



Next-generation Satellite IoT Connectivity for Environmental Monitoring

IoT-based environmental monitoring is the consistent collection of measurements and data from our physical environment, using sensors and connected devices. Sensors embedded in irrigation systems, pipelines, tanks, weather stations, oceanic applications, and industrial equipment – anywhere on the planet – can detect temperature, moisture, water levels, leaks, and other physical properties.

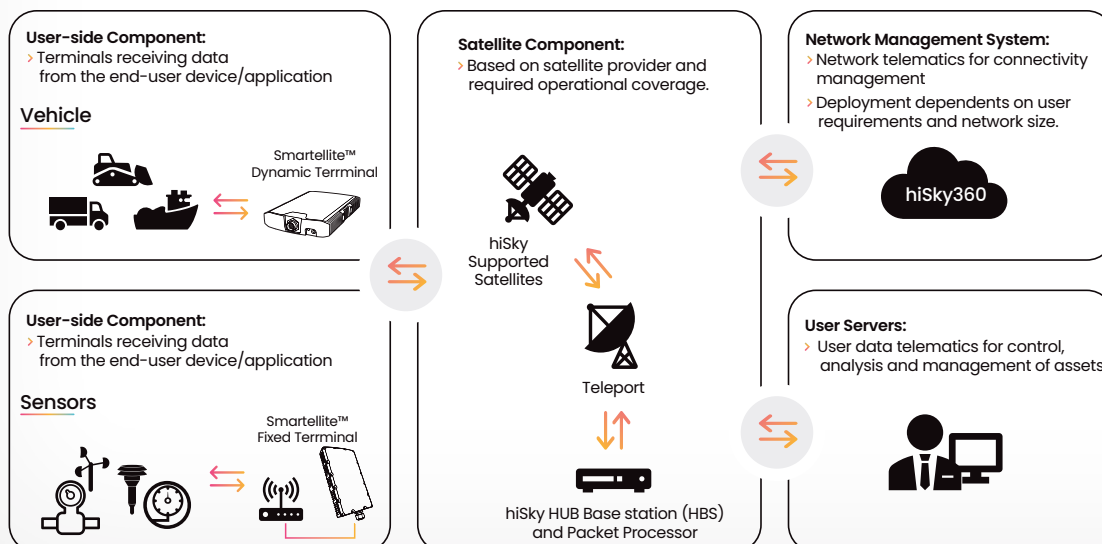
hiSky's IoT network for satellite communication meets the emerging need for environmental sensor connectivity, for real-time processing of critical data from remote sensors to data centres for analysis and action management.

Features

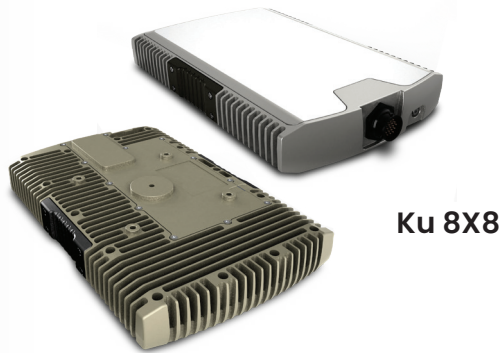
- > API IP integration with any sensory device, aggregator or gateway.
- > Low-cost satellite communication for mass sensory arrays.
- > Fully redundant network, including satellite constellation redundancy for minimal downtime.
- > Ku/Ka-band based connectivity for reliable connectivity of thousands of end-users simultaneously transmitting from a given region.
- > Voice & text communication over satellite from any smartphone.

Agile IoT Network

hiSky's open architecture enables easy integration with any device or application provider that suits your business needs, and integrates with any existing network to complement your coverage in all rural areas worldwide.



Smartellite™ Dynamic



Parameter	Ku 8X8	Ka 8X8
Transmit Frequency	13.75GHz – 14.5GHz	27.5GHz – 30GHz
Receive Frequency	10.7GHz – 12.75GHz	17.7GHz – 20.2GHz
Antenna Type	Electronically steered phased array	Electronically steered phased array
Scan Angles	-60° to 60°	-60° to 60°
EIRP @90°>	21dBW	20dBW
EIRP @30°>	17.5dBW	17.5dBW
Antenna Gain Rx & Tx@90°>	21dBi	20dBi
Antenna Gain Rx & Tx@30°>	17.5dBi	17.5dBi
Noise figure	3dB	3dB
Polarization for TX & RX	Linear H/V	Circular (R/L,R/R,L/R,L/L)
Communication Interfaces	Ethernet, WI-Fi, BLE, Serial	Ethernet, WI-Fi, BLE, Serial
Sleep power consumption	0.1W	0.1W
Idle power consumption	8W	8W
Rx only power consumption	18W	18W
Tx & Rx power consumption	40W	30W
Input Voltage Range	12 – 24VDC	12 – 24VDC
Operational Temperature	-20°C to +55°C *	-20°C to +55°C *
Dimensions (mm): H / W / D	42 / 286 / 187	42/ 244 / 141
Weight	2.2 Kg	1.4 Kg
Dust and water ingress	IP67	IP67
Vibration	SAE J1455	SAE J1455
Salt spray:	SAE J1455	SAE J1455
Certifications	CE, FCC	CE, FCC