



 leaf space



Space Connected Limits Gone



About Leaf Space

Leaf Space enables satellite operators to seamlessly communicate with their spacecraft and transfer mission data, anywhere, anytime.

Our flexible portfolio offers both ground-based and space-based connectivity options through shared or dedicated infrastructure, while always benefiting from Leaf Space's unique unified interface and transparent pricing.

Whether launching one satellite or scaling a constellation, we help you maximize connectivity, simplify operations and focus on your mission.

Today

your proven partner
for ground segment
operations

40+

ground
stations

20+

locations

400+

supported
satellites

37k

passes
every month

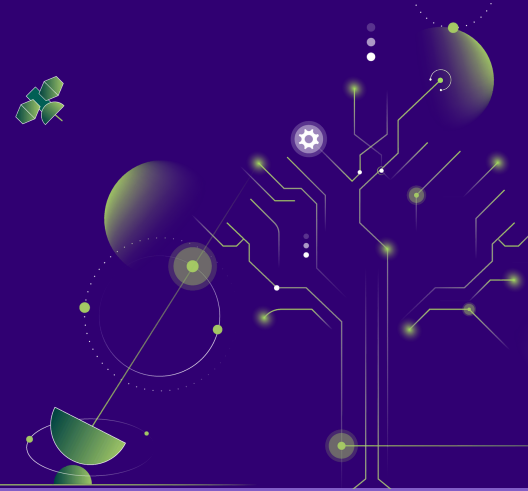
CORE SERVICES

ground- and space-based connectivity assets

TREENET

Always-on connectivity for space assets

- Continuous connectivity via federated mesh network
- Satellite live operations
- All-inclusive subscription



LEAF LINE

Multi-mission GS service

- Satellite access, scheduling & data delivery in one platform
- From automated orchestration to full control across a global network
- Multiple capacity access methods, from automation to customization



LEAF KEY

*Customer-dedicated
Ground Station*

Dedicated GS with any band frequency and aperture, fully integrated with Leaf Line services.



LEAF HOSTING

Infrastructure-as-a-Service

Hosting, deployment and maintenance on a selected number of Leaf Space owned sites.

FLEXIBLE, SCALABLE, TRANSPARENT

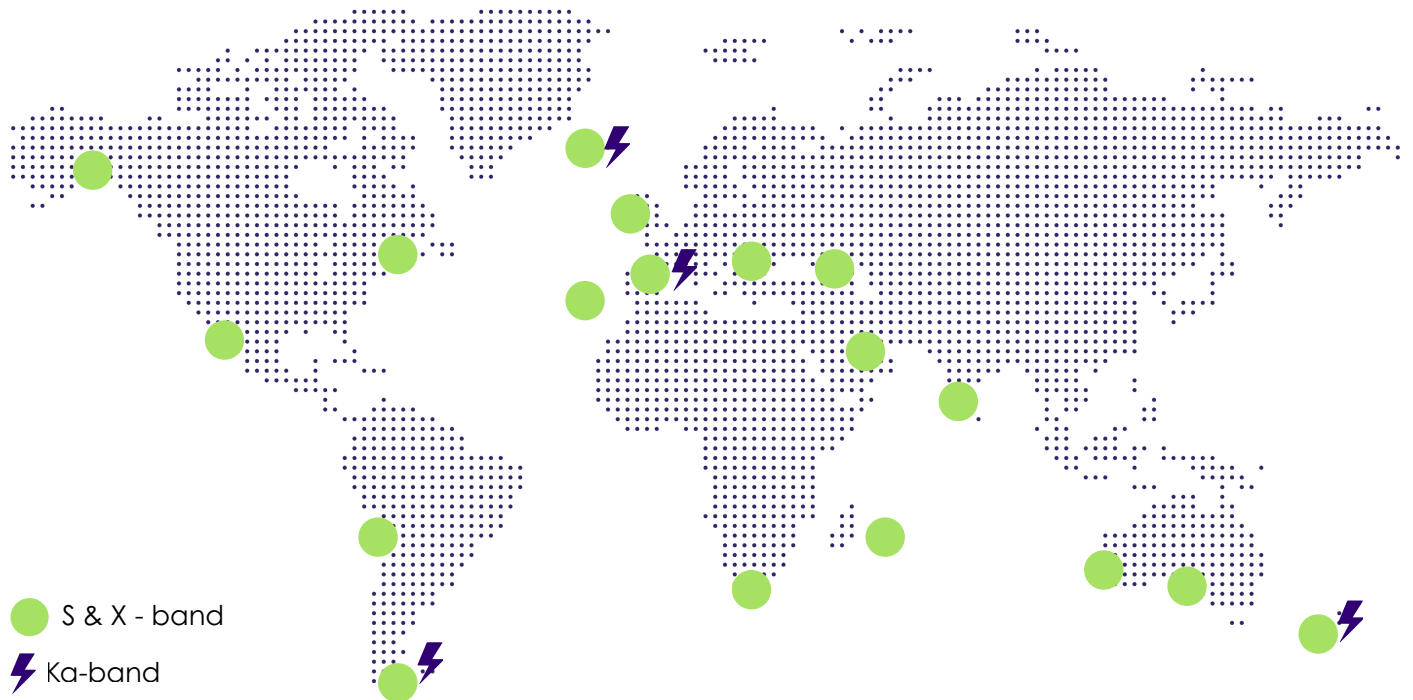
Space Connected
Limits Gone



LEAF LINE

the best way back to Earth

40+ Ground Stations in **20+** locations support **+400** satellites
37,000 passes per month with SLA > **99%**



Network Performance

Orbit	Passes / Day	Avg latency
SSO	61	15 min
45 deg	68	13 min
equatorial	14	93 min

*for a single satellite in a given orbit

GS Performance

	EIRP (dBW)	G/T (dB/K) @ 10° EI	Data rate*
S-BAND	50 dBW	13.0 dB/K	20 Mbps
X-BAND	-	26 dB/K	1200 Mbps
Ka-BAND	-	30.5 dB/K	10000 Mbps

*max data rates are coding scheme dependant

Leaf Line enables satellite operators to seamlessly manage all space-ground communications, from TT&C to high-throughput mission data downlink, through a single API.

The entire network is accessible via Leaf Portal, allowing operators to automate scheduling, book on-demand, or secure priority access to specific stations.

Guaranteed Compatibility

Any Signal
Any Radios
Any MCS



CAPACITY ACCESS METHODS

Access the Leaf Line network through multiple capacity access methods, from fully automated scheduling to priority access on dedicated stations. Choose the method that fits your mission phase and ConOps.

customization

*Book a Pass,
Anytime*

ON-DEMAND

Book residual network capacity via API, from 4 days to 5 mins before AOS.
First-come-first-served.

automation

*Smart Scheduling,
Seamless Operations*

SCHEDULER

Automated 96h conflict-free rolling schedule. Runs daily at 00:00 UTC. Guaranteed baseline capacity, no manual booking needed.

*Extended Planning Horizon,
Operations Your Way*

AHEAD-OF-SCHEDULE

Reserve passes up to 10 days ahead. Extended planning horizon for time-critical or variable ConOps.

*Your Rules,
Our Scheduler*

SERVICE REQUESTS

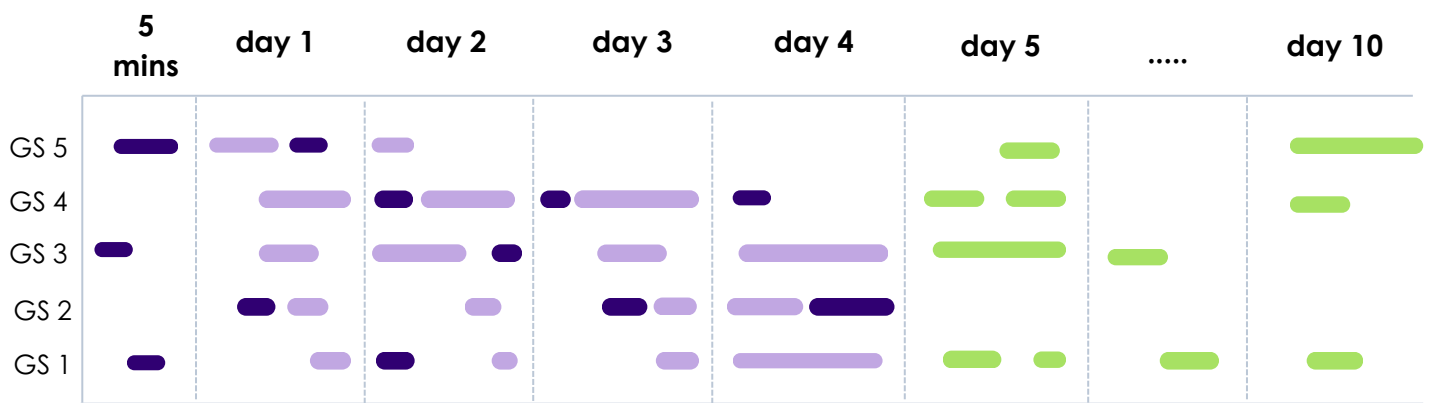
Custom scheduling constraints: Area of Interest, Time of Interest, Ground Station inclusion/exclusion. Feasibility-checked, guaranteed capacity.

*Dedicated Access,
Fully Integrated*

FIRST ACCESS

Exclusive antenna reservation. Priority capacity on selected stations, booked via the same Leaf Line API. All the benefits of dedicated infrastructure with service-like flexibility. No CapEx.





Scheduler

Nominal Operations
Rolling 4 days



On-Demand

Residual Network Capacity
4 days to 5 mins
before pass



Ahead-of-Schedule

Specific Passes
Up to 10 days in
advance



LEAF PORTAL

one interface, full control

Leaf Portal is the single operational workspace for the full Leaf Space experience. Manage missions, schedule passes, monitor performance, access support and handle account administration, all in one place. Leaf Portal works on top of Leaf Space APIs, giving you immediate access to every new feature as it's released.

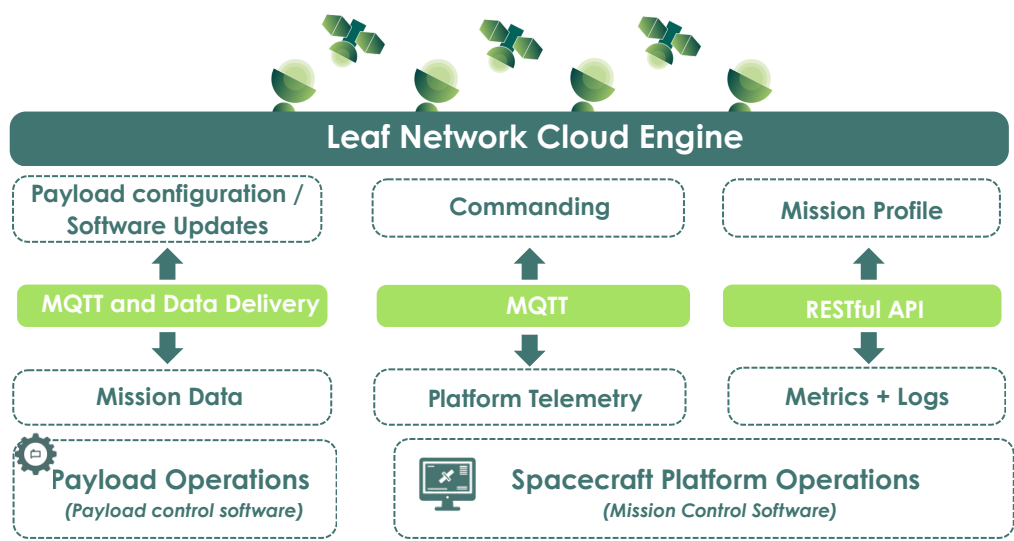
anytime, anywhere



INTERFACE & INTEGRATION OPTIONS

RESTful API

Satellite operators interact with the Leaf Line service through the Leaf Space API, a unique and unified interface that streamlines integration between the customer's environment and Leaf Space's infrastructure. Regardless of which ground station is used, all operations - data transfer, mission configuration, constraint settings, and quality log retrieval - are handled through this single API. This ensures a consistent, simplified experience across the entire Leaf Line network.

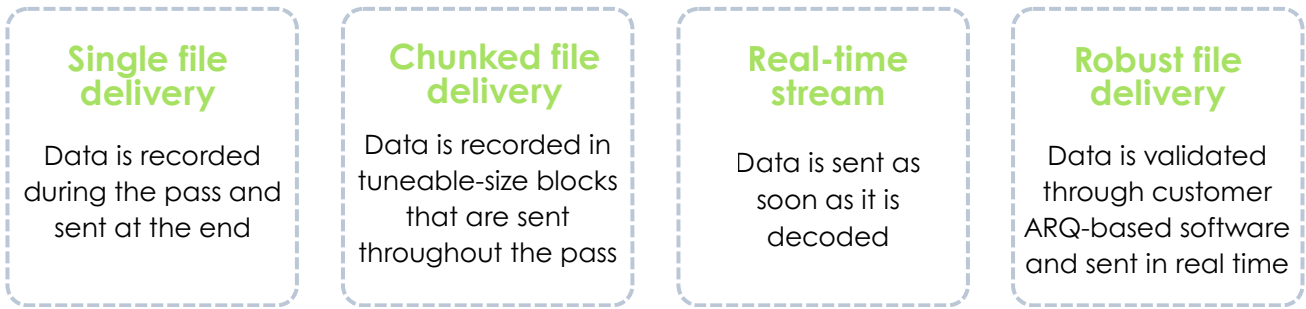


MQTT

Lightweight real-time protocol used for telemetry downlink and command uplink during passes. Single connection to the Leaf Line cloud broker, no per-station management.

DATA DELIVERY

Payload data decoded and delivered via UDP/TCP/mTLS (real-time) or S3/SFTP/FTPS (file). VPN options (OpenVPN, IPsec) for secure transfer. Choose the data delivery method that best matches your mission's latency and throughput needs:

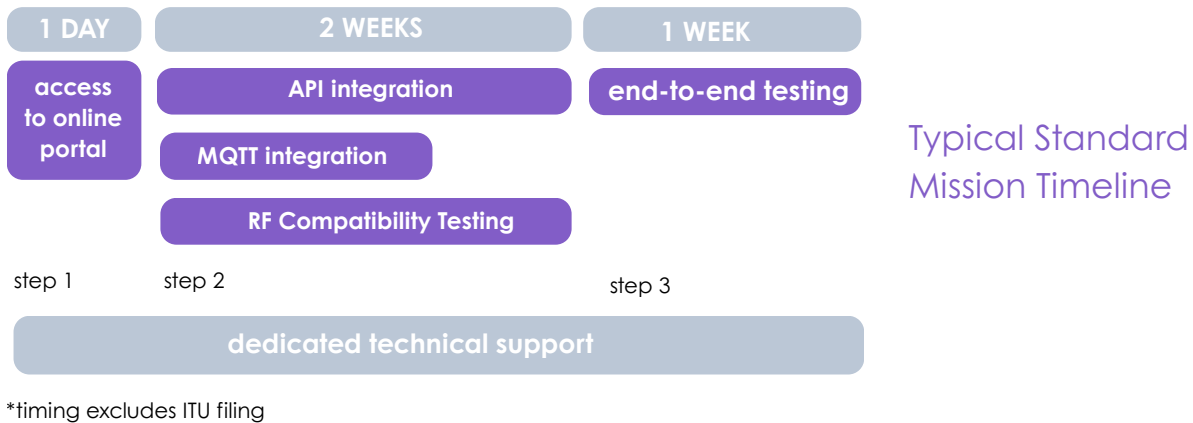


Via S3 buckets or dedicated FTP/SFTP streams

Dedicated TCP or UDP connection



ONBOARDING, SUPPORT & OPERATIONS



Self-Service Onboarding

Standard missions can now onboard in two weeks autonomously, via sandbox API documentation and automated compatibility checks. For complex or non-standard setups, our Mission Management Team guides you step by step through integration, RF validation and launch readiness.



Tailored Onboarding

Fully customized activation paths for non-standard missions, including additional RF/IQ testing, bespoke timelines, and dedicated engineering support aligned with mission complexity. Ground Support Equipment (GSE) available for compatibility testing and validation.



Licensing & Regulatory

Leaf Space manages all ground station RF licences — renewal included, no additional cost. Customer provides ITU filing details only.



Support

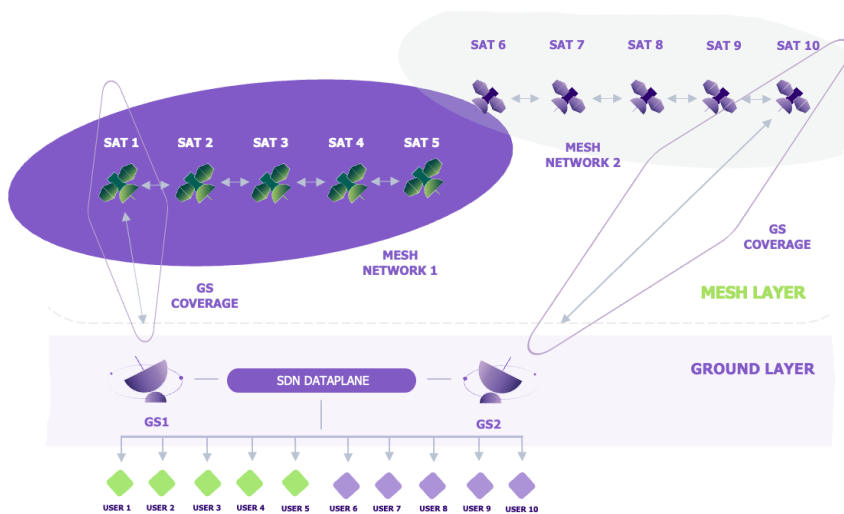
Dedicated Mission Manager supporting your mission throughout its entire lifecycle. Ticketing support available 12 hours per day, with acknowledgement times of less than one hour and an enhanced support offering currently evolving toward 24/7 coverage.

During LEOP, benefit from 48 hours of continuous on-deck support to ensure critical mission operations run smoothly.



TREENET

the future of connected space



TreeNet transforms every TreeNode equipped satellite into a relay node, creating a decentralized orbital mesh network that enables direct satellite-to-satellite communications and seamless access to the Leaf Line network worldwide.

TreeNode

A compact plug-and-play unit combining:

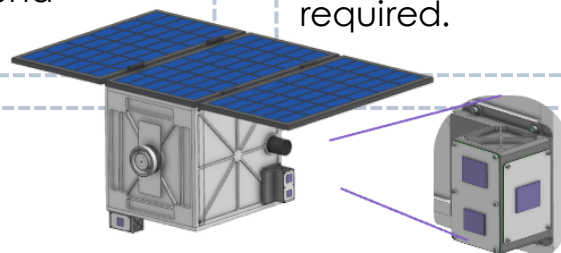
- S-Band radio
- Embedded data router
- Patch antennas for inter-satellite and space-to-ground links

Each TreeNode can route, transmit, and receive data across the network while connecting natively to Leaf Line ground stations, providing secure, IP-based, two-way connectivity whenever needed, without scheduling, pre-coordination, or dependency on individual ground stations.

A subscription-based service covering:

- Always-on connectivity
- Flexible data plans
- Spectrum authorization for ISL and ground communications
- TreeNodes provision

No upfront infrastructure investment, no spectrum licensing effort, and no dedicated relay satellites required.



TreeNet & Leaf Line:

Use TreeNet for:

- Real-time TT&C
- Direct tasking
- Metadata transfer
- Software updates

Use Leaf Line for:

- High-rate and low-rate communications
- Punctual, direct ground access
- Scheduled contacts via capacity access methods
- Pre-defined and dedicated communication opportunities

CORE VALUE PROPOSITION & PRICING

what you enable

Leaf Line

Multi-mission GS service

TreeNet

Always-on Connectivity

Flexible Service

> 99% SLA

flexible solution

Pioneer

Pay As You Go
We Take You to Space

- Self-Service Onboarding
- Standard automated capacity access
- Limited GS locations (up to 6)

Pathfinder

Fixed Short Mission Bundle
Just What You Need

- Tailored onboarding
- Customized capacity access
- Limited GS locations (up to 6)

Space Rider S

Monthly Plan
Small, Regular Needs

- Tailored onboarding
- Customized capacity access
- Extended GS locations access (up to 8)
- Options available
- Discounts apply

Space Rider M

Monthly Plan
Growing Mission, Full Flexibility

- Tailored onboarding
- Premium capacity access
- Extended GS locations access (up to 12)
- Options available
- Discounts apply

Space Rider L

Monthly Plan
Full Peace of Mind

- Tailored onboarding
- Premium capacity access
- Full GS network access
- All options included
- Discounts apply

powered by

Global Network

40+ GS
S / X / Ka,
Low latency

Leaf Portal

Best in class
UX/UI

Unique and Unified Interface

RESTful API for full
programmatic
access

Multiple Pass Booking Choices

Real-time Ops

Telemetry,
Commanding,
Live Control

Low Latency Data Delivery

Automated,
Flexible,
Cloud-ready

- **No CapEx, No Complexity:** No infrastructure investment, no hardware ownership required.
- **Scalable & Flexible:** Start with what you need and seamlessly expand as your constellation grows.
- **Transparent Pricing:** No hidden fees, with volume discounts and commitment plans designed for every budget. Pay only for what you use with per-minute billing.
- **All-Inclusive Service:** Every plan includes licensing, platform access, and technical support.
- **Dedicated Mission Support:** Work with the Mission Management Team from onboarding through operations, with 24/7 support during LEOP.



COMPANY EXPERTISE

Leaf Space was founded in 2014 and currently employs 60+ people. The company is headquartered in Milan, Italy and has offices in the USA through Leaf Space LLC entity.



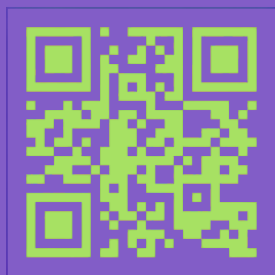
our EXCO





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Lewes DE 19958
USA





Italy
USA

leaf.space

Ground Segment as a Service