

<b>TX ES Location</b>
<b>RX ES Location</b>
Information (bit) rate [kbps]
Modulation type
FEC Rate
Emission BW [kHz]
Number of carriers per transponder
Uplink Frequency [GHz]
Uplink ES antenna diameter [m]
Uplink ES antenna gain [dBi]
Uplink Antenna feed flange power [dBW]
Uplink ES to Satellite Distance [km]
Uplink Free-Space Loss [dB]
Satellite RX antenna gain towards the TX ES [dBi]
Satellite Rx system noise temperature [K]
Uplink Atten. due to Rain, Cloud, and Atmospheric Gases [dB]
Uplink Noise Temp. Increase due to Rain, Cloud, and Atmospheric Gases [K]
Uplink Thermal C/N [dB]
Uplink C/I (ASI) [dB]
Uplink C/I (Xpol) [dB]
Uplink C/I (IM) [dB]
Uplink C/(N+I) [dB]
Downlink Frequency (GHz)
Satellite TX antenna gain towards the RX ES [dBi]
Downlink Antenna feed flange power [dBW]
Downlink ES to Satellite Distance [km]
Downlink Free-Space Loss [dB]
RX ES antenna diameter [m]
RX ES antenna gain [dBi]
RX ES system noise temperature [K]
Downlink Atten. due to Rain, Cloud, and Atmospheric Gases [dB]
Downlink Noise Temp. Increase due to Rain, Cloud, and Atmospheric Gases [K]
Downlink Thermal C/N [dB]
Downlink C/I (ASI) [dB]
Downlink C/I (Xpol) [dB]
Downlink C/I (IM) [dB]
Downlink C/(N+I) [dB]
Overall Link C/(N+I) [dB]
Required C/(N+I) [dB]
Margin [dB]

<b>Portland, OR (45.53N, 122.68W)</b>
<b>Buffalo (42.9N, 78.9W)</b>
1600
QPSK
0.500
2000
250
29.65
1
48.0
4.5
37971.6
213.5
32.9
690.2
5.3
204.4
2.7
23.3
30.0
30.0
2.6
19.95
31.4
-5.5
38925.5
210.2
8
62.6
250.0
4.3
182.3
13.2
37.9
30.0
30.0
13.0
2.26
1.80
0.46