5G Module

SIM8202G-M2 is a small-size multi-band 5G module with a new four-antenna design. Its package dimensions are 30*42mm, which can better meet the needs of terminal products with higher requirements on size. So far, SIMCom has launched SIM8200EA-M2, SIM8200CE-M2, SIM8200G, SIM8300G-M2 and SIM8202G-M2, forming a quite comprehensive product line. All 5G modules support NSA/SA networking, cover all frequency bands of major network carriers worldwide, and are compatible with a variety of communication protocols, which are quite suitable for high-rate scenarios such as telemedicine and distance education, etc.

		SIM8200EA-M2	SIM8200G	SIM8300G-M2	SIM8202G-M2
Size		30.0*52.0*2.3 mm	41.0*43.6*2.8 mm	30.0*52.0*3.8 mm	42.0*30.0*2.3 mm
Band	5G NR	n1,n2,n3,n5,n7,n8,n12,n20,n25,n28,n40,n41,n66,n71,n77,n78,n79			
	TE - TDD	B34/B38/B39/B40/B41/B42/B43/B48			B34/B38/B39/B40/B41/B42/B48
	LTE - FDD	B1/B2/B3/B4/B5/B7/B8/B12/B13/B14/B17/B18/B19/B20/B25/B26/B28/B29/B30/B32/B66/B71			
	WCDMA	B1/B2/B3/B4/B5/B8			
	mmWave			n257/n258/n260/261	
Data Transmission	Sub-6G	4Gbps(DL)/300Mbps(UL)	4Gbps(DL)/450Mbps(UL)	4Gbps(DL)/450Mbps(UL) mmWave6 Gbps(DL)	2.4Gbps(DL)/500Mbps(UL)
	LTE CAT22	2.4Gbps(DL)/150Mbps(UL)	2.4Gbps(DL)/200Mbps(UL)	2.4Gbps(DL)/200Mbps(UL)	1Gbps(DL)/200Mbps(UL)
	HSPA+				42Mbps (DL)/5.76Mbps(UL)
Certification		RoHS Compliant / CCC / CTA / SRRC / REACH / CE / FCC / GCF			
Application Scenarios		AR / VR / CPE / 5G Drone / 5G Robot			

5G Robot

SIMCom 5G modules have been used in 5G cloud service robots to improve the quality of human life. Cloud robots and cloud intelligent robots are the best carriers to practice the advanced technical features of 5G networks, such as high bandwidth, massive connectivity and network slicing. Through 5G modules, loads of image, video and sensor data captured by the robot can be transmitted to the intelligent brain in the cloud, so as to improve the intelligence level and service capability of the robot, and achieve difficult applications such as motion intelligence and visual feedback. Cloud service robots are gradually becoming an important service force in community, medical care, retail and other scenarios

The home robot is equipped with SIMCom's SIM8200EA-M2 module, which combines with mobile phone, cloud, and robot. It support remote management and can be a good caretaker for the old people as it can monitor their health in real-time.

Advantage：　● High bandwidth　● Massive connectivity　● High Speed

5G live broadcasting box

Live broadcasting allows users to get closer to reality and the scene. However, in the 4G era, the signal available is limited in live broadcasts, especially live broadcasts of large galas or sports events. The content needs to be sent to the broadcasting van from the camera, and then sent to the studio control room through the signal transmission system after technical processing. When the signal is interrupted, the picture is jammed. Satellite broadcasting vans require lying fiber-optic cables on site, which is very costly and manpower consuming.

SIMCom and its partner have launched a 5G live broadcasting box based on SIMCom 5G module SIM8200EA-M2. Thanks to the high bandwidth and low latency of 5G, live broadcast images can be quickly transmitted through the 5G module, reducing the latency time to the level of milliseconds. No need to lay fiber-optic cables on site. The live broadcasting box can easily upload data through the module and broadcast 4K or even 8K HD videos. Meanwhile, it is small in size, so it can be used in areas that couldn't be reached by satellite broadcasting vans before, thereby broadcasting anytime and anywhere.

Advantage：　● 4K /8K HD video　● Lower latency　● Multi-scene application

◀ 5G Robot　▲ 5G live broadcasting box　▼ 5G Industry Router
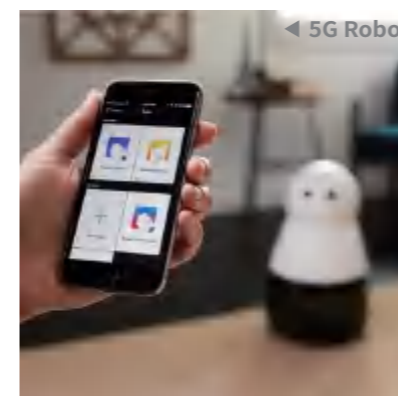
5G Industry Router

In the 5G era, smart homes, smart cities, smart transport and smart manufacturing will be more operable and no longer only exist in spoken or written words. We can never achieve these revolutions without the development of network technology, including the router tech. Routers, which provide easy connectivity, have become essential devices in network nodes.

Industry router is a fundamental staff in the wireless communication. SIMCom 5G module SIM8200EA-M2 has been used in the 5G industry router, it can use public 3G/4G/5G networks to provide users with long-range wireless big data transmission. The 5G industrial router adopts high-performance industrial 32-bit communication processors and industrial wireless modules and an embedded real-time OS is operating as its software support platform. With a RS232 (or RS485/RS422), 4 Ethernet LANs, an Ethernet WAN and a WIFI interface, it can connect to serial port devices, Ethernet devices and WIFI devices simultaneously, realizing transparent data transmission and routing functions.

Advantage:　● Improve the speed of data transmission　● Higher stability　● Multi-scene applications

4K/8K HD Videos

Limited by function, it's hard for traditional medical communication systems to realize all-round remote communication and diagnosis and treatment, making advanced medical knowledge unable to be quickly spread and medical resources unable to serve more patients. Therefore, telemedicine, videoconferencing, distance academic communication and teaching videos have become the development direction for medical informatization and function improvement.

The HD video transmission product DS8000 5G+4K/8K ULTRA using SIMCom 5G module SIM8200EA-M2 has been launched. This product combines 4G, 5G, Wi-Fi 6, H.265/VP9, AI and other technologies. Depending on the millisecond end-to-end latency, 10 Gbit/s throughput and a million connections per square kilometer of 5G, it can be used in not only medical service, but also ULTRA-HD live streaming, education and training, intelligent transportation, industrial manufacturing, videoconferencing, and outdoor screens.

Advantage：   ● Lower latency   ● Multi-scene application   ● 4K/8K HD Videos

▲ 4K/8K HD Videos
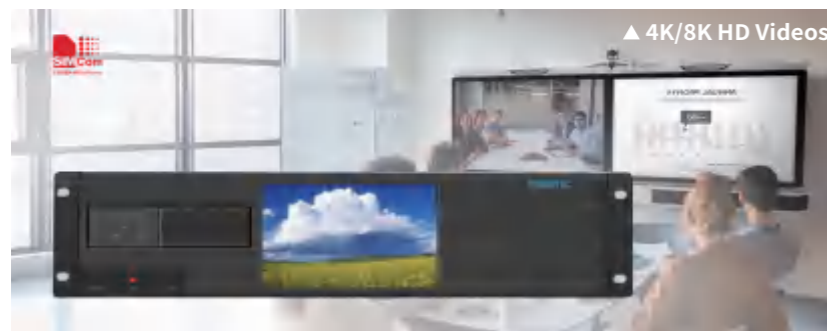
▼ 5G CPE

5G CPE

The new-generation 5G industrial gateway /CPE products are equipped with SIMCom 5G modules capable of fast data transmission and powerful data processing and computing. SIMCom 5G modules support local data storage, analysis and decision making. The open system design supports secondary development and third-party SDK. With a variety of interfaces, they adopt complete industrial design, featuring a wide operating temperature range, good dustproof, waterproof and oil proof performance and resistance to strong electromagnetic interference. They are suitable for different application scenarios, and are widely used in smart factories, smart medical systems, driverless cars, smart cities and other fields.

Advantage：

● Simultaneous access to 4G, 5G and wired networks

● 2.4G/ 5.8G dual-frequency WiFi, full signal coverage

● Multiservice access

5G Laptop

5G laptops can connect to the Internet on their own, instead of relying on Wi-Fi/ hot spots, so people can work anywhere, enjoying real mobile cloud office. The low latency and high bandwidth brought by 5G technology can greatly promote the popularity of cloud office. Some functions of laptops will move to the cloud, further reducing the size of laptops and making them easier to carry around. Meanwhile, a lot of computing will be done in the cloud over 5G networks, so laptops will become thinner. Higher laptop efficiency will also extend the battery life, allowing you to work all day on with an uninterruptible power supply for real.
The low latency of 5G means that the time needed for a laptop to communicate with another device over the network will be greatly reduced, improving the program response speed and game experience, particularly large games.

Advantage：

● Longer battery life

● Lighter and thinner

● Faster Internet speed, real mobile cloud office

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Automotive Module

SIM7800E is an automotive grade module based on Qualcomm's MDM9628 LTE CAT4, available in LGA package with 34x40x2.9mm form factor. With downlink up to 150Mbps and uplink up to 50Mbps, SIM7800E supports the frequency bands of China's three major telecom operators. Designed with the latest network security in mind, SIM7800E can meet automotive security architecture standard, leveraging multiple security mechanisms to guarantee the communication security between the vehicle and the Internet. SIM7800E also allows customers to carry out software secondary development according to market needs and has reserved high-speed Ethernet interfaces to enable high-bandwidth network communication with in-vehicle intranet gateways.

	SIM7800E	SIM8100
Size	34.0*40.0*3.1 mm	30.0*32.0*2.75 mm
Data Transmission	150Mbps (DL) /50Mbp(UL)	3GPP Release 14 CV2X PC-5 mode
Band	LTE-TDD B38/B40/B41 LTE-FDD B1/B3/B5/B7/B8/B20 UMTS/HSPA+ B1/B5/B8 GSM/GPRS/EDGE 900/1800 MHz	B47, B46D
Certification	RoHS / REACH	TBD
Application Scenarios	Vehicle Tracking / OBD / Vehicle DVR / T-Box	

4G T-Box In-Vehicle Equipment

According to IHS forecasts, the global automotive electronics market is expected to reach US$300 billion by 2020 with enormous growth potentials. From the product perspective, automotive electronics application has been focusing on powertrain, chassis and car body over the last decade. In the future, Internet of Vehicles will no longer be confined to vehicle awareness. The focus will shift to smart terminals connected to extranets.

With increasing demands from car owners, the majority of new vehicles will be equipped with networking capabilities in the future. The penetration rate of vehicle interconnectivity will increase year by year. With complicated and harsh in-vehicle environment, this requires high standards on equipment and components, and core components need to meet automotive grade requirements. Manufactured strictly according to the IATF 16949:2016 quality standard, SIMCom's SIM7800 automotive grade modules can provide OEMs and tier-1s vendors with a more stable and reliable solution.

Advantage: ● More stable and reliable ● Multiple security mechanisms ● Support secondary development

Advantage: ● Real-time data collection ● Enhanced early warning ● Improved safety

Advanced Driving Assistance System (ADAS)

Advanced Driving Assistance System (ADAS) makes use of various vehicle-mounted sensors (MMW radar, laser radar, monocular\ binocular cameras and satellite navigation) to sense the surrounding environment, collect data, identify, detect and track static and dynamic objects at any time during the process of driving, systematically compute and analyze collected data coupled with the navigation map data, so as to let the driver perceive possible dangers in advance, effectively increasing driving comfort and safety.

ADAS with a built-in SIMCom module SIM7800E can effectively collect vehicle condition information and provide lane-changing assistance, lane departure warning, ACC, tire pressure monitoring, etc., to effectively reduce driving risks and ensure personal safety. If the driver is found to have dangerous driving behaviors such as fatigue driving, smoking or talking on the phone, it will give warning and obtain evidence.

Smart Module

SIM8950 module is equipped with Octa-core Coretex-A53 @ 1.8GHz processor, with support for WUXGA display, up to 21M-pixel camera and LTE Cat4 150 DL/50 UL network bandwidth capabilities. With WIFI/BT/GNSS features, its high level of integration will greatly reduce customers' overall design cost during product development. It will also reduce the design difficulty of radio frequency components. In terms of software, it supports the Android operating system. Customers can carry out secondary software development based on their own scenario needs so as to accelerate time to market.

	SIM8950X
Size	44.1*45.6*2.8 mm
Data Transmission	150Mbps (DL) /50Mbp (UL)
Band	LTE-FDD B1/B3/B5/B8 LTE-TDD B34/B38/B39/B40/B41 UMTS/HSDPA/HSPA+:B1/B8 TD-SCDMA:B34/B39 GSM/GPRS/EDGE B3/B8
Certification	RoHS (TBD)
Application Scenarios	Vehicle Tracking / OBD / Vehicle DVR / T-Box

In-Vehicle Entertainment Central Control Unit

With the prosperous development of the automotive industry and the transport industry, in-vehicle infotainment system is expected to become a highlight of future vehicles, providing the most useful traffic information and entertainment service anywhere anytime, including navigation, video and audio streaming, and network connectivity. More and more automakers believe in-vehicle entertainment central control system will become one of their biggest selling points. It's not just listening to the radio and music, but also organically integrating in-vehicle audio and video, map navigation, network service and driver assistance into the in-vehicle entertainment central control system. With more multimedia services being integrated into the in-vehicle infotainment system, this will greatly enrich such features as in-vehicle news and navigation. These features will in turn facilitate in-vehicle infotainment system's market development and technology revolution. As for consumers, compared to traditional powertrain technology, consumers will pay more attention to intelligent connectivity. As per capita income grows, demands for vehicle customization will also continue to increase. Therefore, demands for in-vehicle infotainment system will grow accordingly.

OEMs are facing enormous pressure in terms of the cost to transform their medium to low-end models into intelligent vehicles with interconnectivity. SIMCom has collaborated with its partners to develop highly integrated and cost-effective in-vehicle entertainment central control unit based on the SIM8950 platform, with support for WiFi hotspots, Bluetooth, navigation, music streaming and other features.
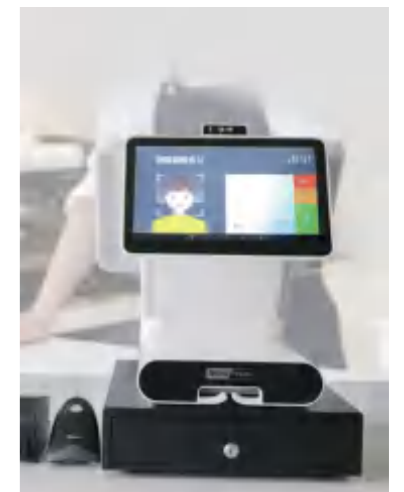
Smart Module

SIM8950LH is a multi-mode LTE module which is based on Qualcomm SDM450. It has a complete multi-band LTE-FDD/TDD/TD-SCDMA/DC-HSPA+/HSPA/UMTS/EVDO/EGDE/GPRS/GSM/GNSS with uplink rate up to 50 Mbps and downlink rate up to 150 Mbps. With powerful processor design, customers can benefit from these small, economical and efficient products. It's ideal for smart retail, smart payment, graphic display, etc.

	SIM8950LH
Size	44.1*45.6*2.8 mm
Data Transmission	150Mbps(DL)/ 50Mbps(UL)
Band	LTE-FDD B1/B3/B5/B8 LTE-TDD B34/B38/B39/B40/B41 UMTS/HSDPA/HSPA+ B1/B8 TD-SCDMA B34/B39
Certification	CCC
Application Scenarios	Smart Retail/Smart Payment/Smart Security

◀ **In-Vehicle Entertainment Central Control Unit**

▼ **Smart Payment**

Smart Payment

Alipay Box Dragonfly F1 is a device terminal that combines Alipay Cloud's face recognition function and IoT technology. SIM8950LH module has been used in this device for data transmission. Alipay Box Dragonfly F1 combines voice broadcast, password keypad, and advertising electronic poster, face recognition payment, scan code payment and other functions. Compared with traditional payment methods, with the addition of biometrics and facial recognition, smart payment has enabled convenient self-service marketing of "no cash, no mobile, online order and offline pickup", giving consumers a hands-free experience. With cashless payment, there is no need for consumers to withdraw money and for cashiers to give change. This will improve the efficiency of daily operations, avoid cash being stolen, eliminate the process of cash counting, and effectively help companies "reduce cost, increase efficiency and improve experience".

Advantage： ● Higher speed transmission ● More amusement choices ● Conceive a better Life

Advantage： ● Support AI face recognition ● More convenient and faster ● Increased security

4G Module

SIM7600G-H series is the LTE Cat 4 module which supports wireless communication modes of LTE-TDD/ LTE-FDD/HSPA+/GSM/GPRS/EDGE etc. It supports maximum 150Mbps downlink rate and 50Mbps uplink rate.

	SIM7600G-H
Size	30.0*30.0*2.9 mm
Data Transmission	150Mbps(DL)/ 50Mbps(UL)
Band	LTE-TDD：B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19/B20/B25/B26/B28/B66 LTE-FDD：B34/B38/B39/B40/B41 WCDMA：B1/B2/B4/B5/B6/B8/B19 GSM：850/900/1800/1900MHz
Certification	RoHs/REACH/CCC/TA/CTA
Application Scenarios	Smart Payment / Smart Industry / Smart Agriculture / PoC

Smart Module SIM8950LH

Smart Elevator

Elevator has provided lots of convenience to us. However, it can have accidents and people can get injured accidently. How to improve the safety of elevator has become a social concern. Some experts believed that establish elevator files, carry out big data analysis and have safety hazard warning can be useful to improve the reliable operation.

A leading elevator enterprise has cooperated with SIMCom to create the smart elevator. SIMCom's 7600G-H, SIM7100X and SIM800C modules are well used in the smart elevator. Through the connection to the main control panel of the elevator, the original operation data of the elevator is collected. It can provide real-time monitoring and safety hazard warning. If there is an emergency, it will send the notification to people timely, so the efficiency of emergency rescue can be improved. Besides, the smart elevator also can achieve predictive maintenance analysis, fault warning and maintenance notice.

Vending machine + Power bank

Power Bank brings big convenience for people who need to charge while travelling. With the big display screen, merchants also can do product promotion by power bank at a lower cost.

An all-in-one advertising power bank equipped with SIMCom's smart module SIM8950LH, which also combines the function of a vending machine. Consumers only need to scan the code; product purchase can be done easily. SIM8950LH also supports commercial display, which allows merchants to display advertisements and provide selling service at the same time, to achieve the maximize profit.

Advantage：

- Remote management
- High data transmission
- Lower cost

Advantage：

- Reduce the rate of accident, improve safety
- Accurate fault warning
- Extended elevators' service life

Smart Grid

SIMCom has cooperated with one leading electricity company, and its SIM7600G-H module has been successfully applied to the Distribution Automation System, helping realize the real-time monitoring and smart operation of electric power. When a fault occurs, the fault information is sent through the modules to the master station. Then the later identifies the fault point and the current condition according to the information received. At the same time, an alarm goes off to inform relevant staff to get to the scene immediately. Thanks to the information system and smart system, staff are able to find out the fault point quickly, which saves patrolling personnel and fault handling time, making power supply more reliable and stable.

Advantage： ● Accurate points of faults ● Reduce the handling time of faults ● Cut down the labor cost

Battery Management System for Electric Vehicle Charging

As an important means of transportation, electric vehicles are widely used by consumers for daily commuting and recreation. However, power battery always can have risks.

The Battery Management System (BMS) with SIM7600G-H can be a good solution for power battery. he BMS accurately estimates the remaining battery charge of the power battery pack to ensure that the SOC is maintained within a reasonable range and thus prevent damage to the battery due to overcharging or overdischarge. It also can facilitate rider positioning for takeout or delivery industry and keeps driving record online.

Advantage： ● Dynamic monitoring ● Accurate estimation ● Creating a Battery Profile

IoT-based System for Real-time Monitoring of Bridge Displacement

Bridges are the veins of modern transportation. It is important to ensure not only smooth traffic under a bridge, but also safety of cars on it. However, any bridge is impacted by external factors during construction and service, which will lower its functionality and safety. Traditional monitoring methods are time consuming, labor intensive and delayed.

By embedding several sensors in a bridge, for example, those for monitoring bridge displacement, in combination with wireless communication technology, data about the bridge status can be timely transmitted to a platform for central processing. Upon any risk, an alarm is automatically sent to alert related parties for quick repairs to prevent accidents. Working with Jiangsu Zhonglan Intelligent Technology Co., Ltd., SIMCom has launched sensors for monitoring bridge displacement equipped with LPWA and 3G and 4G communication modules, for real-time monitoring of bridges. Different types of sensing equipment are embedding in a bridge, a data acquisition node/gateway and a real-time monitoring platform are established, the monitoring data are collected by SIM7020G, a communication module based on the low-power wide area network, and then transmitted to the acquisition node. SIM7600G-H, a 4G module, transmits the data to the platform layer for storage, processing and analysis. Quick response is thus made possible based on the analysis results.

Advantage：

● Real-time monitoring

● Report potential hazards

● Reduce labor input and improve monitoring accuracy

Smart Truck Tracker

Trucks have been a problem for city management. Over-height, overload, dropping earth along the road, running red lights, frequent accidents, and random dumping have become the problem tags for "crazy trucks". They not only damage urban environment, but also threaten road safety. Meanwhile, oil theft by truck drivers is also a problem for their employers.

The Smart Truck Tracker can track, locate and monitor trucks in real time all the way. The built-in 2G module SIM808 and 4G module SIM7600G-H enables the tracker to switch between 2G and 4G, ensuring the truck's location can be effectively monitored with different network signals. The truck's condition can be uploaded in real time. The truck's real-time running track, driving speed, parking/driving state, tipping state, delivery times and other information can be seen in the background system for convenient management. Meanwhile, the system will immediately report to the police as soon as the truck has illegal behaviors such as illegal unloading.

Advantage：

- Flexible switch between 2G and 4G
- Real-time location tracking
- Enhanced management efficiency

4G DTU

DTU (Data Transfer Unit) is a wireless terminal device that converts serial port data into IP data or IP data into serial port data for transmission through wireless communication networks.

Industrial DTU supports a variety of communication protocols, making large-scale networking easy to achieve. It also supports heart beat monitoring, with higher operation maintenance efficiency, at lower costs. M2M cloud platform management enables remote fault diagnosis, maintenance and upgrading without leaving home. With multiple interface options, it's compatible with all serial slave computers. Its industrial quality guarantees 7×24h stable transmission. Scientific appearance design makes the product small and lightweight, with no installation space requirements. The industrial DTU adopts the SIMCom 4G module SIM7600G-H, which is a core component of DTU.

Advantage：

- Achieving large-scale networking
- A variety of communication protocols
- Remote fault diagnosis

Cat.1 Module

The A7670 series is the LTE Cat 1 module which supportswireless communication modes of LTE-TDD/LTE-FDD/GSM/GPRS/EDGE. It supports maximum 10Mbps downlinkrate and 5Mbps uplink rate.

The A7670 series adopts LGA form factor and iscompatible with SIM7000/SIM7070 series(NB/Cat Mmodules), and SIM800A/SIM800F(2G modules), whichenables smooth migration from 2G/NB/Cat M products toLTE Cat 1 products, and greatly facilitates morecompatible product design for the customer needs.

	A7670X
Size	24*24*2.3 mm
Data Transmission	10Mbps (DL) /5Mbp (UL)
Band	LTE-FDD B1/B3/B5/B8 LTE-TDD B34/B38/B39/B40/B41 GSM 900/1800MHz
Certification	CCC*/TA*/CTA*
Application Scenarios	Tracker / Poc / Smart Industry
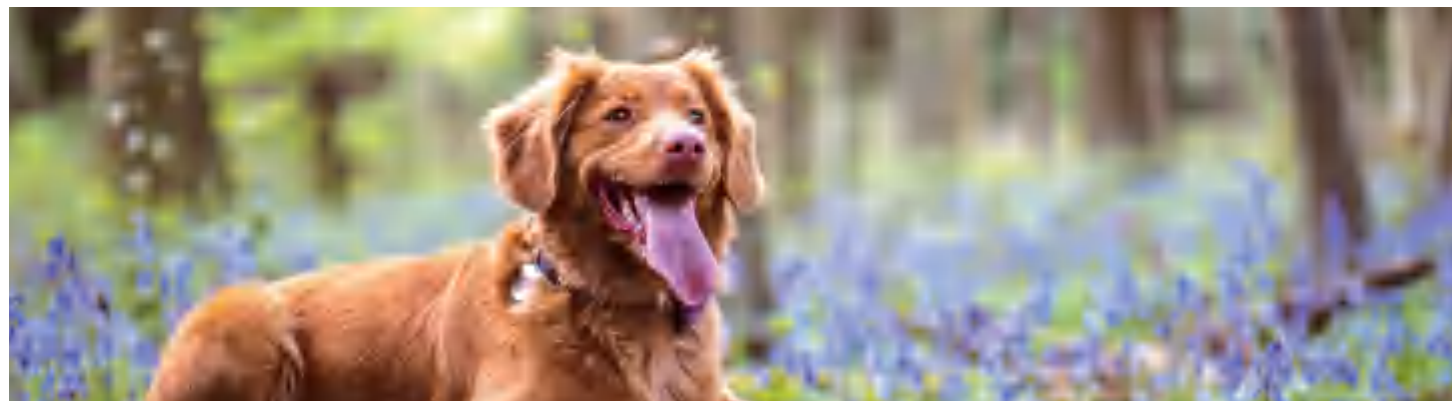
Pet Tracker

Pets play an important role in the family. However, it is not uncommon for pets to go missing. A pet locator solution which based on SIMCom's Cat.1 module A7670X has been developed successfully, which provides precise positioning and keeps pet trackable anytime. Pet tracks can be transmitted to the background management system via the A7670X, allowing people to check the exact location of their pet on the computer or mobile phone. Meanwhile, it supports trace playback which allows you to easily find your pet's secret haunt.

Advantage：

- Provide precise positioning
- Support trace playback
- Keep pet trackable anytime

shared chargers, shared umbrellas, shared bikes and shared coffee machines

The emergence of sharing economy has greatly reduced the cost of both supply and demand, and greatly improved the efficiency of resource matching and allocation. Applications such as shared chargers, shared umbrellas, shared bikes and shared coffee machines have appeared one after another.

SIMCom A7670X sharing economy solution can ensure fast and stable data transmission to the background, enabling convenient remote management for suppliers. Meanwhile, consumers only need to scan the code to use the products they need, simple and fast. Suppliers can also adjust their product strategies according to the obtained data and information to maximize profits.

Advantage：

- Self-service code scanning payment reduces labor cost
- Remote management improves operational efficiency
- Multi-scenario application

NB-IoT module

SIM7020 is a multi-band NB-IoT wireless communication module that adopts 42 PIN LCC packaging, which has a variety of hardware interfaces, including the serial port, GPIO, ADC and so on. Therefore, it's highly scalable, providing great convenience for product development. Besides, SIM7020 package is compatible with the SIM800C module, so it can shorten customers' R&D time as much as possible and speed up their launching of products on the market.

	SIM7000A/E/JC	SIM7020	SIM7060G	SIM7070G	SIM7090G
Size	24.0*24.0*2.6 mm	17.6*15.7*2.3 mm	24.0*24.0*2.6 mm	24.0*24.0*2.3 mm	14.8*12.8*1.8 mm
Band	A:LTE-FDD B2/B4/B12/B13 (EMTC&NB-IoT) E:LTE-FDD B3/B5/B8/B20/B28 GPRS/EDGE 900/1800/MHz JC:B1/B3/B5/B8/B20/B26 (no GPRS)	B1/B3/B5/B8/B20/B28	B1/B2/B3/B4/B5/ B8/B12/B13/B17/ B18/B19/B20/B25/ B26/B28/B66/B70/B71	B1/B2/B3/B4/B5/ B8/B12/B13/ B18/ B19/B20/B25/B26/ B28/ B66/B71/B85	B1/B2/B3/B4/B5/ B8/B12/B13/B18/ B19/B20/B25/B26/ B28/B66/B71/B85
Data Transmission	300Kbps(DL)/ 375Kbps(UL)	26.15Kbps(DL)/ 62.5Kbps(UL)	136Kbps(DL)/150Kbps	127 Kbps (DL)/ 158.5 Kbps (UL)	158.5Kbps (DL)/127Kbps(UL)
Certification	A:FCC/IC/PTCRB/GCF/RoHS/ REACH E:CE/NCC/GCF/ACMA/RoHS/ REACH JC:Telec/JATE/RoHS/ REACH	CCC/TA/CTA/RoHS/ REACH/ATEX	CE / FCCRoHS / REACH	FCC/IC/CE/RCM/ JATE*/ TELEC*/ NCC*/ANATEL*/ GCF*/PTCRB*/ RoHS/REACH	FCC*/IC*/CE*/RCM* RoHS*/REACH*
Application Scenarios	Smart meters/Vending /Asset Tracking /Telematics				

Smart Waste Container

The Smart Waste Container is installed with SIMCom's SIM7020 module, and is powered by a built-in lithium battery, which can last for 3 years. It uses ultrasonic identification technology to show the container's remaining capacity according to the volume of garbage already in the container. When the container is full, the terminal will automatically connect to the Internet of Things, show the container's real-time status on the website and push information to relevant staff, reminding them to collect garbage timely. There is also a smoke detector and temperature sensor, which can give early warnings against fire risks.

Advantage：   ● Full load warning   ● Decrease labor cost   ● Reduce fire rate

Smart Water/Gas/Electricity Metering

SIMCom and Partners have created a series of smart metering devices in an effort to make sure that Water/gas/electricity is better distributed and protected. These Smart metering applications were equipped with SIMCom's NB-IoT Modules SIM7020G and SIM7000E, used to realize remote data transmission and control. It supports accurate measurement, remote data transmission and real-time monitoring. More than that, it has certain warning functions, and helps the control platform to enable smart management, improve the management efficiency, and save human and time cost to a very large extent.

Advantage：

● Improve the accuracy of data largely

● Lower power consumption and can last longer

● Stronger signal and adapt to various environments

Smart Helmet

Construction can be a high-risk industry since there are many scaffolds and debris on construction sites, risks such as falling objects from high altitude may happen from time to time.

SIMCom and its partners have jointly launched a smart helmet solution which based on the NB-IoT module SIM7070G. It is possible to provide enterprises with integrated smart helmets featuring positioning, sensing, early warning, and audio-video communication, which may facilitate development of the construction industry. Through the module, the real-time position of worker can be uploaded to the system.

Advantage：

● Accuracy in Position and Attendance Checking

● Prolonged Battery Life

● Warning Alert