

RadSat-g FCC Experimental License Supplementary Info (11/21/17)

6. Provide the information notes below for the purposed Cubesat. Submit your response as .pdf to your application:

a) THE TYPE OF SATELLITE, GEOSTATIONARY OR NONGEOSTATIONARY

Non-Geostationary

B) IF ANY SATELLITES ARE NONGEOSTATIONARY, REPORT ITS INCLINATION ANGLE, APOGEE IN KILOMETERS, PERIGEE IN KILOMETERS, ORBITAL PERIOD IN HOURS AND FRACTIONS OF HOURS IN DECIMAL, THE NUMBER OF SATELLITES IN THE SYSTEM

Inclination Angle: 51.56 degrees
Apogee: 416 km
Perigee: 409 km
Orbital Period: 1.55 hours
of Satellites: 1

b) THE SATELLITE TRANSMITTER ANTENNA GAIN AND BEAMWIDTH,

Gain: 2.15 dBi
Beamwidth: 156.2 degrees (1/4 wave monopole antenna)

c) THE SATELLITE TRANSMITTER ANTENNA AZIMUT: NARROWBEAM (NB), EARTH COVERAGE (EC),

Narrowbeam (NB)

d) THE EARTH STATION RECEIVER ANTENNA GAIN, BEAMWIDTH, AZIMUTHAL RANGE, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS AND THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS,

Gain: 16.3 dBiC
Beamwidth: 30.6 degrees
Azimuthal Range: 360 degrees
Site Elevation: 1497.98 m
Antenna Height: 23 m (Above Terrain)

e) THE EARTH STATION RECEIVER ANTENNA AZIMUTH, THE MINIMUM ANGLE OF ELEVATION (V00 TO V90),

Azimuth: V00

f) THE TRANSMITTER ANTENNA ORIENTATION (XAP), EXAMPLE XAP01 J, AND THE RECEIVER ANTENNA ORIENTATION (RAP), EXAMPLE RAP01 J, WHERE J REPRESENTS LINEAR POLARIZATION. OTHER POLARIZATIONS INCLUDE H FOR HORIZONTAL, V FOR VERTICAL, S FOR HORIZONTAL AND VERTICAL, L FOR LEFT HAND CIRCULAR, R FOR RIGHT HAND CIRCULAR, T FOR RIGHT AND LEFT HAND CIRCULAR, E FOR ELLIPTICAL AND O FOR OBLIQUE ANGLED CROSSED.,

Transmitter Antenna Orientation: XAP01 J
Receiver Antenna Orientation: RAP01 S