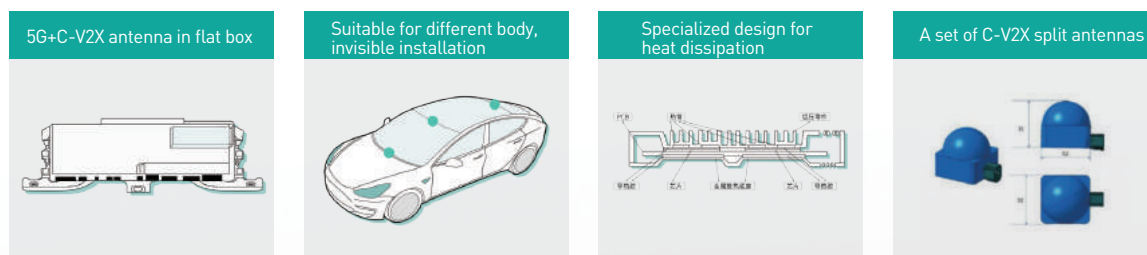


## ► JOYNEXT nVision 3A 5G+V2X Integrated Digital Smart Antenna Solution

This solution comes with strong platform integration capabilities. Featuring a digital, highly integrated and invisible design, it can provide users with such value-added functions as centimeter level high-precision positioning and Bluetooth / UWB smart key solutions, in addition to basic functions like 5GTBOX, 5G+C-V2X and Tuner.



### ► Tech Spec

- Type: Shark-fin and flat
- Size: Shark-fin: 260\*160\*15mm (bottom case) + 65mm high (shark fin); flat: 280\*150\*30mm; maximum about 390\*120\*30mm
- Weight: Shark-fin 700g, flat 500g
- 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 automated driving
  - Nearfield communication technologies: UWB, NFC, BLE, Wi-Fi
  - Tuner: AM/FM, DAB

### ► Feature Overview

- **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**
  - Available in two types: shark-fin and flat
  - 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

### ► Future Applications

- With the development of 5G technology, integration of RF, antenna and digital signal processing has become an industry trend. 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.
- JOYNEXT's integrated digital smart antenna solution has been installed in millions of vehicles of world renowned OEMs, and is expected to be put into mass production by 2024