

STA Filing for GPS Repeater at FRE and MPK

GPS Link Budget calculation

Receive Ant Gain	Ant Cable Insertion Loss	Repeater Amp Gain	Repeater Ant Gain Best Case	Range in Feet	Repeated Signal Power @ Range In dBm
13.5	-25.5	60	3	150	-148.61
	GPS Carrier Frequency MHz		Total System Gain	Range in Miles	Total Signal Power @ Range in Watts
	1575		51	0.03	1.4E-18
	Avg Receive Power L1 dBm North America			Range in Meters	Radiated Power dBm
	-130			46.75	-79
	Free Space loss with Isotropic Antennas			Range in Kilometers	Transmitted Power (W)
	-69.61			0.05	6.3E-12
					Effective Radiated Power (W)
					12.6E-12
					Effective Radiated Power (dBW)
					-109