

3SI Link Budget Calculator

Change the values in the yellow boxes to calculate required readings

-140 or less at a range of 100 feet to meet NTIA regulations

Receive Ant Gain	Ant Cable Insertion Loss	Repeater Amp Gain	Repeater Ant Gain Best Case	Range in Feet	Repeated Signal Power @ Range In dBm
33	-14	30	3	100	-144.09
GPS Carrier Frequency MHz		Total System Gain		Range in Miles	Total Signal Power @ Range in Watts
1575		52		0.02	3.9E-18
Avg Receive Power L1 dBm North America				Range in Meters	Radiated Power dBm
-130				31.17	-78
Free Space loss with Isotropic Antennas				Range in Kilometers	Transmitted Power (W)
-66.09				0.03	7.9E-12
					Effective Radiated Power (W)
					15.8E-12
					Effective Radiated Power (dBW)
					-108