

S-Band Ground Station Specification

- Groundcom **GCS-S1** is a turn-key, low-cost ground station solution for the satellite missions that meets all the new space demands.
- **GCS-S1** is designed for satellite operations, TT&C and payload data downlink, especially to support Earth Observation (EO) or telecommunication satellite constellations on LEO.



Command and
control



Telemetry



Data download

Model

GCS-S1v2

Antenna and radio

Frequency [MHz]	Tx: 2025 - 2120 Rx: 2200 - 2300
Antenna Type	Prime-focus fed parabolic reflector
Antenna Diameter [m]	3
Beamwidth ¹ [°]	3.1
Antenna Gain [dBi]	>34
EIRP [dBW]	49
G/T [dB/K]	11
Polarization	LHCP/RHCP (remotely switchable)
Modulation	Customizable
Data types	Customizable

¹ Full Width at Half Maximum beamwidth

Motion

Rotator Range Of Motion	Azimuth: 0-720°, Elevation ² : 0-180°
Tracking Accuracy [°]	0.6
Pointing Accuracy [°]	0.2
Angular Velocity [°/s]	>15
Tracking	Software track based on TLE ³

Operation

Power supply (max.) (Air-condit. unit)	2,3A@230 VAC / 4,8A@115 VAC, 45-65 Hz TBD
Back-up fuse [A]	2 x 16 , char. C
Temperature [°C]	-20 to +55
Max. wind during operation (without/with radome) [km/h]	75/180
Weight (without/with radome) [kg]	ca. 450-500/900
Height (radome) [m]	4.19
Width (radome) [m]	3.85

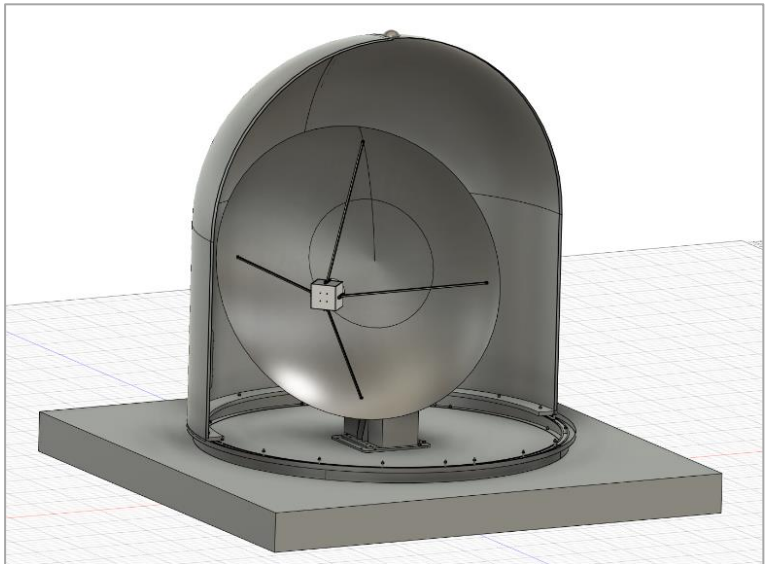
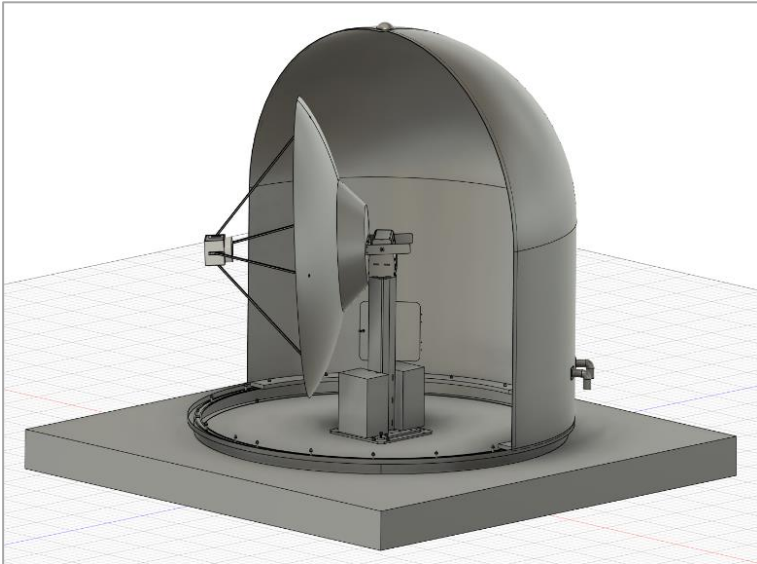
Control

API commands	Yes
GUI SW	Yes
Satellite database	Yes
Scheduling	Yes
Real time monitoring	Yes
Remote access	Yes
Data storage	Yes

² Includes elevation flip to remove key-hole effect

³ Two line element data

Ground station GCS-S1 3D model visualization



Ground station GCS-S1

