

| | 36M0G7W | 2M00G7W | 500KG7W | 18M0G7W | 1M00G7W | 200KG7W | 9M00G7W |
|---|---------|---------|---------|---------|---------|---------|---------|
| Emission Designator | | | | | | | |
| Emission BW [kHz] | 36000 | 2000 | 500 | 18000 | 1000 | 200 | 9000 |
| Modulation type | QPSK | QPSK | QPSK | QPSK | QPSK | QPSK | 8PSK |
| Information (bit) rate [kbps] | 38080.9 | 2115.6 | 528.9 | 21419.6 | 1190.0 | 282.6 | 14260.6 |
| FEC Rate | 0.667 | 0.667 | 0.667 | 0.750 | 0.750 | 0.889 | 0.667 |
| Uplink Frequency [GHz] | 14 | 14 | 14 | 14 | 14 | 14 | 14 |
| Uplink ES antenna diameter [m] | 6 | 1.2 | 1.2 | 6 | 9.1 | 2.4 | 9.1 |
| Uplink ES antenna gain [dBi] | 57.0 | 43.0 | 43.0 | 57.0 | 60.6 | 49.1 | 60.6 |
| Uplink Antenna feed flange power [dBW] | 14.6 | 5.0 | -1.0 | 11.6 | -1.0 | -7.0 | 8.5 |
| Uplink ES to Satellite Distance [km] | 38000 | 38000 | 38000 | 38000 | 38000 | 38000 | 38000 |
| Uplink Free-Space Loss [dB] | 207.0 | 207.0 | 207.0 | 207.0 | 207.0 | 207.0 | 207.0 |
| Satellite RX antenna gain [dBi] | 31.9 | 31.9 | 31.9 | 31.9 | 31.9 | 31.9 | 31.9 |
| Satellite Rx system noise temperature [K] | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| Uplink Rain Atten. [dB] | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 |
| Uplink Cloud Atten. [dB] | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| Uplink Noise temp. increase due to rain and cloud [K] | 174.5 | 174.5 | 174.5 | 174.5 | 174.5 | 174.5 | 174.5 |
| Uplink Thermal C/N [dB] | 18.0 | 7.0 | 7.0 | 18.0 | 21.6 | 11.0 | 21.6 |
| Uplink C/I (ASI) [dB] | 14.2 | 14.2 | 14.2 | 15.2 | 15.2 | 17.3 | 18.3 |
| Uplink C/I (Xpol) [dB] | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| Uplink C/I (IM) [dB] | 27 | 27 | 27 | 27 | 27 | 27 | 27 |
| Uplink C/(N+I) [dB] | 12.5 | 6.2 | 6.2 | 13.1 | 13.9 | 10.0 | 16.0 |
| Downlink Frequency (GHz) | 11.7 | 11.7 | 11.7 | 11.7 | 11.7 | 11.7 | 11.7 |
| Downlink EIRP [dBW] | 48.5 | 32.6 | 26.6 | 45.5 | 33.0 | 25.1 | 42.5 |
| Downlink ES to Satellite Distance [km] | 38000 | 38000 | 38000 | 38000 | 38000 | 38000 | 38000 |
| Downlink Free-Space Loss [dB] | 205.4 | 205.4 | 205.4 | 205.4 | 205.4 | 205.4 | 205.4 |
| RX ES antenna diameter [m] | 1.2 | 6 | 6 | 1.2 | 1.2 | 9.1 | 1.2 |
| RX ES antenna gain [dBi] | 41.5 | 55.5 | 55.5 | 41.5 | 41.5 | 59.1 | 41.5 |
| RX ES system noise temperature [K] | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| Downlink Rain Atten. [dB] | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 |
| Downlink Cloud Atten. [dB] | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| Downlink Noise temp. increase due to rain and cloud [deg K] | 137.8 | 137.8 | 137.8 | 137.8 | 137.8 | 137.8 | 137.8 |
| Downlink Thermal C/N [dB] | 9.5 | 20.1 | 20.1 | 9.5 | 9.5 | 26.3 | 9.5 |
| Downlink C/I (ASI) [dB] | 14.2 | 14.2 | 14.2 | 15.2 | 15.2 | 17.3 | 18.3 |
| Downlink C/I (Xpol) [dB] | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| Downlink C/I (IM) [dB] | 27 | 27 | 27 | 27 | 27 | 27 | 27 |
| Downlink C/(N+I) [dB] | 8.2 | 13.0 | 13.0 | 8.4 | 8.4 | 16.2 | 8.9 |
| Total C/(N+I) [dB] | 6.79 | 5.35 | 5.35 | 7.10 | 7.31 | 9.04 | 8.10 |
| Required C/(N+I) [dB] | 3.90 | 3.90 | 3.90 | 4.83 | 4.83 | 7.00 | 7.92 |
| Margin [dB] | 2.89 | 1.45 | 1.45 | 2.27 | 2.48 | 2.04 | 0.18 |