

6b.4 Frequency Stability in the MOTotalk ISM Band -- 47 CFR 47 CFR 2.1055a(1) and §2.1055(d)(2)

The transmitter was set to transmit on a single frequency of 915.525 MHz using a special test mode not accessible by the user. The data shown below shows the maximum frequency excursion due to temperature and voltage extremes.

Frequency Stability (in ppm) at 915.525 MHz, Voltage = 4V_{DC}		
TEMP (°C)	Frequency Error (Hz)	Error (ppm)
-30	50.4	0.055
-20	60.27	0.066
-10	13.11	0.014
0	127.42	0.139
10	66.82	0.073
20	177.02	0.193
30	334.42	0.365
40	48.56	0.053
50	182.67	0.200
60	6.74	0.007

Table 6b.4.1 Transmitter Frequency Stability vs. Temperature at 915.525 MHz.

Frequency Stability (in ppm) at 915.525 MHz, Temperature = 25°C		
Power Supply Output Voltage (V)	Frequency Error (Hz)	Error (ppm)
3.55	342.39	0.374
3.6	73.31	0.080
3.7	79.75	0.087
3.8	282.61	0.309
3.9	299.30	0.327
4.0	395.10	0.432
4.1	405.19	0.443
4.2	418.96	0.458

Table 6b.4.2 Transmitter Frequency Stability vs. Voltage at 915.525 MHz.