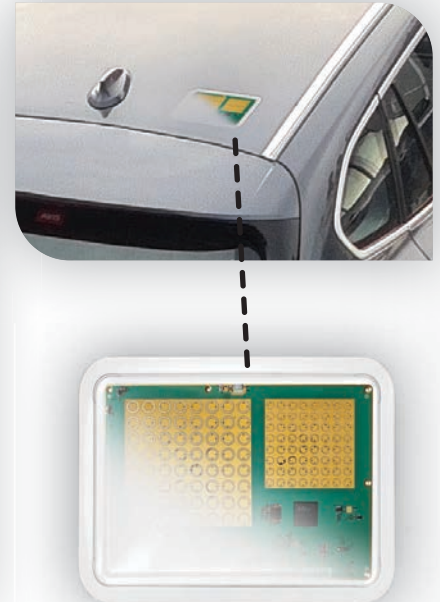


hiSky's Connected Cars Agenda



hiSky offers a revolutionary proposal for in-vehicle NTN (Non-Terrestrial Network) components, combining cellular, Wi-Fi, and broadband satellite solutions to enhance coverage and reliability for the next generation of vehicles.

hiSky's proposal is based on the commercially available Smartellite™ line of terminals. These field-proven ground terminals present a risk-free path for in-vehicle satellite terminals enabling constant connectivity over multi-orbit networks. With effective plans of further cost-reduction to fit the vehicle OEM market requirements, hiSky is supporting the connected cars agenda with design and testing partnerships with tier-1 OEMs, targeting per piece pricing of ~\$100.

hiSky's network architecture, with hardware and software agnostic to satellite networks, gives the OEMs their choice of GEO, MEO, and LEO constellations to base their connectivity on. hiSky's ability to provide a multi-orbit solution from a singular terminal opens an additional layer of service compliance and efficiency unique to the hiSky network.

Solution overview

Mass market deployment of connected vehicles primarily depends on cellular networks providing robust, high-speed connectivity. The connected cars agenda required NTN as a secondary layer of connectivity as cellular planning does not include most road mass globally.

OEMs define the NTN solution as expected to provide basic safety and telemetry needs such as e-Call, road safety, and vehicle telematics, with infotainment as a premium service delivered over satellite.

When planning an NTN solution for connected cars the large quantities of vehicles that are expected to be connected simultaneously at every given area is a leading factor. Only high bandwidth satellite communication channels (Ku-Band and Ka-band) have the capacity to support millions of simultaneous connections. Other leading factors taken into consideration are the bitrate per vehicle which will depend on network parameters, vehicle antenna size & weight, energy consumption, and satellite constellation. With all factors still dynamic, the planning towards an in-vehicle satcom antenna for connected cars starts now as the 2028-2029 tier-1 models take final form.

Technical Specifications

Following the requests from global Tier-1 manufacturers leading the NTN agenda, the hiSky solution currently includes the following specifications:

1. Silicon components capable of operating in 200°C ambient temperature.
2. NTN Terminal Power Consumption:
 - > Idle: < 1mA @ 12V
 - > Standby: 3W
 - > Rx: 16W
 - > Rx + Tx: 32W
3. Time to First Traffic: 10-50 seconds from cold boot.
4. NTN Terminal Mass: ~200g.
5. NTN Terminal Dimensions: 10cm x 25cm

hiSky's innovative approach to in-vehicle NTN connectivity solutions offers a reliable, scalable, and cost-effective solution for vehicle manufacturers to enhance connectivity globally with fully connected fleets.

