



## **Product ID - RFM22B**

### **User Manual**

#### **Operational Summary**

The RFM22B in limited modular approval applications uses the ISM band and operates on 50 frequency hopping spread spectrum channels from 915.5mhz to 919.5mhz. The RFM22B host products are designed to have an extreme low power requirement in order to allow extended battery life. Due to the power limitations the radio communication system has been setup to have a very short transmission time and a low duty cycle.

The RFM22B is only available and authorised for use in the manufacturers own compliant host products and is not for third party use or available separately. It cannot be reprogrammed or adjusted by the installer, end user or distributor.

#### **A) System Communication Modes.**

The system has three communication modes, which all serve different purposes.

1. Linked update mode
2. Linked reset/test mode
3. Search modes

##### **1. Linked Update Mode**

The system operates in this mode 99.9% of the time. Once every 10 minutes the two paired host products communicate to exchange data and confirm their status.

##### **2. Linked reset/test mode**

This mode is used in the event that the system requires a quicker response, and the system operator wants to send a reset command or perform a radio range test. If the operator sends one of the commands the system will transmit at a synchronised point within the next 15 seconds.

##### **3. Search modes**

Search modes are used in the event that the pair has become unsynchronised. This condition is very rare and is usually caused by the system being powered off. e.g. to change the batteries. If the pair become unsynchronised, the system will commence a search procedure to relink the pair. When a connection is made the synchronization information is exchanged all statuses are updated and the pair returns to normal Linked operation.

## **B) Regulatory Compliance Statements**

**FCC Compliance Statement** - This device complies with Part 15 of the FCC rules. Operation is subject to the two following conditions (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not authorised by the manufacturer could void your right to use or operate the product.

**Industry Canada Compliance Statement** - This device complies with Industry Canada licence exempt RSS standard(s). Operation is subject to the two following conditions (1) this device must not cause harmful interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device. Changes or modifications not authorised by the manufacturer could void your right to use or operate the product.

**Déclaration de conformité Industrie Canada** - Cet appareil est conforme avec Industrie Canada RSS exempt de licence standard . Son fonctionnement est soumis aux deux conditions suivantes (1) ce dispositif ne doit pas causer d'interférences nuisibles, et (2) ce dispositif doit accepter toute interférence, y compris les interférences qui peuvent entraîner un mauvais fonctionnement de l'appareil. Les changements ou modifications non autorisées par le fabricant peuvent annuler votre droit d'utiliser ou de faire fonctionner le produit

**Silent Tech Holdings Pty Ltd ABN 53607510912**

5 13-15 Ellerslie Road Meadowbrook Queensland 4131 Australia Tel +61 7 32996464