



# Next-generation IoT Satellite Connectivity for Precise Agriculture

## Mobile

Small portable devices creates a WiFi hotspot even in the most remote locations, static or on-the-move

## AFFORDABLE

Cents per minute for voice / data and even lower for IoT

## CONVENIENT

Easily integrates with any IoT devices and fleet management systems

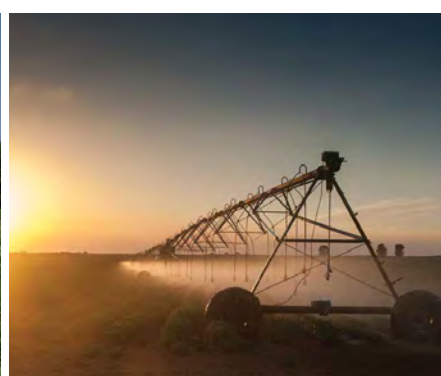
In a connected world, IoT systems have become crucial to the farming & agriculture industries. Today's farmers require constant and continuous connection and communication with their assets and field monitoring systems, including environmental monitoring, automatic irrigation

systems, harvest management and power consumption of machines and facilities.

hiSky's Smartellite™ terminals provide a real time connectivity solution to the growing demand for connectivity in farms in the most remote locations.

## Answering the challenges of the present and future farming

- Remote personnel voice calls and text messages via a dedicated smartphone app (Android & iPhone)
- Transmission of environmental conditions (precipitation, temperature, humidity, Co2, wind speed, etc.)
- Automatic Irrigation control and monitoring systems
- Greenhouse management
- Open field management
- Monitoring of power production / consumption of solar panels
- Harvest and crop management
- Increased food and crop productivity
- Fuel consumption, maintenance and location transmission for tracking of light / heavy machinery
- Robust terminals for challenging environments and extreme conditions
- On the move and fixed installation terminals
- Supports anti-theft and vandalism of security systems



hiSky is a Satellite Virtual Network Operator (SVNO), offering quick easy connectivity, even in the most remote locations on land, at sea or in the air.

## Smartellite **Dynamic**

The Smartellite dynamic includes a built-in, electronically steered, phased array antenna, which locates the satellite automatically in a matter of milliseconds, and a built-in modem designed for low-to-medium data rates and fast acquisition of satellite signals.

The Smartellite Dynamic enables seamless transitioning between satellites in the GEO and LEO constellation, voice and data connectivity are constantly maintained, even on the move.

Terminal band	Ku band	Ka band
Data Rates GEO (Typical)	4Kbps-100Kbps	4Kbps-100Kbps
Data Rates LEO (Typical)	0.5Mbps-4Mbps	0.5Mbps-4Mbps
Transmit Antenna Frequency Range	13.75~14.5GHz	27.5GHz to 30GHz
Receive Antenna Frequency Range	10.7~12.75GHz	17.7Ghz to 20.2Ghz



## Smartellite **Fixed/Static**

A small form-factor box that connects the subscriber's smartphone / IoT sensor / Tablet with the satellite network using a standard WiFi connection. The Smartellite Static includes an innovative Modem and Patch Antennas for communication with the satellite.

Terminal band	Ka band
Data Rates GEO (Typical)	4Kbps-100Kbps
Transmit Antenna Frequency Range	27.5GHz to 30GHz
Receive Antenna Frequency Range	17.7Ghz to 20.2Ghz

## hiSky 360

### Network Management System

hiSky developed it's own unique network management system (NMS) with a network operation center and a 24/7 hour help desk. **hiSky 360** is active 24/7 and has an operations portal which allows interface through which authorized subscribers or re-sellers can monitor and administer the hiSky platform and its components. It provides the capability to flexibly filter elements as well as group them by devices deployed with a specific satellite provider, device type, firmware version, etc. The operations portal provides the link between platform resources and subscribers enabling impact analysis of ongoing operations and planned maintenance.

