

Transmitter Configuration and Link Budget

PCM/FM

350kbps

Data Randomized

2205.5 MHz (pending frequency coordination)

20W output

Expect ~9 dB cable losses

~5 dB margin (assuming a max range of ~12 miles):

Path Loss		
Tx Freq	MHz	2205.5
Distance	m	20000
FSPL	dB	125.3281
TX Parameters		
TX Power	dBm	43
Cable Loss	dB	9
Max Triband Gain	dB	4
Min Triband Gain	dB	-10
Max EIRP	dBm	38
Min EIRP	dBm	24
RX Antenna Parameters		
Max RX Antenna Gain	dB	6
Min RX Antenna Gain	dB	0
Received Noise Floor	dBm/Hz	-174
RX Path Parameters		
BPF Attenuation	dB	2
LNA Gain	dB	28.4
LNA NF	dB	0.9
Splitter	dB	4
Cable Loss	dB	20
LNA2 Gain	dB	28.4
Received Signal Information		
Max Received Input Power	dBm	-50.5281
Min Received Input Power	dBm	-70.5281
Receiver Noise Floor	dBm/Hz	-140.3
Bandwidth MHz	MHz	3
Noise Power	dBm	-75.5288
S/N		
Max S/N	dB	25.00068
Min S/N	dB	5.000679