



4 Channel FM / LoRa RF Transmitter

Features

- 4 x No-Volt Switch Inputs
- Radio Transmitter FSK/FHSS LoRa 1-7
- LoRa Mode:
 - Up to **5Km** range line of sight
 - Up to **1Km** range in buildings
- LED Indication: TX, ACKNOWLEDGEMENT
- Waterproof IP68 Enclosure
- Compact Size 92 x 92 x 45mm
- Ultra low power Standby mode
- Power 2 x AAA Battery (supplied) or
- 5 - 15V External Supply
- Battery Life >1 Million Transmissions
- Screw Terminal Connections
- Operates with RF Solutions Receivers
- Optional external antenna via UFL connector



Intended Applications

- Industrial Control
- Gates / Barriers
- Remote Traffic Lights
- General Purpose Remote Control

Description

The BOGEYBOX can convert any switch into a Radio transmitter.

BOGEYBOX is a self contained, four channel RF transmitter. Simply connect up to 4 x no-volt switches to the screw terminals to operate. Supplied in an IP68 Wall mounting enclosure.

BOGEYBOX RF Transmitter



Ordering Information:

Part Number	Description
BOGEYBOX-8T4	4 channel 868MHz transmitter +22dBm
BOGEYBOX-9T4	4 channel 918MHz transmitter +22dBm

Operation

BOGEYBOX will remain in a "Deep Sleep" mode at all times when no inputs are active. When any of the No-Volt inputs change state, (Closes or Opens) BOGEYBOX will wake up and Transmit an RF signal. The LED Flashes to indicates RF Transmission.

Pairing to a Receiver

BOGEYBOX, can be used with any RF Solutions Receiver operating at the same frequency.

Technical Specifications:

Operating temperature: 0 - 60°C, Storage Temperature: -10 - 85°C

Supplied Battery AAA LR03 1.5V X2

Electrical Characteristics	Min	Typical	Max	Units
Supply Voltage Battery External Supply	2.8 5	3.00	15	V
Operating Frequency		869.500 918.000		MHz
RF Transmit power ERP			+22	dBm
Time from I/P Active to Receiver O/P Active FM LoRa Mode7 (worst Case)		25 1280		mSecs
Supply Current Asleep (between readings) Battery External Supply		1 70		uA
Supply Current Whilst Transmitting		118		mA
RF Packet TX Transmit operation: FM Mode LoRa Mode 7		20 1.28		mSecs Secs

Battery Life (Estimated)

Depends on several factors;

- The time interval between RF Transmissions
- FM / FHSS LoRa Mode 1-7
- The ambient Temperature

Operations	FSK	FHSS (LoRa)7
1 per Min	8 months	1 month
2 per Hour	19 years	4 months
1 per Hour	39 years	1 year

BOGEYBOX RF Transmitter



Product Revision Change History			
Part	ECN / Date	Rev	Change / Fix
BOGEYBOX-8T4	10/11/20	1	Initial release
BOGEYBOX-8T4	ECN378 08/07/22	2	Enhancement: Upgraded to include LoRa modes 1 - 7

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.

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