



SGoSat Lpro

The SGoSat LPro Terminals comply with the strictest standards, including military standards like MIL-STD-810, MIL-STD-461 and EN50155 (railway applications) providing connectivity anywhere and in any condition.

Its low profile, with a radome height under 30 cm is optimum for high speed trains and aircraft applications, with the possibility to be integrated in a certified aircraft radome.

SGoSat LPro Terminals are designed with all systems integrated under the radome: antenna, BUC, BDC, LNA, LNB, modems, ACU, etc. keeping a low profile and small dimensions. The design allows for different options, with base band equipment inside the radome or inside the vehicle.

Features:

Available for:

Ka-Band, X-Band, Ku-Band and Dual Ka/Ku Band, Dual X/Ka Band and Dual X/Ku Band.

Maximum regulatory compliant EIRP SD for all latitudes.

Polarization diversity for full support

GPS Dual antenna

1 kHz attitude sample frequency Pointing Loss (RMS) < 0.1°

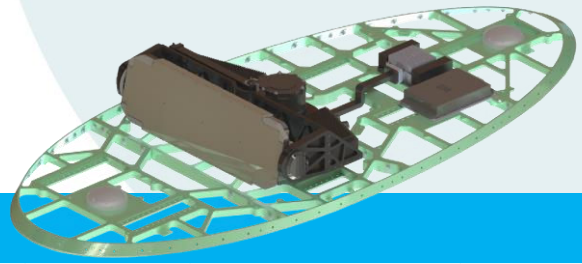
Inertial sensors:

Gyros, accelerometers magnetometers and barometer

Re-acquisition quasi-instantaneous.

Doppler Effect compensation

Immune to frequency inhibitors.



Radiofrequency features

Parameter	X-Band	Ka-Band	X/Ka-Band	Ku-Band	Ku/Ka Dual Band	X/Ku Dual Band
Rx Freq	7.25 – 7.75 GHz	Civil: 19.2-20.2 GHz Military: 20.2-21.2 GHz	X-Band: 7.25 – 7.75 GHz Ka-Band: 19.2- 21.2 Ghz	10.7-12.75 GHz	Ku-Band: 10.7 – 12.75 GHz Ka-Band: 19.2- 21.2 GHz	X-Band: 7.25 – 7.75 GHz Ku-Band: 10.7- 12.75 GHz
Tx Freq	7.90 – 8.40 GHz	Civil: 29-30 GHz Military: 30-31 GHz	X-Band: 7.90 – 8.40 GHz Ka-Band: 29- 31 Ghz	13.75 - 14.5 Ghz	Ku-Band: 13.75 – 14.5 GHz Ka-Band: 29- 31 GHz	X-Band: 7.9 – 8.4 GHz Ku-Band: 13.75- 14.5 GHz
Polarization	LHCP/RHCP (manual)	LHCP/RHCP (simultaneous)	LHCP/RHCP	Linear H/V (pol tracking)	Ku-band: Linear H/V (pol tracking) Ka-Band: LHCP/RHCP simultaneous	X-band: LHCP/RHCP Ku-band: Linear H/V (pol tracking)
G/T	9 dB/K	12 dB/K	X-Band: 9 dB/K Ka-Band: 12 dB/K	12 dB/K	Ku-Band: 12 dB/K Ka-Band: 12 dB/K	X-Band: 9 dB/K Ku-Band: 12 dB/K
EIRP linear	44 dBW	49 dBW	X-Band: 44 dBW Ka-Band: 49 dBW	48dBW	Ku-Band: 48 dBW Ka-Band: 49 dBW	X-Band: 44 dBW Ku-Band: 48 dBW
Tx A.R.	< 1 dB					
Rx A.R.	< 1 dB	< 1.2 dB	X-Band: < 1 dB	< 1 dB	Ku-Band: < 1 dB	< 1 dB
Regulatory compliance	MIL-STD- 188-164B, STNAG4484	FCC 47 CFR.25.138 /ETSI EN 303.978 / ETSI EN 301.429	STANAG 4484/ MIL-STD 188-164B; FCC 47 CFR.25.138 /ETSI EN 303.978 / ETSI EN 301.429	FCC 47 CFR.227,ETSI EN 302 186	Ku-Band: FCC 47 CFR.227,ETSI EN 302 186 Ka-Band: FCC 47 CFR.25.138 /ETSI EN 303.978 / ETSI EN 301.429	X-Band: MIL-STD-188- 164B, STNAG4484 Ku-Band: FCC 47 CFR.227,ETSI EN 302 186

Mechanical and Environmental features

Parameter	X-Band	Ka-Band	X/Ka-Band	Ku-Band	Ku/Ka Dual Band	X/Ku Dual Band
Height	< 30 cm					
Weight	< 96 kg	< 80 kg	< 100 kg	< 87 kg	< 95 kg	< 100 kg
Diameter	1 m	87 cm	1.15 m	99 cm	1 m	1.15 m
Speed	AZ and EL: > 400°/s					
Acceleration	AZ and El: > 1000°/ s ²		AZ>600°/s ² ; EL:>1000°/ s ²	AZ and El: > 1000°/ s ²	AZ>600°/s ² ; EL:>1000°/ s ²	
Power	< 700 W (average) < 1000 W (peak)					