



GPS Networking 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

<https://www.gpsnetworking.com/linkbudget>

Receive Ant Gain	Ant Cable Insertion Loss	Repeater Amp Gain	Repeater Ant Gain Best Case	Range in Feet	Repeated Signal Power @ Range In dBm
38	-12	20	3	30	-136.64
GPS Carrier Frequency MHz		Total System Gain		Range in Miles	Total Signal Power @ Range in Watts
1575		49		0.01	21.7E-18
Avg Receive Power L1 dBm North America				Range in Meters	Radiated Power dBm
-130				9.35	-81
Free Space loss with Isotropic Antennas				Range in Kilometers	Transmitted Power (W)
-55.64				0.01	4.0E-12
					Effective Radiated Power (W)
					7.9E-12
					Effective Radiated Power (dBW)
					-111

If you need assistance with the calculations, please do not
 hesitate to call us toll-free at 1-800-463-3063