# EXCELSIOR

Terran Orbital presents the Excelsior-class spacecraft platform, the entry-level microsat platform. Excelsior is designed as the standard point of departure for missions necessitating two spacecraft from a single 15-inch ESPA or similar interface, allowing efficient build-out of constellations.

Excelsior shares a common EPS architecture with the larger spacecraft in the product line while providing redundancy in key components. Terran Orbital's entire line of satellite buses shares the same avionics and GNC algorithms.

The Excelsior allows maximum payload volume and a large solar array while providing low launch costs. This class also gives it a power advantage over the nano platforms. It includes a propulsion bay accommodating EP, Hydrazine, or a mix of propulsion systems.

Terran Orbital employs top-of-the-line automation and modern manufacturing processes to support the delivery of hundreds of buses annually. From order to launch, in quantities from one to a constellation of one hundred, Terran Orbital accelerates the delivery of mission solutions.
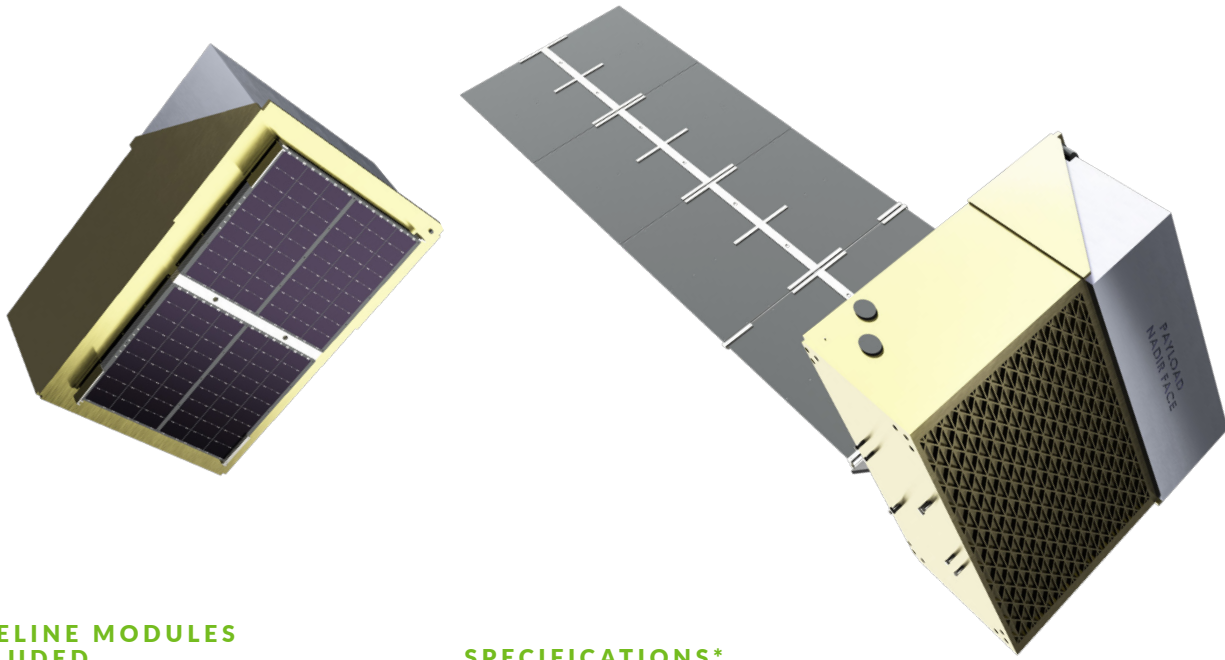

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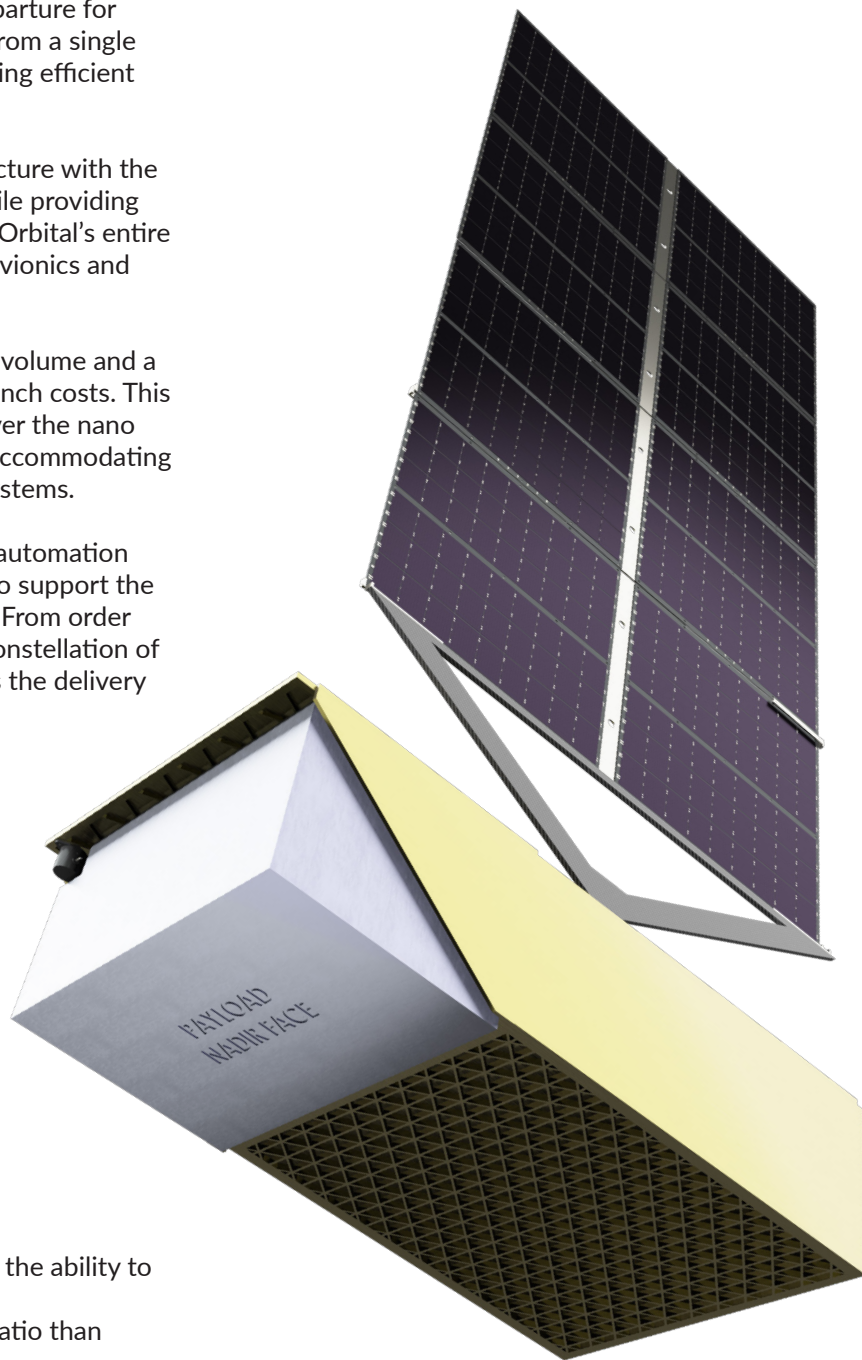
KEY BENEFITS

- Build-out constellations faster with the ability to launch two satellites per ESPA port
- Delivers higher power-to-payload ratio than nano-class platforms
- Based on hardware with significant flight heritage

TERRAN ORBITAL™

EXCELSIOR

BASELINE MODULES INCLUDED

- Watchdog
- Backplane
- Flight Computers (2)
- 66V Battery Modules (2-4)
- 66V MPPT (1-2)
- 66V Load Controller
- 28V Low-power Point-of-Load (varies)
- 28V High-power Point-of-Load (varies)
- Coarse Sensors (2)
- Gyro Assembly
- Star Trackers (3)
- GPS (2)
- Magnetorquers (3)
- Reaction Wheels (3)
- LDRR (2)
- MDR (2)

SPECIFICATIONS*

Configuration	Half-ESPA
Applications	LEO
Native Orbits	400km-1200km
Launch Mass (Wet)**	up to 125kg
Available Payload Mass	50kg
Max Solar Array Power	500W
Redundancy	Single-string
Power System	66V sys power, 28V, 12V, and 9V rails available
Communication Data Rate	S-band: 125 Kbps uplink 2 Mbps downlink X-Band: 650 Mbps downlink
Propulsion	400s I_{sp} standard
Pointing Accuracy	10 to 50 arcseconds higher accuracy available

* For additional spacecraft specifications or to configure a platform for your requirements, please contact a sales professional.

** maximum mass may not be supported on all launch vehicles or with all deployers.

MADE IN U.S.A.

TERRAN ORBITAL™

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