

# IRIS

## KA-BAND TERMINAL

Low-Latency, High-Throughput Communications for LEO

Better Data. Better Forecasts. Better Outcomes.

### Iris™ Ka-band Terminal

The Iris™ Ka-band Terminal is a compact, integrated spacecraft communications system designed for Low Earth Orbit missions where data latency matters. It combines a Ka-band radio, gimbal, parabolic dish, and waveguide into a single, space-ready terminal.

At its core is a high-data-rate Ka-band radio built for communications on LEO platforms. Iris enables spacecraft to relay data through SES O3b satellites, providing fiber-like connectivity from orbit to ground and significantly reducing delivery times.

### Key Benefits

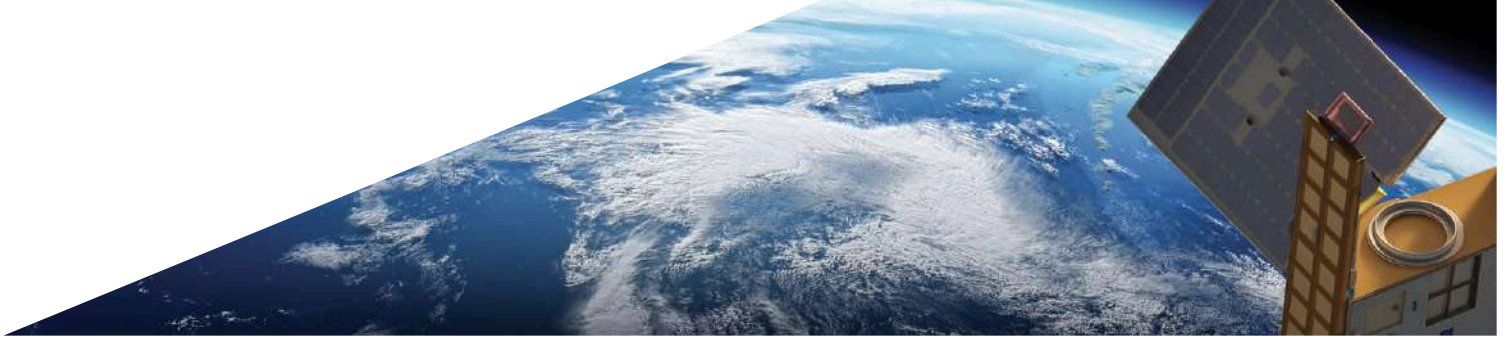
- **Low latency** for time-sensitive missions
- **High throughput** Ka-band communications
- **Compact, integrated design**

Ideal for missions supporting timely, actionable data delivery for operational decision-making.

### Performance

End-to-end throughput depends on transmit EIRP and antenna aperture. A representative configuration—35 cm dish with 1 W transmit power at the feed—achieves an average of ~10 Mbps to O3b. Higher data rates can be enabled with larger apertures and external high-power amplifiers (HPAs).

The system features a 2-axis (X/Y) gimbal paired with a 35 cm antenna, providing  $\pm 190^\circ$  elevation and  $360^\circ$  azimuth coverage. This wide field of regard enables LEO-to-MEO and LEO-to-GEO connectivity. The assembly includes resettable launch locks for secure deployment.



Component	Size	Mass	Power Rx & Track	Power, TX additional
Avionics/Radio	10 x 10 x 12 cm	< 1.5 kg	8 to 24 W TBD	1 W RF out
Gimbal	5 x 5 x 20 cm	< 3 kg	TBD (W)	TBD (W)
Parabolic Dish	35 cm diameter	<1.5 kg	N/A	N/A
Wave Guide	10 x 4 x 4 cm	0.3 kg	N/A	N/A



The IRIS Ka-Band Terminal comes with a radio, gimbal, and parabolic dish

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## LEARN MORE

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