



## 2 Channel RF / Wi-fi Gateway

### Features

- Twin RF (FM/LoRa) Radio Modules
- Wi-fi 802.11b,g,n
- RF Transmit Power: +22dBm
- RF Range: upto 22km LOS
- RF Receive Sensitivity: -148dBm
- USB powered: (type  $\mu$ C)
- On-board Real Time Clock Backup
- Android / iPhone app Control
- Website Monitoring
- All Comms Encrypted
- Easy Config Process



### Intended Use

- Internet to Radio Gateway
- Internet Control RF Receivers
- Internet Monitoring of Sensors

The **RIoT Hub** provides smartphone and internet-based remote monitoring of RIoT sensors and control of RF Solutions receivers.

This compact, self-contained unit is powered via USB (cable included) and is easy to set up—simply connect it to your local Wi-Fi, and it's ready to link with multiple RIoT sensors and receivers.

The RIoT Hub features two RF Solutions FSK/LoRa transceiver modules operating in parallel, enabling it to function in two distinct RF modes, along with a Wi-Fi transceiver module for seamless internet connectivity. This provides reliable, flexible wireless control and monitoring for a wide range of applications.

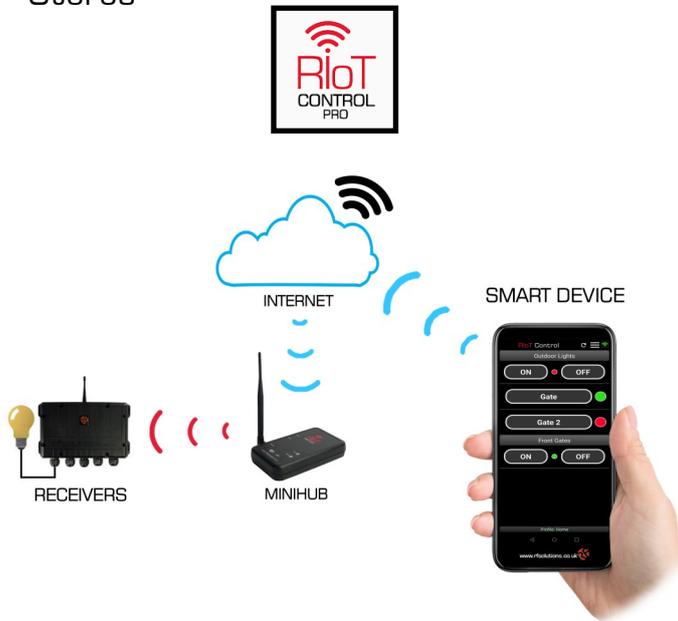
Part No	Description	Supply
RIOT-HUB8	Hub Gateway 868MHz	USB type C
RIOT-HUB9	Hub Gateway 918MHz	USB type C

# RIoT-HUB RF / WiFi Gateway



## Typical Application – Wireless Switching

Users can monitor and control RF Receivers from, anywhere using the Apps, free to download from the App Stores



## Typical Application– Sensor Monitoring

Users can monitor and control RF Receivers from, anywhere using the Apps, free to download on a smart device or the Wireless monitoring Website (subscription Service) [www.wireless-monitoring.co.uk](http://www.wireless-monitoring.co.uk)



## Technical Specification:

Dimensions: 162x 97 x 30mm.  
 Power Supply:  $\mu$ USB type C  
 Operating Temperature: -10 to +55° Celsius.

Electrical Characteristics	Min	Typical	Max	Units
Supply Current (Standard USB typ C)		35	200	mA
Operating Frequency				
WiFi	2400		2500	MHz
RF 868 Band		869.50		
RF 915 Band		918.00		
RF Output power				
Operating Frequency				
RF 868 Band (2 Independent Channels)			+22	dBm
RF 918 Band (2 Independent Channels)				
RF Receive Sensitivity			-148	dBm
868 / 918MHz				
Bandwidth (Spreading Factor for LoRa only)		60		KHz

**Security** The Internet Data is protected by 32bit encryption. For any further details please see PSTI Statement of Compliance or contact [support@rfsolutions.co.uk](mailto:support@rfsolutions.co.uk)

# RIoT-HUB RF / WiFi Gateway



## SUPPLIER'S DECLARATION OF CONFORMITY (918MHz version)

This device complies with part 15 of the FCC Rules Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must not accept any interference received, including interference that may cause undesired operation.

47 CFR 2.1077 Compliance Information

This Declaration of Conformity is hereby issued according to Chapter 1, Subpart A, Part 2 of Title 47 of the code of Federal Regulations by:

RF Solutions Limited

William Alexander House  
William Way  
Burgess Hill  
West Sussex  
RH15 9AG  
United Kingdom

Trade Name	Model
RF Solutions RIOT-HUB	RIoT-HUB9



Contains FCC ID: P9OLAMBDA62

Complies with FCC Part 15.247

### United States Responsible Party

Violette Engineering Corporation, 6731 Whittier Avenue, McLean, VA 22101

Email : info@violettecorp.com

The responsible party warrants that each unit of equipment marketed under this Declaration of Conformity will be identical to the unit tested and found acceptable with the standards, that the records maintained by the responsible party continue to reflect the equipment being produced under such Supplier's Declaration of Conformity and continue to comply within the variation that can be expected due to quantity production and testing on a statistical basis.

## Product Revision History

The below shows the product Updates that have been made through the product Lifecycle.

Revision Change History			
Date	Eng Change	New Revision	Product Change / Improvement
1/12/24	N/A	1	First Release

### RF Solutions Ltd. Recycling Notice

Meets the following EC Directives: **DO NOT** Discard with normal waste, please recycle.

**ROHS Directive 2011/65/EU and amendment 2015/863/EU** Specifies certain limits for hazardous substances.

**WEEE Directive 2012/19/EU** Waste electrical & electronic equipment. This product must be disposed of through a licensed WEEE collection point. RF Solutions Ltd., fulfils its WEEE obligations by membership of an approved compliance scheme, environment agency registration number **WEE/JB0104WV**.



### Waste Batteries and Accumulators Directive 2006/66/EC

Where batteries are fitted, before recycling the product, the batteries must be removed and disposed of at a licensed collection point.

RF Solutions battery producer number:  
**BPRN00060.**



### Disclaimer:

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