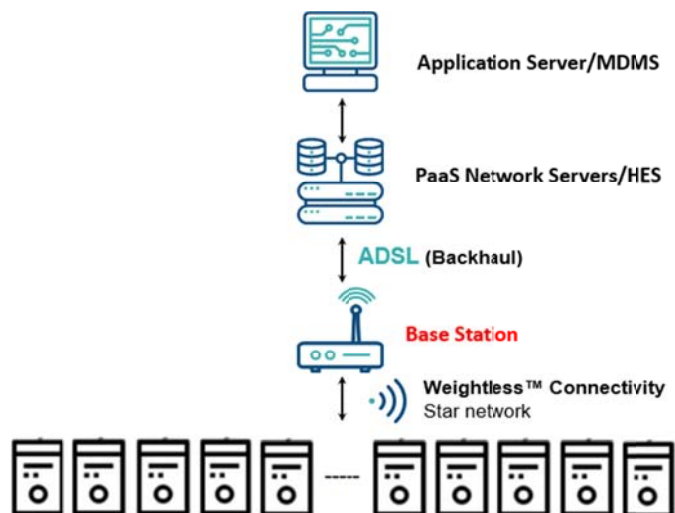


Hardware Setup:

Mount the antenna to the base station and power on the base station by plug into the power outlet.



Ubiik Weightless technology application Architecture:





This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions:

1. This device will not cause harmful interference
2. This device must accept any interference received, including interference that may cause undesired operation.

NOTE:

1. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.
2. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other transmitter.

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment. To avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20cm (8inches) during normal operation.