

Weightless™ Data Concentrator Unit

The weatherproof, Weightless™ Data Concentrator Unit creates a low-power, wide area network (LPWAN) suitable for IoT devices. Data collected by the Data Concentrator Unit can be transferred to the backend via ethernet or LTE Cat 1.



Antenna Length 20cm
Antenna Gain 0.5 dBi



Antenna Length 46cm
Antenna Gain 3.5 dBi



General

- On-board Weightless™ protocol stack
- Dimensions: 254.4 x 254.4 x 83.4 mm
- Weight: 3.4kg
- Suitable for Outdoor: IP67
- Interface: Ethernet, LTE Cat 4
- Environmentally friendly, RoHS compliant
Giteki, FCC, CE compliant
- Dual core ARM Cortex-A9 @667MHz running Linux

Operational

- Power supply: DC 12V, 1A
- 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
- Working temperature: -30°C ~ +60°C
- Storage temperature: -30°C ~ +70°C
- Humidity: 5% ~ 95%

RF/Analog Features

- Supports 870/915 MHz frequency bands
- Sensitivity: 0.625kbps@-129dBm
- Transmit Power: adjustable up to 28 dBm high efficiency PA
- PSK/GMSK modulation

Specification	Details
Dimension	54.4 x 254.4 x 83.4mm
Weight	3.4kg
IP Rating	IP 67
Processor	Dual core ARM Cortex-A9
Technical Standards & Operating Frequencies	<ul style="list-style-type: none"> • Weightless 450-507MHz, 840-870MHz, 902-928MHz, or custom sub-GHz • Ethernet • Wi-Fi 2.4G • LTE Cat 4 Band 1/3/5/7/8/28
Memory	1GB DDR3 SDRAM
Power Supply	DC: 12V, 1 A
DL Data Rate	100/50/12.5/6.25kbps
Receiving Sensitivity	Weightless -129dBm @ 0.625kbps
TX power	Weightless: Adjustable up to 28dBm LTE: 23dBm(±2dB)
Modulation	Weightless GMSK/PSK