TECHNICAL PARAMETERS FOR ITU FILINGS

* Detailed Link budgets for Telecommand, Telemetry and data may be provided

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| --- | --- | --- | --- |
| Name of the Satellite (A1a) | BeliefSat-0 | | |
| Short Duration Mission(A1g) | Yes | | |
| ORBITAL DETAILS | | | |
| Number of orbital planes(A.4.b.1) | Need Data | | |
| Inclination(A.4.b.4.a) | 9.6 degrees | | |
| Number of satellites in plane(A.4.b.4.b) | 1 | | |
| Period (A.4.b.4.c) | 96 minutes | | |
| Apogee (kms) (A.4.b.4.d) | 350e0 | | |
| Perigee (kms) (A.4.b.4.e) | 350e0 | | |
| Minimum Altitude(kms) (A.4.b.4.f) | 350e0 | | |
| Right Ascension (degrees)(A.4.b.4.g) | Need Data | | |
| Argument of the perigee (degrees)(A.4.b.4.i) | Need Data | | |
| Longitude of Ascending node(A.4.b.4.j) | Need Data | | |
| UPLINK (Telecommand, etc) | | | |
|  | Voice Repeating | Telecommands, Digipeating | |
| Satellite Rx Antenna Gain (dbi) (B3a1) | 3 dbi | 2.15 dbi | |
| Satellite Antenna Radiation Pattern (B3c1) | Omni-directional pattern | Omni-directional pattern | |
| Satellite Rx Noise Temp (deg K) (C5a) | Need Suggestion | Need Suggestion | |
| Uplink Frequency range (MHz) (C1) | 437.000 | 145.980 | |
| RF Bandwidth (KHz) | 12.5 | 12.5 | |
| Designation of emission(C7a) | 12K5F3E | 12K5F2D | |
| Carrier Frequency (C7b) | 437.000 MHz | 145.980 MHz | |
| Polarization(C6) | Linear Polarisation | Linear Polarisation | |
| The Max. value of power i/p to E/S antenna (dBW)  (C8a1/C8b1) | 16.99 dBW | 16.99 dBW | |
| Max. Power Density (dBW/Hz) (C8a2/C8b2) | -23.97 dBW/Hz | -23.97 dBW/Hz | |
| The Min. value of power i/p to E/S antenna (dBW) (C8c1) | 0 dBW | 0 dBW | |
| Min. Power Density (dBW/Hz) (C8c3) | -40.9691 dBW/Hz | -40.9691 dBW/Hz | |
| Class of Station (C4a)(C4b) | Refer **Annex(Class of station).**Allocation for the particular service should be in RR | Need Suggestion | |
| Required C/N (C8e1) | Need Suggestion | Need Suggestion | |
| Uplink E/S size | Need Suggestion | Need Suggestion | |
| Uplink E/S antenna Tx gain (dB) (C.10.d.3) | 2.15 dbi | 3 dbi | |
| E/S radiation pattern(C.10.d.5.a.1) | omni-directional pattern | omni-directional pattern | |
| E/S antenna beam width (deg) (C.10.d.4) | 70 degrees(Elevation plane) | 70 degrees(Elevation plane) | |
| Class of Earth Station (C.10.d.1) (C.10.d.2) | Refer **Annex(Class of station).Corresponding to space station (e.g ..for space station: EH, Earth Station: TH)** | Need Suggestion | |
| Location of U/L E/S and Coordinates (Longitude, Latitude) | Latitude: 19.042561 Longitude: 72.863808 | Latitude: 19.042561  Longitude: 72.863808 | |
| DOWNLINK (Telemetry, Data, etc) | | | |
|  | Voice Repeating | | Telemetry, Digipeating |
| Satellite Tx. Antenna Max. gain (dBi) (B3a1) | 2.15 dbi | | 2.15 dbi |
| Satellite antenna radiation pattern (B3c1) | Omni-directional pattern | | Omni directional |
| Downlink Frequency range (MHz) (C1) | 145.980 | | 145.980 |
| RF Bandwidth (TM/RNG) | 12.5 KHz | | 12.5 KHz |
| Designation of emission(C7a) | 12K5F3E | | 12K5F2D |
| Carrier Frequency (C7b) | 145.980 MHz | | 145.980 MHz |
| Polarization(C6) | Linear Polarization | | Linear Polarization |
| The Max. value of the peak power i/p to sat antenna(dBW) (C8a1/C8b1) | 0 dBW | | 0 dBW |
| Max. Power density (dBW/Hz) (C8a2/C8b2) | -40.96 dBW/Hz | | -40.96 dBW/Hz |
| Min value of Peak envelope power (dBW) (C8c1) | -3.01 dBW | | -3.01 dBW |
| Min. Power density (dBW/Hz) (C8c3) | -43.97 dBW/Hz | -43.97 dBW/Hz | |
| Required C/N(dB) (C8e1) | Need Suggestion | Need Suggestion | |
| E/S Rx Antenna gain (dB) (C.10.d.3) | 3 dbi | 3 dbi | |
| E/S Ant. Radiation pattern (C.10.d.5.a.1) | omni-directional pattern (perpendicular to the antenna axis) | omni-directional pattern (perpendicular to the antenna axis) | |
| E/S Ant. Beam width (C.10.d.3) | 70 degrees(Elevation plane) | 70 degrees(Elevation plane) | |
| Class of Earth Station (C.10.d.1) (C.10.d.2) | Refer **Annex(Class of station).Corresponding to space station (e.g ..for space station: EH, Earth Station: TH)** | Need Suggestion | |
| Rx E/S (G/T) (dB/K) | Need Suggestion | Need Suggestion | |
| Rx E/S system noise temp (K) (C.10.d.6) | Need Suggestion | Need Suggestion | |
| Location of D/L E/S (Longitude, Latitude) | Latitude: 19.042561 Longitude: 72.863808 | Latitude: 19.042561  Longitude: 72.863808 | |