

## RF Communications Specifications

The radio section of this module is categorized as an intentional transmitter within the unlicensed 2.4GZ ISM band. The details of communications protocol are described in a separate document which is available upon request from DenMat Holdings, LLC.

The possible frequencies of operation are:

Channel #	Frequency [MHZ]
1	2403
2	2408
3	2413
4	2418
5	2423
6	2428
7	2433
8	2438
9	2443
10	2448
11	2453
12	2458
13	2463
14	2468
15	2473

There are 15 channels of normal operation and one channel specially assigned for transmitter-receiver pairing purposes.

During the pairing process, both a new channel number and a new address are selected by this Module and get communicated to the external receiver.

Each time it is paired with a receiver, the Module increases the frequency by 2 channels, meaning 10MHZ increments. The change is always in the ascending order and wraps around once the maximum normal operating channel number (channel 15) has been exceeded. For example, if starting at channel 1, then the following are the order of channel numbers every time pairing is performed:

1, 3, 5, 7, 9, 11, 13, 15, 2, 4, 6, 8, 10, 12, 14, 1, 3, .....

**Modulation:** Gaussian Frequency-Shift Keying

**Occupied bandwidth (99%):** 511 kHz

**No. of channels:** 15