

| Link Parameters | Units | 1M78G7W |
|-----------------------------------------------|--------------|----------------|
| Uplink frequency | GHz | 13.88 |
| Downlink frequency | GHz | 11.07 |
| User data rate | kbit/s | 2048 |
| Modulation | | QPSK |
| Total coding rate | | 0.691 |
| Carrier bandwidth | kHz | 1778 |
| Uplink: | | |
| Nominal E/S e.i.r.p. per carrier | dBW | 55.8 |
| Earth station diameter | m | 4.5 |
| Earth station gain | dBi | 54.5 |
| Uplink input power per carrier | dBW | 1.3 |
| Uplink input power density | dBW/Hz | -61.2 |
| Atmospheric loss | dB | 0.2 |
| Free space path loss | dB | 207.0 |
| G/T satellite (-3dB contour) | dB/K | 3.9 |
| C/N thermal uplink | dB | 18.6 |
| C/I XPOL, ACI, IM, ASI | dB | 19.7 |
| C/(N+I) uplink | dB | 16.1 |
| Downlink: | | |
| Satellite e.i.r.p. per carrier (-3dB contour) | dBW | 33.3 |
| Atmospheric loss | dB | 0.1 |
| Free space path loss | dB | 205.0 |
| Earth station diameter | m | 1.8 |
| Earth station gain | dBi | 44.5 |
| Noise temperature | K | 105.0 |
| Earth station G/T | dB/K | 24.3 |
| C/N thermal downlink | dB | 18.6 |
| C/I XPOL, ACI, IM, ASI | dB | 16.0 |
| C/(N+I) downlink | dB | 12.2 |
| Overall: | | |
| C/(N+I) overall | dB | 10.7 |
| C/(N+I) required | dB | 5.7 |
| Margin | dB | 5.0 |