



TERRAN ORBITAL™



SMALLSAT GEO™



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Terran Orbital now brings cost-effective small satellite solutions to geostationary orbit. By leveraging plug-and-play modular designs, the same designed-for-GEO modules are used throughout the spectrum of solutions. The platform is scalable based on a mission's power and launch requirements, with designs that range in size and mass.

A SmallSat GEO™ from Terran Orbital significantly reduces risk over traditional large, bespoke GEO missions, with dramatically shorter lead times, 10 to 15 times lower cost, offering flexible and dynamic operations. Terran Orbital leverages extensive heritage and manufacturing experience in LEO and beyond to offer GEO solutions designed with necessary differentiators to withstand harsher environments.

SmallSat GEO™ configurations are compatible with multiple launchers and launch options

such as dedicated, rideshare, or upcoming OTVs. Both electric and chemical propulsion options are available depending on the mission's orbit-raising and station-keeping needs.

Spacecraft lifetime can be customized to a customer's requirements and budget. The spacecraft is also designed to be compatible with the most advanced payloads, allowing for independently steerable multi-beam arrays.

As with all missions, Terran Orbital offers end-to-end mission support, including payload and integration, launch support, and operations. Lower cost, shorter lead times, and flexible requirements have become synonymous with Terran Orbital, and customers will receive these same advantages with a SmallSat GEO™ solution.

CAPABILITIES

Configuration

Rideshare, dedicated, or multi-manifest super-synchronous GTO launches

Wet Mass

Up to 1,250kg

Dry Mass

500 to 750kg, depending on configuration

Mass Available to Payload

Up to 300kg*

Power Available to the Payload

Up to 3kW

Propulsion

Nominal all-electric platform

Frequencies Supported

VHF, UHF, C, X, Ku, K, Ka, Q, V

On-board/Data Processing

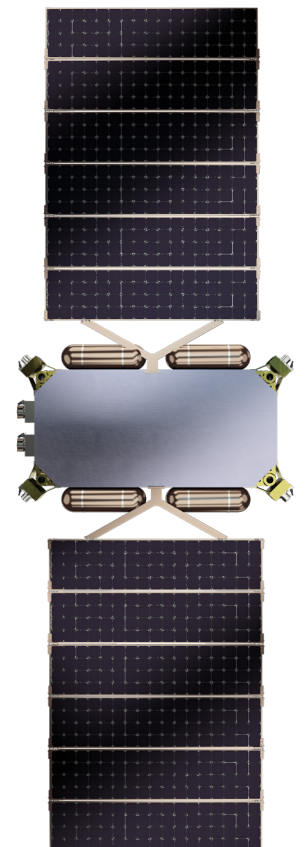
Versal, ARM, RFSoc, MPSoC processing architectures, multi-application support, high-speed data interface support

Payloads Supported

Multiple reflectors, multi-beam phased array

Lifetime

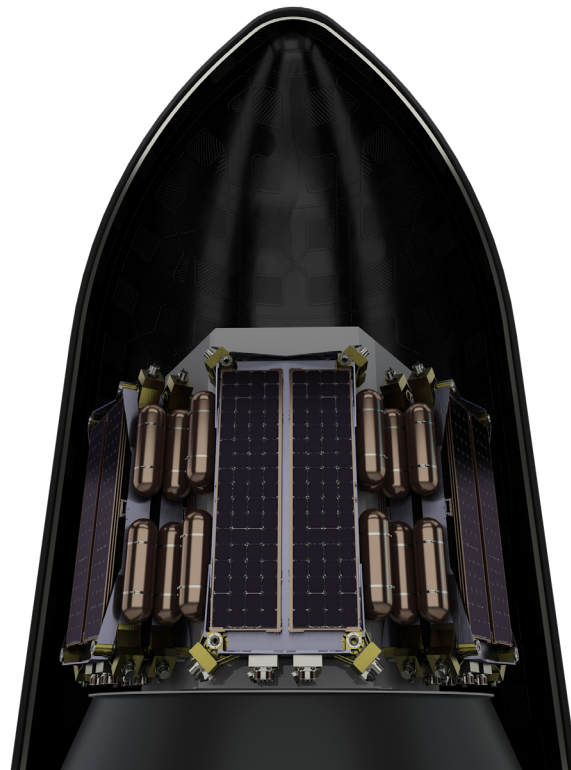
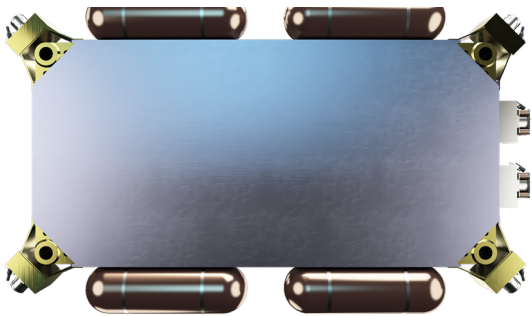
7 years nominal*



*Please contact a sales professional for additional options

KEY FEATURES

- High power, compact design
- Interfaces with commercially available payloads
- Supports multiple reflectors
- Independently steerable beams available
- Supports orbital slot repositioning
- Software-defined radios
- High-performance data rate
- Secure communications for defense customers
- End-to-end mission service options available for launch, operations, spacecraft, and payload



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