

Satellite Connectivity for Critical Infrastructure

A private satellite network as the primary link for remote assets — and the non-cellular backup for critical ones.

HiSKY is an Israeli communications company that provides a private satellite-based communications network for industries monitoring multiple assets and sensory devices. HiSKY's networks act as a primary source of connectivity for remote assets lacking terrestrial communication abilities, and a secondary source of connectivity for critical assets in need of a non-cellular backup solution.



NETWORK ENABLES

What the network enables

- ▶ Reduced — zero — asset downtime.
- ▶ Remote monitoring, management and control of critical assets 24/7/365.
- ▶ A small form-factor terminal directs communication through GEO satellites — minor movement of terminals caused by wind does not affect connectivity.
- ▶ Satellite voice calls available as an add-on to ongoing data transmissions.
- ▶ A unified network for all assets — fixed sensors and the on-the-move company fleet.

Key network features

The solution is hybrid, with automatic and independent switching between cellular and satellite networks — reliable, and designed to serve robust networks with thousands of end-users simultaneously.

- ▶ SLA-based contract with pre-defined accessibility to the network — eliminating network congestion or failure during critical times.
- ▶ Based on Ka/Ku-band frequencies, enabling thousands of end-users to work simultaneously and uninterrupted.
- ▶ Core HUB equipment based in international teleports — unaffected by local / regional crisis.

Terminal — Smartellite™ Dynamic, Ku/Ka

Backup — Optional dual-mode satellite & LTE

Management — Space Control (NMS)

NETWORK ARCHITECTURE

One network, fixed and mobile

User side

Terminals receiving data from the end-user device or application.

- ▶ Smartellite™ Dynamic terminal — vehicles and fixed sensors
- ▶ External LTE router — optional dual-mode satellite & LTE

Space segment

HiSKY-supported GEO satellites and teleports.

- ▶ Ka/Ku-band frequencies
- ▶ Core HUB equipment in international teleports

Management

Data routing to the client's own systems.

- ▶ Client servers — user data telematics for control, analysis and management of assets
- ▶ Space Control (NMS) — network monitoring and administration

HiSKY SYSTEM

Terminal, HUB, management. One unified system.

SMARTELLITE™ FAMILY

Smartellite™ Dynamic Ku/Ka band



A state-of-the-art, electronically steerable phased-array antenna locates the satellite automatically in milliseconds, with a built-in modem for low-to-medium data rates and fast acquisition. Also designed to meet the requirements of LEO satellites — a future-proofed solution.

HUB SYSTEM

HiSKY HBS modem + packet processor



NETWORK MANAGEMENT

Space Control NMS



All Smartellite™ terminals are fully monitored by our cloud-based / on-premises management platform. Developed in-house, it gives partners everything needed to manage their global HiSKY networks — configuration, monitoring, reporting, analysis, billing and more.

Optional dual-mode connectivity — satellite & LTE. An external LTE router lets the same terminal fall back to the cellular network where it exists, and stay on satellite where it does not.