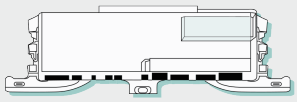
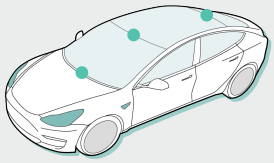
nVision 3A – Integrated Digital Smart Antenna

With the development of 5G technology, integration of RF, antenna and digital signal processing has become an industry trend.This solution comes with strong platform integration capabilities, featuring a digital, highly integrated and invisible design.

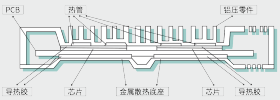
5G+C-V2X antenna in flat box



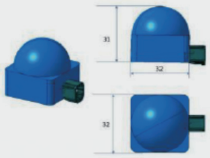
Suitable for different body, invisible installation



Specialized design for heat dissipation



A set of C-V2X split antennas



Technical Details

- Type and size: shark-fine: 260*160*15mm (bottom case) + 65mm high (shark fin); flat box: 280*150*30mm
- High Integrity:
  - 5G+C-V2X: applicable to 17 V2V/V2I standard scenarios and OEM custom scenarios, with Day2 scenario upgrade capability
  - TBOX function incl. connectivity, remote vehicle control, remote update, emergency assistance and roadside assistance, big data and safety function
  - Providing solution for digital key based on BLE or UWB
  - HD GNSS capabilities
  - Centimeter level high-precision positioning, C-V2X, camera and HD map algorithm fusion, L3 autonomous driving
  - Nearfield communication technologies: UWB, NFC, BLE, Wi-Fi
  - Tuner: AM/FM, DAB

Features

- **Improve communication performance**
  - RF, antenna and digital signal processing are integrated to effectively eliminate the loss caused by analog signal transmission in the cable
- **Flexible integration**
  - Two varients: the shark-fin design can integrate more antennas such as AM and FM
  - The flat design supports invisible installation, which is more suitable for the modern design of car body (for example panoramic sunroof)
- **Cost saving**
  - Save cost of wiring harness installation and management
- **Innovative structure design**
  - Solve the problems of high temperature, moisture resistance and electromagnetic interference caused by integration
  - Superior performance above the industry average ensures normal communication under extreme conditions and allows operating at 95 degree working environment

Applications

- Moving up the analog-to-digital conversion of wireless RF signals helps greatly enhance signal stability, reduce feeder loss, improve deployment flexibility, save the cost of wiring harness for customers, save more space, and make it easy to install and manage antennas