

P5 Device Family R/F Channel Dwell Time

Overview

All Packet Power P5-family devices (P5T3, P5T1, P5J6 etc.) use identical hardware and software R/F communication systems. The system uses a pseudo-random frequency hopping scheme, with packet transmission times of 7ms (in 2.4GHz band) or 10ms (in 860/920MHz bands).

Minimum time between any two transmissions (always on different channels) is:

$$2^9 * 22.5\text{ms} = 11.52\text{s},$$

Maximum time between such transmissions is:

$$2^{12} * 22.5\text{ms} = 92.16\text{s}.$$

Minimum time between consecutive transmissions on the same channel (out of 64) is:

$$64 * 2^9 * 22.5\text{ms} = 737\text{s}.$$