

# 4G/5G FWA Device Ecosystem Company Directory

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June 2023



# About

## Revisions

**Issue 1 - 22nd February 2021**

**Issue 2 - 15th March 2021**

**Issue 3 - 24th June 2021:** Updates Changhong, Jointelli, NETGEAR, MediaTek, Sequans, Signalinks, TCL, WNC, Wuhan Da Ta: Removal Blinq and Esound-Flymodem.

**Issue 4 - 27th October 2021:** WNC Updated. SimCom & MiWire added. Yaojin, Maxcomm, Hailo & TigerCel removed.

**Issue 5 - February 2022:** Askey, Flymodem, Intelbras, Signalinks, Tigercel, T&W added, BEC removed.

**Issue 6 - June 2022:** Compal and OPPO added. Askey, Inseego, ZMTel and UNISOC removed. Intelbras, Fibocom and Tozed Kangwei updated.

**Issue 7:** Yaojin added. ATEL, Casa Systems and Gosuncn updated.

**Issue 8:** Casa Systems and Nokia updated. Software Systems section and Pirllys added.

**Issue 9:** Elsys, Telit Cinterion and BEC added. ASR, Esound, NETGEAR, Signalinks, Tigercel, T&W, MOBOT and Gosuncn removed.

## About the Directory

The Fixed Wireless Access Device Ecosystem Directory contains an overview of the growing number of companies involved in the 3GPP Fixed Wireless Access Device Ecosystem.

Companies are grouped according to where they sit in the ecosystem (ie. Chipset Suppliers, Module Suppliers or Device Suppliers), and for each company a single page overview of who they are and where further information can be obtained is provided. A simple overview of all Fixed Wireless Related products being marketed at the time of issue by each company is also included.

As a living document published on the [GSA Website](#) the intent is to keep this updated with new companies or offerings to enable all those involved in the development (or assessment) of the ecosystem or procurement of the resulting devices to identify potential partners. Product information can be viewed in more detail from the [online directory](#), which Forum Partners and Members can upload their products to.

## About 4G-5G FWA Forum

Established in late 2020, the GSA 4G-5G Fixed Wireless Access (FWA) Forum brings together leading infrastructure, chipset, module, and device suppliers to promote 4G and 5G FWA technology, products and services – to report on progress of FWA deployments, identify use cases and encourage global adoption.

3GPP based FWA is already widely used globally, and its adoption keeps growing fast with over 535 operators investing in 4G/5G FWA according to the GSA FWA report from June 2023. In addition, the current Covid-19 pandemic situation further illustrated the pivotal role connectivity and FWA can play as people work, study and socialize on-line. FWA can be a life changer by ensuring the availability of strong and reliable broadband connectivity wirelessly to people wherever they are, whatever they do. Connecting the unconnected was already a fundamental priority in a normal world, but, as we are seeing with the terrible pandemic situation that we are still facing, our mission to accelerate people's access to broadband connectivity through 4G/5G FWA is only becoming more critical. This is true for developing as well as developed economies.

However one challenge for the industry in such a rapidly evolving market is to learn from each other, promote successful experiences and identify directions in technical development. By complementing the existing activities of our members, the GSA 4G-5G FWA Forum is committed to representing the natural voice of the fixed wireless ecosystem for operators and regulators globally.

This document, the GSA 4G-5G FWA Forum's "FWA Device Ecosystem Company Directory" is the 9th release since the Forum's inception in 2020, and continues the mission to help facilitate interactions between the FWA ecosystem and MNOs globally. This document aims to educate the market about the variety of players of all sizes ready to help provide best of breed FWA service experience all over the world. The Forum is working on new initiatives that will keep improving the visibility of the various end user FWA devices available from our members to further promote the product information sharing between suppliers and operators.

## About GSA

GSA (the Global mobile Suppliers Association) is a not-for-profit industry organisation representing companies across the worldwide mobile ecosystem who are engaged in the supply of infrastructure, semiconductors, test equipment, devices, applications and mobile support services.

GSA actively promotes the 3GPP technology road-map – 3G; 4G; 5G – and are a single source of information for industry reports and market intelligence.

## Fixed Wireless Access Devices

This GSA FWA Device Ecosystem Company Directory only includes companies involved in the Fixed Wireless Access (FWA) Device Ecosystem. It is important therefore to define what a FWA Device (and hence what the FWA Device Ecosystem) is.

### Device Suppliers

Only suppliers related to the production of devices conforming to following definition are included in the directory:

**A FWA Device is defined as being any device including a 3GPP based modem used to provide broadband connectivity to a building (residential or enterprise). The device may include additional functionality such as Home Gateways, or WiFi Routers, Desk Phones, FXS Ports, or may be restricted to the access modem only. A FWA Device may also include Fixed Access Modems such as xDSL in addition to a 3GPP modem for Hybrid scenarios or the device may be restricted to 3GPP access only**

In this directory, FWA Devices are split into two families, "CPE" which are defined as AC powered devices designed for continuous 24 hours broadband connectivity, and "Battery operated devices" which are defined as devices including batteries designed specifically for nomadic or sporadic usage of broadband connectivity (e.g. MiFi or Pocket Hotspot).

Within this directory, we further divide the "CPE" family into 4 distinct product types

- 1. Indoor Sub 6GHz CPE (FR1)**  
Used for any type of 4G or 5G Indoor AC powered FWA device, that supports frequencies up to 6GHz
- 2. Outdoor Sub 6GHz CPE (FR1)**  
Used for any type of 4G or 5G Outdoor AC powered (typically via PoE) FWA device, that supports frequencies up to 6GHz
- 3. Indoor mmWave CPE (FR2)**  
Used for any type of 5G Indoor AC powered FWA device supporting any mmWave frequency
- 4. Outdoor mmWave CPE (FR2)**  
Used for any type of 5G Outdoor AC powered (typically via PoE) FWA device supporting any mmWave frequency

With the additional 5th product type of

- 5. Battery Operated Hotspot (e.g. MiFi, Mobile Hotspot)**

It is hoped that this directory shall provide a quick reference to any reader seeking companies producing devices for the most common of deployment scenarios. Further product details should be obtained directly from the companies in question via the listed "Enquiries" contact on the company profile.

For clarity, the following 3GPP based devices are excluded from this directory and are not part of the definition of Fixed Wireless Access (FWA) Devices.

- 3GPP Based Desk Phones or DECT Base Stations that do not provide broadband connectivity to the building
- Smartphones
- Industrial IoT Routers
- Devices without integrated 3GPP antennas
- Devices with Serial Interfaces or Edge Compute Capabilities
- Narrowband (e.g. NB-IoT, Cat-M1/2, Cat-1) devices

Where companies have additional 3GPP based products outside of this definition of an FWA Device, the additional product categories are identified on the individual company pages.

### Chipsets/Modules Suppliers

The companies listed in the chipset and module sections of this directory produce specific 3GPP based 4G/5G chipsets or modules that are suitable for inclusion in any of the 5 FWA product types listed above. Additional chipsets/modules designed for other devices, e.g. smartphones etc are not included in this directory.

# Contents

## Devices

ATEL	Jointelli	WNC
BEC Technologies	MeiG Smart Technology	Yaojin
Casa Systems	MiWire Aps	ZTE
Changhong	Nokia	
Da Ta Technology	Notion	
Elsys	OPPO	
Greenpacket	Smawave	
Huawei	TCL	
Intelbras	Tozed Kangwei	
Jaton Technology	Wavetel	

## Chipsets

Mediatek  
Qualcomm  
Sequans Communications

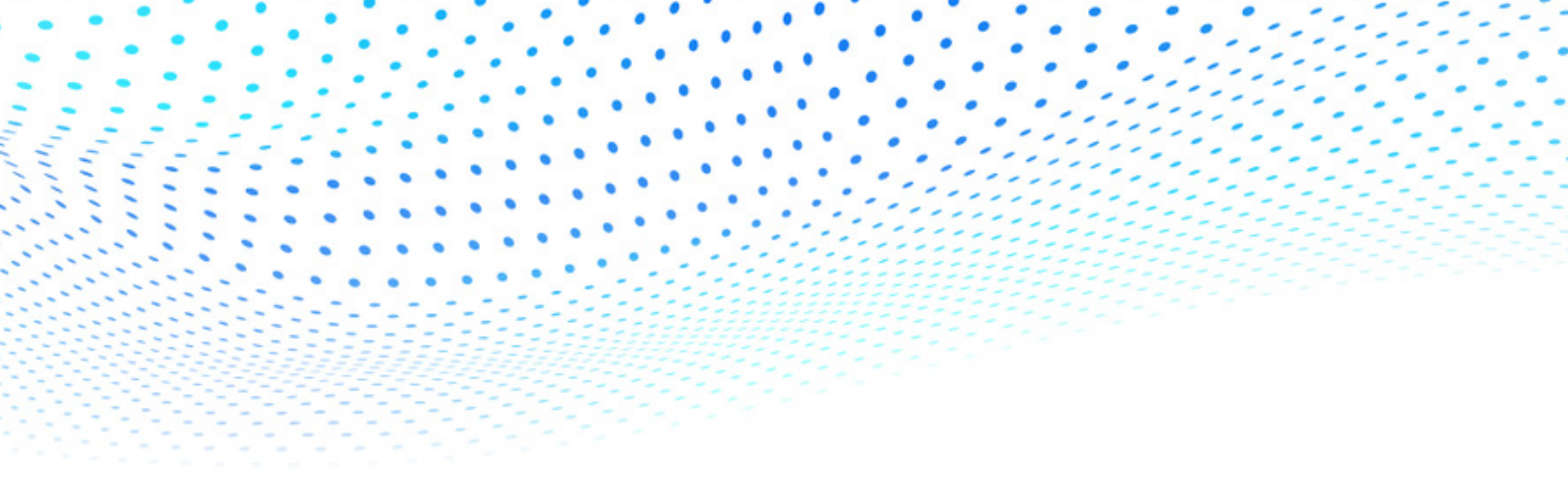
## Software

BEC Technologies  
Pirlys

## Modules

Compal  
Fibocom  
Neoway  
Notion  
Quectel  
Sequans  
SIMCom Wireless Solutions  
Telit Cinterion  
Yaojin





# Fixed Wireless Access Device Suppliers

## Company Profile

ATEL is the leading provider of wireless products/solutions to its value customers worldwide. Its innovative products/solutions are based on 2G/3G/4G/5G wireless technologies, and widely used for reliable broadband access, data/video/voice communications, and IoT/M2M applications. ATEL's sales and marketing are globally positioned. The company has been well-known in the wireless industry due to its excellent products/solutions and services.

## Company Information

**Website:** [www.asiatelco.com](http://www.asiatelco.com)

**Enquiries:** [wlwang@asiatelco.com](mailto:wlwang@asiatelco.com)

**Sales Channel:** Direct to Consumer/Enterprise,  
Direct to Carrier, Resellers/Distributors

**HQ Location:** Shanghai, China

**Sales Office Locations:** North America, Europe, Africa

**Additional 3GPP Devices In Portfolio:** Industrial IoT, Desk Phones, USB Dongles, Vehicular CPE, LTE Combine with Satellite TV

## Product Profiles

### Indoor Sub 6 GHz CPE (FR1)



5G WB570



4G L316



4G PD8640



4G D350



5G H510



5G DW516

### Outdoor Sub 6 GHz CPE (FR1)



5G J515



4G J712



4G PF350

### Battery Operated Hotspot



5G X510 (Sub 6)



4G W8640

## Company Profile

BEC Technologies is driving transformation across industries, business models, and experiences with the power of our 4G and 5G Wireless WAN connectivity solutions. Trusted and widely deployed by global organizations, our cutting-edge technology fuels a new era of growth and opportunity. Headquartered in Richardson, TX, BEC Technologies is the North American subsidiary of 50-year industry pioneer Billion Electric Co. Ltd (TSE #3027: Billion) and leads the Information Communications and Telecommunications (ICT) Division. To learn more about BEC Technologies' products and services, visit [www.bectechnologies.net](http://www.bectechnologies.net).

## Company Information

**Website:** [www.bectechnologies.net](http://www.bectechnologies.net)

**Enquiries:** [sales@bectechnologies.net](mailto:sales@bectechnologies.net)

**Sales Channel:** Direct to Carrier, Resellers/  
Distributors

**HQ Location:** Richardson, TX USA

**Sales Office Locations:** North America, Asia Pacific

**Additional 3GPP Devices In Portfolio:** Industrial IoT, USB Dongles, Vehicular CPE

## Product Profiles

### Indoor Sub 6 GHz CPE (FR1)



5G BEC MX-100U-GW



BEC 8112 5G Enterprise Router



BEC 8112V 5G 5 G NR Wi-Fi 5 VoIP VPN Router



BEC 8207AZ 5G V/ADSL2+ Wi-Fi 6 Router

### Outdoor Sub 6GHz CPE (FR1)



BEC 4700AZ Gigabit LTE Outdoor Router with Carrier-Grade Wi-Fi Hotspot



BEC 7000 R24 Gigabit LTE Outdoor Router



BEC 8231 5G CBRS Outdoor Router



BEC 8232 5G Wideband Outdoor Router

### Outdoor mmWave CPE (FR2)



BEC 8235 5G High-Capacity Outdoor Router



BEC 8243 5G High-Power mmWave Outdoor Router



BEC 8234 5G Global C-Band Outdoor Router

### Indoor/Outdoor Sub 6GHz CPE (FR1)



BEC 8355 5G Universal CPE (uCPE)

## Company Profile

Casa Systems is pioneering advanced ultra-broadband 5G solutions for mobile, cable, fixed and converged service providers. Casa Systems has game-changing core and access solutions to transform any broadband network by delivering the service agility and network efficiency needed for the 5G future. Casa Access Devices (formally NetComm Wireless) was founded in 1982 and acquired by Casa Systems in 2019. With over a decade of experience in 3GPP based Fixed Wireless Access devices and 3GPP Industrial IoT devices. Specialising in professionally installed outdoor high performance FWA CPE, our products have been deployed in some of the harshest climates around the world (cold & hot) and we are supporting some of the largest rural deployment programmes globally.

## Company Information

**Website:** [www.casa-systems.com](http://www.casa-systems.com)

**Enquiries:** [sales@casa-systems.com](mailto:sales@casa-systems.com)

**Sales Channel:** Direct to Consumer/Enterprise, Direct to Carrier, Resellers/Distributors

**HQ Location:** Andover, US

**Sales Office Locations:** North America, Latin America, Europe, China, Asia Pacific, Middle East

**Additional 3GPP Devices In Portfolio:** Industrial IoT, Femto

## Product Profiles

### Indoor Sub 6 GHz CPE (FR1)



4G Enhanced Hybrid Gateway



4G WiFi 6 Mesh Hybrid Gateway



5G AurusGATE Release 16 WiFi 6 Gateway

### Outdoor Sub 6 GHz CPE (FR1)



5G AurusPRO Release 16 CBRS CAT B



5G AurusLINK+ Release 16 Self Install



4G AurusPRO Release 12 CBRS CAT B



4G AurusPRO Release 12 CBRS EUD



5G AurusPRO Release 16 Mid Gain



5G AurusPRO Release 16 High Gain

### Outdoor mmWave CPE (FR2)



5G Aurus AI 360 Degree High Power

### Battery Operated Hotspot



5G AurusGO Release 16 WiFi 6



## Company Profile

Sichuan Changhong Network Technologies Co., Ltd. (hereinafter referred to as the “company”) is a wholly-owned subsidiary of Sichuan Changhong Electric Co., Ltd., with industry-leading capabilities in software and hardware R&D, manufacturing, and global marketing. Over the past 20 years, the company has continuously served more than 100 mainstream telecom operators, broadcasting basic service operators and vertical industry service providers all around the world, growing together with its partners. Focusing on strategic emerging industries such as 5G, ULTRA HD Video, IoT and Pan-intelligent Terminal, the company provides global partners with “full broadband network access and coverage, smart media terminals, and end-to-end system solutions for the IoT industry”.

## Company Information

**Website:** [www.changhong-network.com](http://www.changhong-network.com)

**Enquiries:** [info@changhong.com](mailto:info@changhong.com)

**Sales Channel:** Direct to Consumer/Enterprise,  
Direct to Carrier

**HQ Location:** Mianyang, Sichuan, China

**Sales Office Locations:** Global

**Additional 3GPP Devices In Portfolio:** Industrial IoT,  
Wearables, USB Dongles, Consumer IoT, Cameras, ONU/  
Wireless Router

## Product Profiles

### Indoor Sub 6 GHz CPE (FR1)



5G Enterprise Gateway



5G+8K AI HUB

### Battery Operated Hotspot



5G MiFi

## Company Profile

Wuhan Da Ta Technologies Co. maintains a focus on 5G-based access solutions, including 5G IDU/ODU, SMB Router and IoT Gateway, as well as a focus on WiFi6 Mesh Routers.

## Company Information

**Website:** [www.bigmt.com](http://www.bigmt.com)

**Enquiries:** [info@bigmt.com](mailto:info@bigmt.com)

**Sales Channel:** Direct to Carrier, Direct to Consumer/Enterprise, Resellers/Distributors

**HQ Location:** Wuhan, China

**Sales Office Locations:** China

**Additional 3GPP Devices In Portfolio:** Industrial IoT, Vehicular CPE

## Product Profiles

### Indoor Sub 6 GHz CPE (FR1)



4G FA225 - CAT4



4G FA225A - CAT6



5G FA556



5G FA532



5G FA510



4G FA532-S04 - CAT12

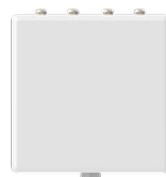
### Outdoor Sub 6 GHz CPE (FR1)



4G FA5320 - CAT12



5G FA5532



5G FA5530

## Company Profile

ELSYS is a Brazilian technology company that has been providing technological solutions in Brazil, Latin America, the United States and Africa for more than 33 years. Its portfolio has products and services for TV, Internet, Smart Home and Solar Energy that together offer a complete experience of connected and sustainable life, as well as business solutions in professional security, infrastructure for providers and manufacturing.

## Company Information

**Website:** [elsys.com/en](https://elsys.com/en)

**Enquiries:** [hello@elsys.com](mailto:hello@elsys.com)

**Sales Channel:** Direct to Consumer/Enterprise, Resellers/Distributors

**HQ Location:** Valinhos, Brazil

**Sales Office Locations:** Latin America

**Additional 3GPP Devices In Portfolio:** Industrial IoT, Consumer IoT, Vehicular CPE

## Product Profiles

### Outdoor Sub 6GHz CPE (FR1)



4G Amplimax



5G Amplimax Ultra

## Company Profile

Since 2000, Greenpacket Wireless Solutions has been working with all-tiers of telecom operators to connect the world over, be it metropolitan cities or remote towns with our wide range of high-performance 5G and 4G indoor and outdoor CPE as well as portable mobile Wi-Fi devices. Green Packet provides flexibility in customizing indoor and outdoor fixed wireless broadband CPE devices while optimizing for better performance and cost-effectiveness, leading to a greater and valuable users' digital experiences.

## Company Information

**Website:** [www.greenpacket.com/brands/gp-wireless-broadband](http://www.greenpacket.com/brands/gp-wireless-broadband)

**Enquiries:** [gpsupport@greenpacket.com](mailto:gpsupport@greenpacket.com)

**Sales Channel:** Direct to Carrier

**HQ Location:** Petaling Jaya, Selangor, Malaysia

**Sales Office Locations:** Global

## Product Profiles

### Indoor Sub 6 GHz CPE (FR1)



5G NR Indoor Gateway D5A



4G DUAL-WAN CPE\_Hybrid Series



4G LTE-A CAT.6 Indoor CPE D2A



5G 2NR CA Indoor CPE\_Classic Series

### Outdoor Sub 6 GHz CPE (FR1)



5G NR Outdoor Gateway O5A



4G LTE Cat.12 Outdoor Gateway OA



5G 2NR CA Outdoor CPE\_Quantum Series

### Battery Operated Hotspot



4G Cat.6 Mi-Fi M2A



5G 2NR CA Mifi\_Oxygen Series



## Company Profile

Founded in 1987, Huawei is a leading global provider of ICT infrastructure and smart devices. We are committed to bring digital to every person, home and organization for a fully connected world. With more than 194,000 employees, we operate in more than 170 countries serving more than 3 billion people around the world. Huawei supplied over 200 FWA networks in more than 120 countries, providing high-speed broadband services to 55+ million users. We provide best user experience through the adoption of most advanced technologies (Massive MIMO, FDD 8T8R, etc). We also provide a wide range of FWA devices including Indoor CPEs, Outdoor CPEs and portable hotspots. Our high-end 5G CPEs are already widely adopted by operators worldwide.

## Company Information

**Website:** <https://consumer.huawei.com/en/routers>

**Sales Channel:** Direct to Consumer/Enterprise,  
Direct to Carrier, Resellers/Distributors

**HQ Location:** Shenzhen, China

**Sales Office Locations:** North America, Latin America,  
Europe, Africa, China, Asia Pacific, Middle East

**Additional 3GPP Devices In Portfolio:** Wearables, Consumer  
IoT, Smartphones

## Product Profiles

### Indoor Sub 6 GHz CPE (FR1)



5G H122-373



4G B535

### Battery Operated Hotspot



4G E5785

## Company Profile

We are Intelbras. A company that for 45 years has been offering innovative solutions in security, networks, communication and energy. Our trajectory so far has been INnovative, INtelligent and INSpiring. We saw innovation, which is part of our DNA, increasingly present in our daily lives. And it was only possible to write a story so full of achievements because employees, partners and customers were close and believed in us. From small houses to smart cities, Intelbras has quality products to offer the best experience to customers, trusty and closely. Safety - We offer products bringing even more quietness to your life. High technology equipment offering more safety, either to you take care who you love or solutions for large-size companies. Networks - Intelbras helps you to stay connected to the world, with products allowing to organize, enlarge and manage networks efficiently and easily. Complete solutions for maximum efficiency connections, from fixed to 5G mobile networks.

## Company Information

**Website:** [www.intelbras.com/en](http://www.intelbras.com/en)

**Enquiries:** [renan.antioli@intelbras.com.br](mailto:renan.antioli@intelbras.com.br)

**Sales Channel:** Direct to Consumer/Enterprise,  
Direct to Carrier, Resellers/Distributors

**HQ Location:** Santa Catarina, Brazil

**Sales Office Locations:** Latin America

**Additional 3GPP Devices In Portfolio:** Consumer IoT, Desk Phones, Cameras, FWA Devices

## Product Profiles

### Indoor Sub 6 GHz CPE (FR1)



5G GX3000

## Company Profile

Jaton Technology Limited, founded in 2012, is a high-tech and innovation corporation, main manufacturer and supplier of telecommunication equipment. We have been professional in Fixed Wireless Broadband (FWB) Terminal for 9 years, especially in 5G NR and 4G LTE-A Pro CPE. We have Fixed Wireless Access LTE-A Private Network solutions, such as 3.5GHz and 5GHz. We would like to provide the products and customized solutions to all people. Jaton has deployed FWA service on over 40 networks in more than 25 countries. We will closely follow the international market trends and hope to cooperate with more and more customers for mutual development and benefits.

## Company Information

**Website:** [www.jatontech.com](http://www.jatontech.com)

**Enquiries:** [sales@jatontech.com](mailto:sales@jatontech.com)

**Sales Channel:** Direct to Consumer/Enterprise,  
Direct to Carrier, Resellers/Distributors

**HQ Location:** Shenzhen City, China

**Sales Office Locations:** North America, Latin America,  
Europe, Africa, China, Asia Pacific, Middle East

**Additional 3GPP Devices In Portfolio:** Vehicular CPE

## Product Profiles

### Indoor Sub 6 GHz CPE (FR1)



JT3600V 5G  
WiFi6 CPE



JT3500V 4G CAT12  
WiFi5 CPE



JT3300V 4G CAT7  
WiFi5 CPE

### Indoor mmWave CPE (FR2)



JT3900V 5G WiFi6 &  
WiFi6E CPE

### Outdoor Sub 6 GHz CPE (FR1)



JT8800D 5G  
High Gain CPE



JT6300D 4G CAT7  
High Gain CPE



JT8500D 4G CAT12  
High Gain CPE

### Outdoor mmWave CPE (FR2)



JT8900D 5G  
High Gain CPE

## Company Profile

Jointelli is a company concentrated on design, research, development, manufacture and sales of 5G CPEs & IoT devices and solutions in wireless connection. Based on continuous R&D capacities, strict manufacturing and quality management, Jointelli takes “customer satisfaction” as our commitment. Jointelli provides flexible customization, end-to-end test and service, differentiated product optimization and rapid response. And Jointelli hopes to cooperate closely with our business partners, leading to a long-term mutual success.

## Company Information

**Website:** [www.jointelli.com](http://www.jointelli.com)

**Enquiries:** [support@jointelli.com](mailto:support@jointelli.com)

**Sales Channel:** Direct to Consumer/Enterprise,  
Direct to Carrier

**HQ Location:** Shenzhen, P.R China

**Sales Office Locations:** North America, Europe, China, Asia  
Pacific, Middle East

**Additional 3GPP Devices In Portfolio:** Industrial IoT,  
Consumer IoT, Vehicular CPE

## Product Profiles

### Indoor Sub 6 GHz CPE (FR1)



5G Jointelli CPE evo



## Company Profile

MeiG Smart Technology Co., Ltd. was established in 2007 and listed in China class A stock market(stock code is 002881), as a world-class provider of IoT terminals and wireless data solutions, MeiG works hard to be an R&D-driven enterprise, and focuses on the design, development and manufacturing of 4G/5G wireless communication devices and whole solutions. The products include Indoor/Outdoor 5G sub6 & mmWave CPE, 5G hotspot MiFi/Wingle, 4G Cat4-Cat16 CPE and MiFi. Based on the self brand modules, MeiG Smart provide customers with high cost-efficiency and quality devices and solutions.

## Company Information

**Website:** [www.meigsmart.com](http://www.meigsmart.com)

**Enquiries:** [dingfei@meigsmart.com](mailto:dingfei@meigsmart.com)

**Sales Channel:** Direct to Carrier, Resellers/  
Distributors

**HQ Location:** Shenzhen, China

**Sales Office Locations:** China, Europe, Asia Pacific

**Additional 3GPP Devices In Portfolio:** USB Dongles

## Product Profiles

### Indoor Sub 6 GHz CPE (FR1)



4G Cat16 SLT868Q



5G SRT856S



4G Cat6 SLT818



4G Cat4 SLT711

### Outdoor Sub 6 GHz CPE (FR1)



4G Cat16  
SLT869-A51



4G Cat16  
SLT867-A31



4G SLT869-A53

### Battery Operated Hotspot



5G Sub6 SRT873



4G Cat6 SLT879



4G Cat4 SLT778

### Indoor mmWave CPE (FR2)



5G Sub5 SRT856s

### Outdoor mmWave CPE (FR2)



5G SRT853

## Company Profile

Miwire ApS brings a premium hassle-free plug-and-play Internet experience to broadband users in challenging conditions on land and at sea. Our portfolio of Fixed Access Wireless devices is centred around two product lines: RouDem for land-based application, and SeaWire for maritime application. Our current and coming 4G and 5G products are built with industrial grade components to withstand rough cold and warm conditions, and integrates automatic scanning directional antennas, WiFi hotspot, batteries for continuous operation and a cloud-based device management platform for both service providers, installers, and customers. MiWire also offers a global connectivity plan integrated with the SeaWire for maritime use.

## Company Information

**Website:** <https://www.miwire.net>

**Enquiries:** [info@miwire.net](mailto:info@miwire.net)

**Sales Channel:** Direct to Consumer/Enterprise,  
Direct to Carrier, Resellers/Distributors

**HQ Location:** Kongens Lyngby, Denmark

**Sales Office Locations:** North America, Latin America,  
Europe

## Product Profiles

### Outdoor Sub 6 GHz CPE (FR1)



4G  
RouDem Aut. High-gain  
Cat 4



5G/4G  
RouDem Aut. High-gain  
Cat 20



4G  
RouDem Aut. High-gain  
Cat 6

## Company Profile

We create the critical networks and technologies to bring together the world's intelligence, across businesses, cities, supply chains and societies. With our commitment to innovation and technology leadership, driven by the award-winning Nokia Bell Labs, we deliver networks at the limits of science across mobile, infrastructure, cloud, and enabling technologies. Adhering to the highest standards of integrity and security, we help build the capabilities we need for a more productive, sustainable and inclusive world.

## Company Information

**Website:** [www.nokia.com](http://www.nokia.com)

**Enquiries:** [www.nokia.com/contact-us](http://www.nokia.com/contact-us)

**Sales Channel:** Direct to Carrier, Resellers/  
Distributors

**HQ Location:** Espoo, Finland

**Sales Office Locations:** Global

## Product Profiles

### Indoor Sub 6 GHz CPE (FR1)



Nokia FastMile 4G  
Gateway 1



Nokia FastMile 5G  
Gateway 3.2



Nokia FastMile 5G  
Gateway 2

### Outdoor Sub 6 GHz CPE (FR1)



Nokia FastMile 4G  
Receiver



Nokia FastMile 4G  
CBRS Receiver



Nokia FastMile 5G  
Receiver

## Company Profile

Shanghai Notion Information Technology CO. LTD was founded in Shanghai 2010, the first class supplier of LTE/5G and IOT/M2M terminal devices and solutions. With dedicated staff and strong R&D capabilities, Notion covers over 60 countries. Notion's products include Mifis/CPEs/ODUs/4G Modules/M2M Modules/USB modems. Due to remote equipment management and operation platform with fully autonomous intellectual property rights, which supports TR069 protocol, Notion can provide the total solution of "hardware+software+services". Notion's mission is to establish a long-term and stable partnership with international operators and brands by rapid response to customer needs, customized products and end-to-end service to achieve mutual business success.

## Company Information

**Website:** [www.notioni.com](http://www.notioni.com)

**Enquiries:** [sales@notioni.com](mailto:sales@notioni.com)

**Sales Channel:** Direct to Carrier, Resellers/  
Distributors

**HQ Location:** Shanghai, China

**Sales Office Locations:** North America, Latin America,  
Europe, Africa, China, Asia Pacific

**Additional 3GPP Device Types In Portfolio:** Wearables,  
Industrial IoT, Consumer IoT, USB Dongles,

## Product Profiles

### Indoor Sub 6 GHz CPE (FR1)



R0121 CAT4 CPE



R281 CAT6 CPE

### Outdoor Sub 6 GHz CPE (FR1)



MU261 CAT6 ODU

### Battery Operated Hotspot



M022 CAT4 MiFi



M271 CAT6 MiFi

## Company Profile

OPPO, founded in 2004, is a Chinese consumer electronics and mobile communications company in the Guangdong-Hong Kong-Macao Greater Bay Area, the home to many Chinese hi-tech companies. We strive to become a sustainable company that helps customers and partners, and shares success and benefits the society with technology. Through continuous efforts in the global market, we have expanded our footprint to over 40 countries and regions in six continents, and established strategic partnerships with more than 80 operators. OPPO started fixed wireless access (FWA) business as one of our new 5G strategies in 2019. Our first generation CPE product, T1 series, has been commercially launched with operators worldwide in many regions, bringing high quality connectivity experience to end users.

## Company Information

**Website:** [www.oppo.com](http://www.oppo.com)

**Enquiries:** <https://support.oppo.com/en/email-us>

**Sales Channel:** Direct to Carrier, Direct to Consumer/Enterprise, Resellers/Distributors

**HQ Location:** Shenzhen, China

**Sales Office Locations:** Latin America, Europe, Africa, China, Asia Pacific, Middle East

## Product Profiles

### Indoor Sub 6 GHz CPE (FR1)



OPPO 5G CPE T1



OPPO 5G CPE T1a



OPPO 5G CPE T2

### Indoor mmWave CPE (FR2)



OPPO 5G CPE Omni

## Company Profile

Smawave is a leading product development company focused on residential and enterprise 5G/4G CPEs and IoT devices including fixed wireless access (FWA) CPEs for carriers, rugged routers, rugged MiFi and dongle, rugged smart phones and tablets, edge AI CPEs for enterprise and industrial applications. Its products support global carriers' and most private frequency bands. Through our global strategic partners, our products are being deployed in global markets for both residential and enterprise customers on smart city, smart transportation, smart energy and smart factory. Smawave has a core team with 20 years plus technical and market experience, is growing fast with its willingness to invest in customers to create the differentiated value and build the sustainable partnership.

## Company Information

**Website:** [www.smawave.com](http://www.smawave.com)

**Enquiries:** [sales@smawave.com](mailto:sales@smawave.com)

**Sales Channel:** Direct to Consumer/Enterprise,  
Direct to Carrier, Resellers/Distributors

**HQ Location:** Shanghai, China

**Sales Office Locations:** North America, China

**Additional 3GPP Devices In Portfolio:** Industrial IoT, USB  
Dongles, Consumer IoT, Smartphones, Vehicular CPE, Cameras

## Product Profiles

### Indoor Sub 6 GHz CPE (FR1)



4G SRT Series



4G SRS Series



5G SRS Series

### Outdoor Sub 6 GHz CPE (FR1)



4G SRW Series



4G SRM Series



5G SRW Series

### Battery Operated Hotspot



4G SMC411 Series

## Company Profile

March of 1999, TCL Communication Technology Holdings LTD. (TCT) was founded as subsidiary of TCL Group. Since 2004, TCL and Alcatel built together T&A and TCL officially take over Alcatel cell phone overall business, products being sold more than 160 countries and regions, employees more than 13,000. TCL started MBB business since 2008 and the accumulated shipment was more than 10 millions units by the end of 2013. In 2014, with reliable product quality control and differentiated innovation, TCL's MBB product stepped into north America carrier market, Current products covered portable router, indoor and outdoor CPE, USB dongle, etc.

## Company Information

**Website:** [www.tcl.com/global](http://www.tcl.com/global)

**Enquiries:** [eric.w@tcl.com](mailto:eric.w@tcl.com)

**Sales Channel:** Direct to Consumer/Enterprise,  
Direct to Carrier, Resellers/Distributors

**HQ Location:** Shenzhen, China

**Sales Office Locations:** Global

**Additional 3GPP Devices In Portfolio:** Wearables, USB Dongles, Consumer IoT, Smartphones

## Product Profiles

### Indoor Sub 6 GHz CPE (FR1)



5G HH500

### Outdoor Sub 6 GHz CPE (FR1)



4G ODU120

### Battery Operated Hotspot



4G MW45



4G MW70



## Company Profile

Guangzhou Tozed Kangwei Intelligent Technology Co.,Ltd, founded in Mar 2019, is a state-level high-tech enterprise introduced by Guangzhou Nansha Free Trade Zone government. Tozed Kangwei focuses on designing, developing and manufacturing of wireless communication terminals and solutions for operators/industrial/end customers worldwide; keeps enriching product portfolio with various platforms including Qualcomm, MTK, Unisoc, Sanechips and Sequans etc., and iterating 5G CPE / MiFi / Dongle / Industrial Router / Fixed Wireless Phone, Wi-Fi Router, GPON etc., simultaneously. Our products has been exported to 100+ countries. We own an experienced and professional sales service team, and has established globally integrated market network and after-sales service system. Tozed Kangwei always provides great service, creates sustainable value for customers. We are committed to connecting to better future.

## Company Information

**Website:** [www.gztozed.com](http://www.gztozed.com)

**Enquiries:** [admin@gztozed.com](mailto:admin@gztozed.com)

**Sales Channel:** Direct to Carrier, Direct to Consumer/Enterprise

**HQ Location:** Guangzhou, China

**Sales Office Locations:** China, Africa, Europe, Middle East, Latin America, Asia Pacific

**Additional 3GPP Devices In Portfolio:** Industrial IoT, USB Dongles, Vehicular CPE

## Product Profiles

### Indoor Sub 6 GHz CPE (FR1)



5G CPE ZLT X300 Series



5G CPE ZLT X20



4G CAT4 CPE ZLT T30



5G CPE ZLT X25 Series



5G CPE ZLT X100 Series

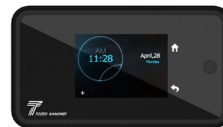


4G CAT12 CPE ZLT S90 Series



4G CAT6 CPE ZLT S50

### Battery Operated Hotspot



5G MIFI ZLT X31 Series



5G MIFI ZLT X30

### Outdoor Sub 6 GHz CPE (FR1)



5G CPE ZLT X17 Series



5G CPE ZLT X16 Series



4G CAT6 CPE ZLT P55

## Company Profile

Wavetel Technology aims to provide quality 5G/LTE access devices for Internet service provider and Tecllo Carrier. We commit to deliver the high-class connectivity for home and business customers. By the prominent technical development, Wavetel could deliver the rich data and voice products, including 5G Indoor/outdoor CPE, 5G Enterprise Router, LTE Indoor/Outdoor CPE, Industrial IOT 4G Cellular Router etc.

## Company Information

**Website:** [www.wavetelco.com](http://www.wavetelco.com)

**Enquiries:** [sales@wavetelco.com](mailto:sales@wavetelco.com)

**Sales Channel:** Direct to Carrier, Resellers/  
Distributors

**HQ Location:** Hongkong, China

**Sales Office Locations:** Europe, China

**Additional 3GPP Devices In Portfolio:** CPE, Router

## Product Profiles

### Indoor Sub 6 GHz CPE (FR1)



5G Indoor CPE



4G Indoor CPE

### Outdoor Sub 6 GHz CPE (FR1)



5G Outdoor CPE



4G Outdoor CPE

## Company Profile

WNC, established in 1996, specializes in the design and development of cutting-edge communications products. WNC's technical expertise encompasses broadband, broadcasting, multimedia, IoT, and wireline and wireless communications applications, with products including network communications solutions (outdoor/indoor 5G CPE), digital home products (Wi-Fi 6/6E mesh products), 5G E2E O-RAN solutions, satellite broadcasting, and advanced driver-assistance systems (ADAS). WNC is a trusted partner of tier-1 operators in communications technology development and integration, mass production, and global deployment and a leader across a wide spectrum of technologies including millimeter wave high-frequency communications and IoT/IoV.

## Company Information

**Website:** [www.wnc.com.tw](http://www.wnc.com.tw)

**Enquiries:** [wnc.info@wnc.com.tw](mailto:wnc.info@wnc.com.tw)

**Sales Channel:** Direct to Carrier, Resellers/  
Distributors

**HQ Location:** Hsinchu, Taiwan

**Sales Office Locations:** North America, Latin America,  
Europe, Asia Pacific

**Additional 3GPP Devices In Portfolio:** Wearables, Industrial  
IoT, Consumer IoT, Vehicular CPE, Cameras

## Product Profiles

### Indoor Sub 6 GHz CPE (FR1)



5G Indoor Sub-6 CPE



5G Indoor/Outdoor  
High Power CPE



4G LTE-A CPE

### Indoor mmWave CPE (FR2)



5G Indoor/Outdoor  
High Power CPE

### Outdoor Sub 6 GHz CPE (FR1)



5G Indoor/Outdoor  
High Power CPE



5G ODU

### Outdoor mmWave CPE (FR2)



5G Indoor/Outdoor  
High Power CPE



5G ODU



4G Outdoor CPE

### Battery Operated Hotspot



5G Mobile Hotspot



4G Mobile Hotspot

## Company Profile

Yaojin Technology (Shenzhen) Co., Ltd. was invested and founded in 2003. The company has been engaged in electronic products R&D, production, export and integration enterprises. Yaojin Technology has been committed to continue to provide excellent products and services, for people to create a smarter, healthier and richer life. Yaojin Technology adheres to independent innovation, speeds up the innovation of technology and service, enriches talent pool, and vigorously promotes the upgrading of management. In the five years from 2013 to 2020, we will take three product lines: home entertainment, network communication and 4G-5G wireless home network terminal as the core pillars, gradually form the development pattern of multi-industry coordination.

## Company Information

**Website:** [www.yaojinkeji.com](http://www.yaojinkeji.com)

**Enquiries:** [jerry@yaojinkeji.com](mailto:jerry@yaojinkeji.com)

**Sales Channel:** Direct to Consumer/Enterprise, Resellers/Distributors

**HQ Location:** ShenZhen GuangDong China

**Sales Office Locations:** China

**Additional 3GPP Devices In Portfolio:** 5G CPE Router

## Product Profiles

### Indoor mmWave CPE (FR2)



4G CAT4 CPE Router A310



4G CAT4 CPE Router A320B



4G CAT6 CPE Router A311



4G CAT12 CPE Router A390B



5G CPE Router A810

### Outdoor mmWave CPE (FR2)



4G Outdoor CPE A210

### Battery Operated Hotspot



4G MIFI A610



4G MIFI A620



4G MIFI A650



4G MIFI A630

## Company Profile

ZMTEL is a startup founded in Shanghai in 2011. We have about 150 employees including 120 engineers. Our main business was WiMAX at the beginning and in 2015 we started to develop 4G CPE. Up to now, we're able to provide 4G CPE from CAT4 to CAT 12 with multiple bands based on diverse chipset platforms. There're more than 50 telecommunication carriers all over the world working with ZMTEL 4G CPE. ZMTEL is in tier I in terms of non-Qualcomm CPE manufactures. ZMTEL 5G CPE was ready in Q4 2020 for testing and approve, which will launch in the market after Q1 2021.

## Company Information

**Website:** [www.zmtel.com](http://www.zmtel.com)

**Enquiries:** [marketing@zmtel.com](mailto:marketing@zmtel.com)

**Sales Channel:** Direct to Carrier, Resellers/  
Distributors, Direct to Consumer/Enterprise

**HQ Location:** Shanghai, China

**Sales Office Locations:** China

**Additional 3GPP Devices In Portfolio:** Industrial IoT,  
Consumer IoT, Vehicular CPE

## Product Profiles

### Indoor Sub 6 GHz CPE (FR1)



5G CN5000 series



4G ZS311 series



4G ZT621 series



4G ZB611 series

### Outdoor Sub 6 GHz CPE (FR1)



5G CW5000 series



4G ZR612 series



4G ZL312 series

## Company Profile

ZTE is a publicly-listed global provider of telecommunications equipment and network solutions with the most comprehensive product range covering virtually every sector of the wireline, wireless, service and terminals markets. The company delivers innovative, custom-made products and services to over 500 operators in more than 140 countries. ZTE's 2010 revenue led the industry with a 21% increase to USD10.609 billion. ZTE commits 10% of its revenue to research and development and takes a leading role in a wide range of international bodies developing emerging telecoms standards. ZTE is China's only listed telecom manufacturer, publicly traded on both the Hong Kong and Shenzhen Stock Exchanges.

## Company Information

**Website:** [www.zte.com.cn](http://www.zte.com.cn)

**Enquiries:** [mobile@zte.com.cn](mailto:mobile@zte.com.cn)

**Sales Channel:** Direct to Carrier, Resellers/  
Distributors, Direct to Consumer/Enterprise

**HQ Location:** Shenzhen, China

**Sales Office Locations:** Global

**Additional 3GPP Devices In Portfolio:** Industrial IoT,  
Consumer IoT, Vehicular CPE, Wearables, USB Dongles,  
Smartphones

## Product Profiles

### Indoor Sub 6 GHz CPE (FR1)



5G MC801A



4G MF289D



4G MF286D



4G MF253V



4G MF286C



4G MF286R

### Outdoor mmWave CPE (FR2)



5G MC7010

### Outdoor Sub 6 GHz CPE (FR1)



4G MF266



4G MF268

### Battery Operated Hotspot



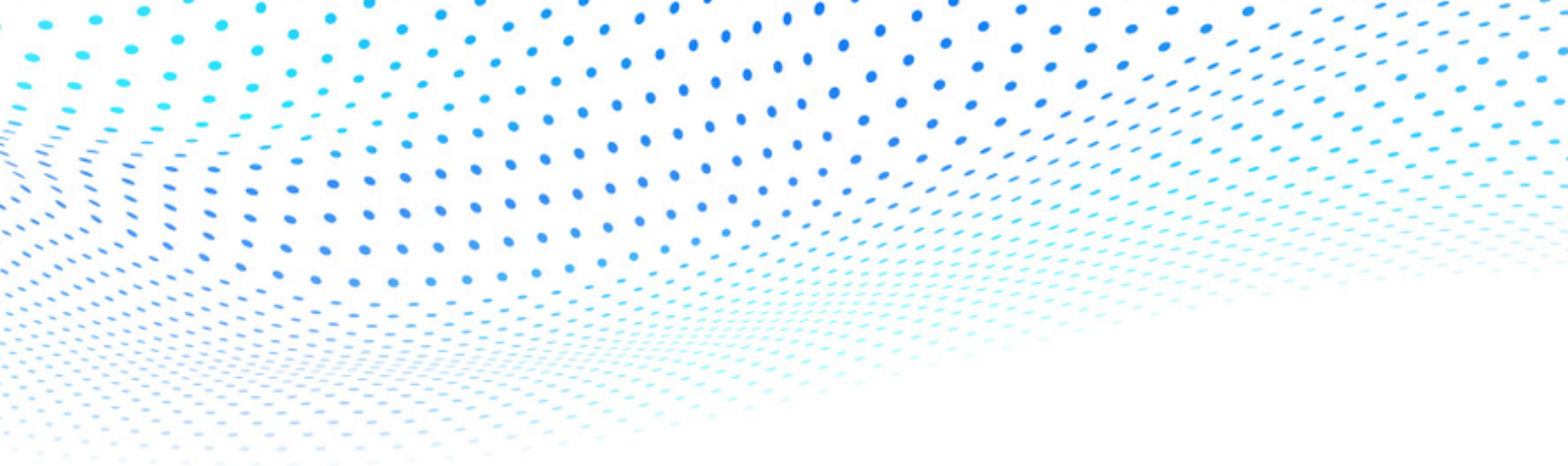
5G MU5001



4G MF920U



4G MF985T



# Fixed Wireless Access Chipset Suppliers



## Company Profile

We lead the market in chipset technology for Smart TVs, Voice Assistant Devices, Android tablets, feature phones, Optical and Blu-ray DVD players, and we're number one globally in mobile phones. We build chips that are less about connecting people to their devices and more about connecting your devices to what matters. Connecting to the things that shape our lives, makes us smarter, healthier and improve everyday life.

## Company Information

**Website:** [www.mediatek.com](http://www.mediatek.com)

**Enquiries:** [corp.mediatek.com/about/contact-us](http://corp.mediatek.com/about/contact-us)

**Sales Channel:** Direct to Consumer/Enterprise

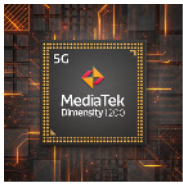
**HQ Location:** Hsinchu, Taiwan

**Sales Office Locations:** Global

**Additional 3GPP Chipsets In Portfolio:** Smartphone, Wearables, Industrial IoT, Consumer IoT, Automotive, Laptop/Tablet

## Product Profiles

### Application & Baseband Processor



5G Dimensity 1200



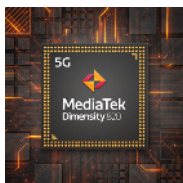
5G Dimensity 1100



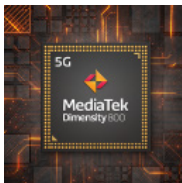
5G Dimensity 1000



5G Dimensity 900



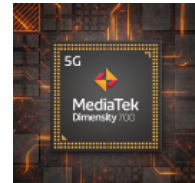
5G Dimensity 820



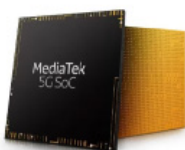
5G Dimensity 800



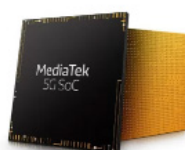
5G Dimensity 720



5G Dimensity 700



5G T700



5G T750

## Company Profile

Qualcomm is the world's leading wireless technology innovator and the driving force behind the development, launch, and expansion of 5G. Today, our foundational technologies are found in every 3G, 4G and 5G smartphone. We bring the benefits of mobile to new industries, including automotive, the internet of things and are leading the way to a world where everything and everyone can interact seamlessly. Qualcomm Technologies, Inc., a subsidiary of Qualcomm Incorporated, operates, along with its subsidiaries, substantially all of our engineering, research and development functions, and substantially all of our products and services businesses, including our QCT semiconductor business.

## Company Information

**Website:** [www.qualcomm.com](http://www.qualcomm.com)

**Enquiries:** [corpcomm@qualcomm.com](mailto:corpcomm@qualcomm.com)

**Sales Channel:** Direct to Carrier, Resellers/  
Distributors, Direct to Consumer/Enterprise

**HQ Location:** San Diego, CA

**Sales Office Locations:** Global

**Additional 3GPP Chipsets In Portfolio:** Smartphone,  
Wearables, Industrial IoT, Consumer IoT, Automotive, AI, XR/  
AR/VR, Cameras, Audio, Mobile Computing, Wifi, Bluetooth

## Product Profiles

### Application & Baseband Processor



Snapdragon X65  
5G Modem-RF System



Snapdragon X62  
5G Modem-RF System



Snapdragon X55  
5G Modem-RF System



Snapdragon X16  
LTE Modem



Snapdragon X12  
LTE Modem



Snapdragon X12+  
LTE Modem



Snapdragon X5  
LTE Modem

### RF Front End



QTM547 mmWave  
Antenna Module



QTM527 mmWave  
Antenna Module

## Company Profile

Sequans Communications is a leading developer and provider of 5G and 4G chips and modules for massive, broadband, and critical IoT. For 5G/4G massive IoT applications, Sequans provides a comprehensive product portfolio based on its flagship Monarch LTE-M/NB-IoT and Calliope Cat 1 chip platforms, featuring industry-leading low power consumption, a large set of integrated functionalities, and global deployment capability. For 5G/4G broadband and critical IoT applications, Sequans offers a product portfolio based on its Cassiopeia Cat 4/Cat 6 4G and high-end Taurus 5G chip platforms, optimized for low-cost residential, enterprise, and industrial applications.

## Company Information

**Website:** [www.sequans.com](http://www.sequans.com)

**Enquiries:** [bb-marketing@sequans.com](mailto:bb-marketing@sequans.com)

**HQ Location:** Paris, France

**Sales Office Locations:** North America, Europe, China, Asia Pacific

**Additional 3GPP Chipset Types In Portfolio:** Wearables, Consumer IoT, Industrial IoT

## Product Profiles

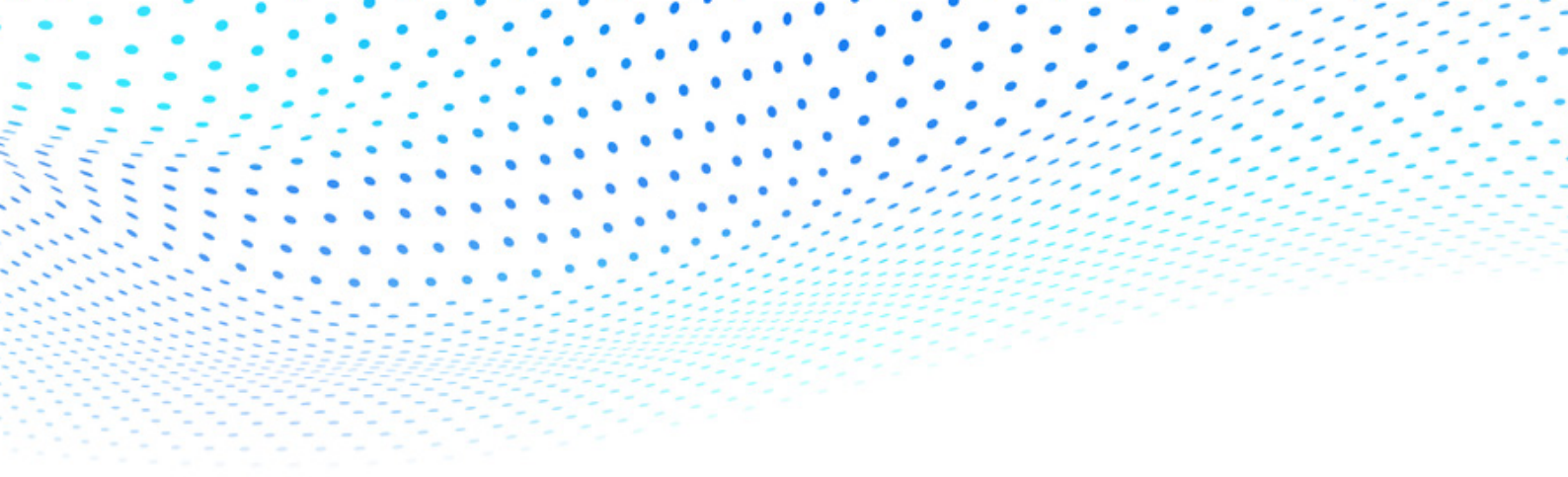
### Application & Baseband Processors



4G Cassiopeia SQN3220-SC  
BBIC + SQN3242 RFIC



4G Cassiopeia SQN3220  
BBIC + 2xSQN3242 RFIC



# Fixed Wireless Access Module Suppliers

## Company Profile

Compal, as one of the world's leading manufacturers of notebook PCs, Notebook, and 5G smart devices with exceptional quality. Since its initiation as a PC peripheral supplier in 1984, Compal has grown to its present scale with outstanding management and solid R&D capacity. Compal manufacture 5C products such as notebook computers, tablets, wearable devices, 5G module, and smart phones...etc We have a complete system with R&D, manufacturing, quality assurance and logistics and this allows us to provide flexible and rapid services.

## Company Information

**Website:** [www.compal.com](http://www.compal.com)

**Enquiries:** [SamSC\\_Huang@compal.com](mailto:SamSC_Huang@compal.com),  
[Morris\\_Ho@compal.com](mailto:Morris_Ho@compal.com)

**Sales Channel:** Direct to Carrier, Direct to OEM

**HQ Location:** Tapei, Taiwan

**Sales Office Locations:** North America, Europe, China, Asia Pacific

**Additional 3GPP Module Types In Portfolio:** Wearables, USB Dongles, Consumer IoT, Smartphones, Vehicular CPE, Notebook, AR, VR

## Product Profiles

### LGA



RXL-G1 Series



RML-G1/N1/EI Series



RXL-G2/N1/E1 Series

### M2



RXM-G1 Series

## Company Profile

Fibocom is a leading global provider of IoT wireless solution and wireless communication modules, as well as the first stock-listed (Stock Code: 300638) wireless module provider in China. We provide one-stop services and high-performance module solutions, including 5G, LTE/LTE-A, NB-IoT/LTE-M, Android Smart, Automotive, WCDMA/HSPA(+), GSM/GPRS, etc. We are committed to empowering the intelligent future of all industries.

## Company Information

**Website:** [www.fibocom.com](http://www.fibocom.com)

**Enquiries:** [market@fibocom.com](mailto:market@fibocom.com)

**Sales Channel:** Direct to Consumer/Enterprise, Resellers/Distributors, Direct to Carrier

**HQ Location:** Shenzhen, China

**Sales Office Locations:** North America, Latin America, Europe, China, Asia Pacific, Middle East

**Additional 3GPP Modules In Portfolio:** Wearables, PC, Industrial IoT, Consumer IoT

## Product Profiles

### LGA



5G FG160 Series



4G FG101 Series



5G FG360 Series



5G FG650 Series



4G FG621 Series



4G NL668 Series

### M2



5G FM160 Series



4G FM101 Series



5G FM650 Series



4G FM100 Series



5G FM350 Series



4G NL952 Series

## Company Profile

Neoway Technology Co.,Ltd, shortly referred to as Neoway, is a hi-tech enterprise that is dedicated to providing communications products and related services for Industrial Internet of Things (IIoT). Our products include 2G/3G/4G/5G/NB-IoT/eMTC cellular modules, devices, neopipe cloud, and neoaccess cloud, which are widely used in Smart Energy, IoV, Smart Manufacturing, Commercial Retail, Smart City, and other industries. To satisfy customers is our purpose all the time. Our mission is to increase the value of IoT in environmental protection, efficiency, and convenience by providing stable and reliable connectivity.

## Company Information

**Website:** [www.neoway.com/en/index.html](http://www.neoway.com/en/index.html)

**Enquiries:** [sales@neoway.com](mailto:sales@neoway.com)

**Sales Channel:** Direct to Consumer/Enterprise

**HQ Location:** Shenzhen, China

**Sales Office Locations:** North America, Europe, China, Asia Pacific

**Additional 3GPP Module Types In Portfolio:** Wearables, Consumer IoT, Industrial IoT

## Product Profiles

### LGA



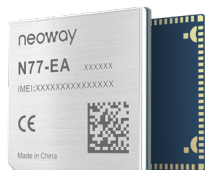
5G Module N512



LTE Cat.4 Module N723



LTE Cat.4 Module N720



LTE Cat.4 Module N77



LTE Cat.4 Module N75

### M2



5G Module N510M



5G Module N511

### Other



4G LTE Smart Module N1



4G LTE Smart Module S6a



## Company Profile

Shanghai Notion Information Technology CO. LTD was founded in Shanghai 2010, the first class supplier of LTE/5G and IOT/M2M terminal devices and solutions. With dedicated staff and strong R&D capabilities, Notion covers over 60 countries. Notion's products include Mifis/CPEs/ODUs/4G Modules/M2M Modules/USB modems. Due to remote equipment management and operation platform with fully autonomous intellectual property rights, which supports TR069 protocol, Notion can provide the total solution of "hardware+software+services". Notion's mission is to establish a long-term and stable partnership with international operators and brands by rapid response to customer needs, customized products and end-to-end service to achieve mutual business success.

## Company Information

**Website:** [www.notioni.com](http://www.notioni.com)

**Enquiries:** [sales@notioni.com](mailto:sales@notioni.com)

**Sales Channel:** Direct to Carrier, Resellers/  
Distributors

**HQ Location:** Shanghai, China

**Sales Office Locations:** North America, Latin America,  
Europe, Africa, China, Asia Pacific

**Additional 3GPP Module Types In Portfolio:** Wearables,  
Industrial IoT, Consumer IoT

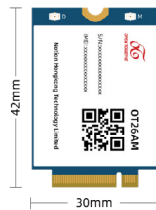
## Product Profiles

### LGA



4G OT20A

### M2



4G OT26AM

### Other



4G OT26AP

## Company Profile

Quectel is the leading global supplier of cellular and GNSS modules, with a broad product portfolio covering the most recent wireless technologies of 5G, LTE/LTE-A, NB-IoT/LTE-M, UMTS/HSPA(+), GSM/GPRS and GNSS. As a professional IoT technology developer and cellular module supplier, Quectel is able to provide one-stop services for IoT cellular modules. Quectel products have been widely applied in IoT/M2M fields including smart payment, telematics and transport, smart energy, smart cities, safety, wireless gateways, industry, healthcare, agriculture, and environment monitoring.

## Company Information

**Website:** [www.quectel.com](http://www.quectel.com)

**Enquiries:** [marketing@quectel.com](mailto:marketing@quectel.com)

**Sales Channel:** Direct to Carrier, Resellers/  
Distributors, Direct to Consumer/Enterprise

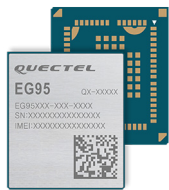
**HQ Location:** Shanghai, China

**Sales Office Locations:** Global

**Additional 3GPP Module Types In Portfolio:** Consumer IoT,  
Industrial IoT

## Product Profiles

### LGA



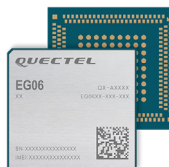
4G EG95



4G EG512R



5G RG500L



4G EG06



5G RG50xQ



4G EG18



4G EG12



5G RG500U



5G RM500U

### M2



4G EM160R



5G RM50xQ



5G RM510Q

## Company Profile

Sequans Communications is a leading developer and provider of 5G and 4G chips and modules for massive, broadband, and critical IoT. For 5G/4G massive IoT applications, Sequans provides a comprehensive product portfolio based on its flagship Monarch LTE-M/NB-IoT and Calliope Cat 1 chip platforms, featuring industry-leading low power consumption, a large set of integrated functionalities, and global deployment capability. For 5G/4G broadband and critical IoT applications, Sequans offers a product portfolio based on its Cassiopeia Cat 4/Cat 6 4G and high-end Taurus 5G chip platforms, optimized for low-cost residential, enterprise, and industrial applications.

## Company Information

**Website:** [www.sequans.com](http://www.sequans.com)

**Enquiries:** [sales@sequans.com](mailto:sales@sequans.com)

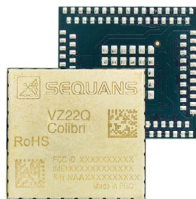
**HQ Location:** Paris, France

**Sales Office Locations:** North America, Europe, China, Asia Pacific

**Additional 3GPP Module Types In Portfolio:** Wearables, Consumer IoT, Industrial IoT

## Product Profiles

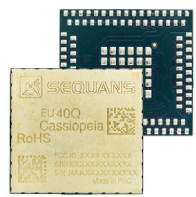
### LGA



4G Colibri VZ22Q -  
Band 4/13



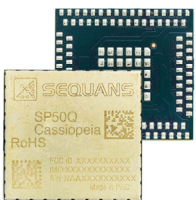
4G Cassiopeia US30Q -  
Band 2/4/12



4G Cassiopeia EU40Q -  
Band 1/3/8/20

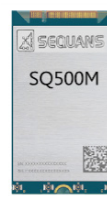


5G Taurus SQ500G



4G Cassiopeia SP50Q -  
Band 25/26/2/5/12

### M2



5G Taurus SQ500M

### Other



4G Cassiopeia CB410L -  
Band 42/43/48



4G Cassiopeia CB610L -  
Band 42/43/48

## Company Profile

SIMCom Wireless Solutions Limited is global leading Machine-to-Machine (M2M) wireless modules and solutions supplier, Since established in 2002, SIMCom has been fully committed to provide a variety of wireless technology platform modules and terminal level solutions around the world, such as 5G, C-V2X, LPWA, LTE-A, Smart Module, LTE, WCDMA/HSPA(+), GSM/GPRS and GNSS Modules.

## Company Information

**Website:** [www.simcom.com](http://www.simcom.com)

**Enquiries:** [simcom@simcom.com](mailto:simcom@simcom.com)

**Sales Channel:** Direct to Carrier, Resellers/  
Distributors, Direct to Consumer/Enterprise

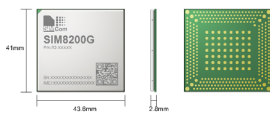
**HQ Location:** Shanghai, China

**Sales Office Locations:** Global

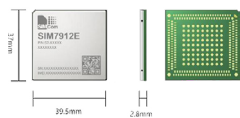
**Additional 3GPP Module Types In Portfolio:** Smartphone,  
Wearables, Industrial IoT, Consumer IoT

## Product Profiles

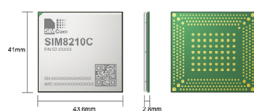
### LGA



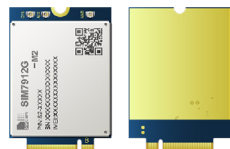
5G SIM8200G



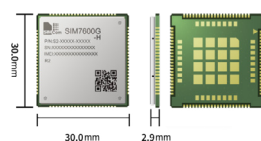
4G SIM7912X



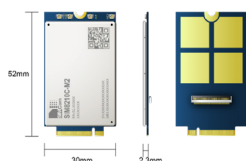
5G SIM8210C



4G SIM7912G-M2

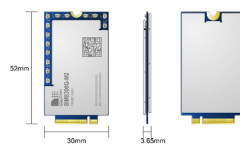


4G SIM7600G-H R2

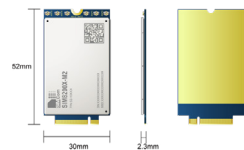


5G SIM8210C-M2

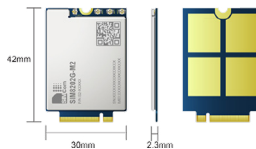
### M2



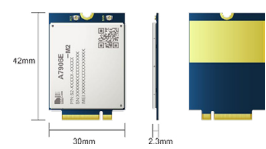
5G SIM8300G-M2



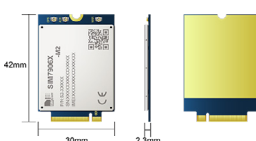
5G SIM8200EA-M2



5G SIM8202X-M2



4G A7906E-M2



4G SIM7906X-M2

## Company Profile

Telit Cinterion (known as Telit prior to January 1, 2023) is an Internet of Things (IoT) Enabler company headquartered in Irvine, California, United States. It is a privately held company with key operations in the US, Brazil, Italy, Israel, and Korea.

Telit Cinterion is an IoT Enabler providing IoT modules, edge-to-cloud services including connectivity plans, IoT SIMs, IoT embedded software and PaaS IoT deployment managed services.

## Company Information

**Website:** [www.telit.com](http://www.telit.com)

**Enquiries:** [marco.contento@telit.com](mailto:marco.contento@telit.com)

**Sales Channel:** Direct to Consumer/Enterprise, Resellers/Distributors

**HQ Location:** Irvine, California, United States

**Sales Office Locations:** Global

**Additional 3GPP Module Types In Portfolio:** Industrial IoT

## Product Profiles

### M2



5G FN990 family



5G MV32 family



5G FN980 family



5G MV31 family

### LGA



5G FE990 family

## Company Profile

Yaojin Technology (Shenzhen) Co., Ltd. was invested and founded in 2003. The company has been engaged in electronic products R&D, production, export and integration enterprises. Yaojin Technology has been committed to continue to provide excellent products and services, for people to create a smarter, healthier and richer life. Yaojin Technology adheres to independent innovation, speeds up the innovation of technology and service, enriches talent pool, and vigorously promotes the upgrading of management. In the five years from 2013 to 2020, we will take three product lines: home entertainment, network communication and 4G-5G wireless home network terminal as the core pillars, gradually form the development pattern of multi-industry coordination.

## Company Information

**Website:** [www.yaojinkeji.com](http://www.yaojinkeji.com)

**Enquiries:** [jerry@yaojinkeji.com](mailto:jerry@yaojinkeji.com)

**Sales Channel:** Direct to Consumer/Enterprise, Resellers/Distributors

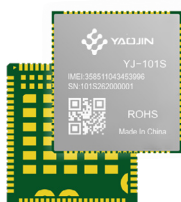
**HQ Location:** ShenZhen GuangDong China

**Sales Office Locations:** China

**Additional 3GPP Devices In Portfolio:** 4G Module

## Product Profiles

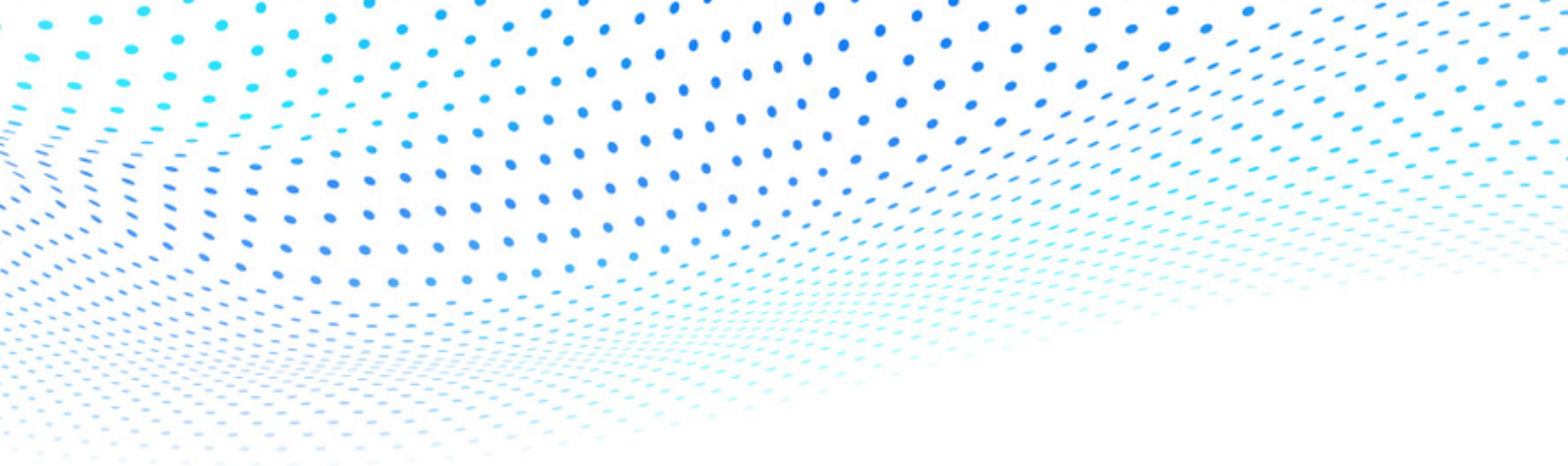
### Other



4G Module 101S



4G Module 106S



# Fixed Wireless Access Software Suppliers



## Company Profile

BEC Technologies is driving transformation across industries, business models, and experiences with the power of our 4G and 5G Wireless WAN connectivity solutions. Trusted and widely deployed by global organizations, our cutting-edge technology fuels a new era of growth and opportunity. Headquartered in Richardson, TX, BEC Technologies is the North American subsidiary of 50-year industry pioneer Billion Electric Co. Ltd (TSE #3027: Billion) and leads the Information Communications and Telecommunications (ICT) Division. To learn more about BEC Technologies' products and services, visit [www.bectechnologies.net](http://www.bectechnologies.net).

## Company Information

**Website:** [www.bectechnologies.net](http://www.bectechnologies.net)

**Enquiries:** [sales@bectechnologies.net](mailto:sales@bectechnologies.net)

**Sales Channel:** Direct to Carrier, Resellers/  
Distributors

**HQ Location:** Richardson, TX USA

**Sales Office Locations:** North America, Asia Pacific

**Additional 3GPP Devices In Portfolio:** Industrial IoT, USB  
Dongles, Vehicular CPE

## Product Profiles

### FWA Device Management BECentral®CloudEdge Service Platform



## Company Profile

In the world of mobile network capacity and quality of experience measurements, Pirlys is an industry innovator through a data analytics software. Pirlys uses advanced machine learning to compute trends from the OSS data, providing insights used to optimise network dimensioning and planning. Pirlys also provides predictive technology that can estimate the capacity needs at 6, 12, 24 months based on historical data. By only investing in areas where there is traffic to capture, Pirlys helps operators save on investments and generate new revenues. As part of Pirlys' mission, we strive to provide a better experience for our customers' subscribers.

## Company Information

**Website:** [pirlys.com](http://pirlys.com)

**Enquiries:** [support@pirlys.com](mailto:support@pirlys.com)

**Sales Channel:** Direct to Mobile Network Operators and National Regulatory Authority

**Sales Office Locations:** Andorra, France, Russia, Luxembourg

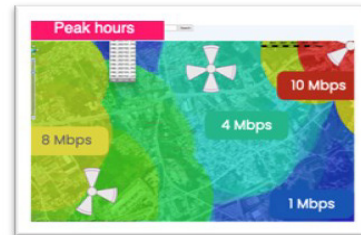
**HQ Location:** Principal d'Andorra

## Product Profiles

### Network Planning

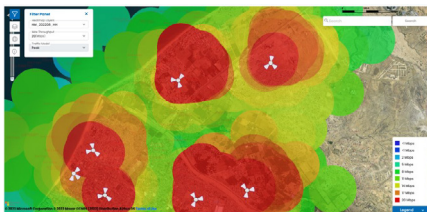
Number of sellable lines / FWA lines deprecation / Budget versus QoE / Traffic forecast

SECTOR	Hour	Type	Ulr Thp	Ulr Max	Duty Ratio	Lines Sold			Lines Available		
						Bronze	Silver	Gold	Bronze	Silver	Gold
S-BAR_0001_C01_303_R	117_214_2500	212R	8.87	24.00	2.38%	1	0	0	60	44	15
S-BAR_0001_C01_303_R	117_214_2500	212R	2.51	24.00	2.38%	1	0	0	7	4	1
S-BAR_0001_C01_303_R	117_214_2500	212R	4.33	24.00	2.38%	1	0	0	0	0	0
S-BAR_0001_C01_303_R	117_214_2500	818R	24.44	10.00	0.99%	5	0	0	500	469	182
S-BAR_0001_C01_303_R	117_214_2500	818R	19.17	26.00	2.58%	13	0	0	156	117	46
S-BAR_0001_C01_303_R	117_214_2500	818R	11.81	24.00	2.38%	12	0	0	72	53	20



### Quality Management

Quality coverage / Peak hour versus ROT / Marketing offers simulation

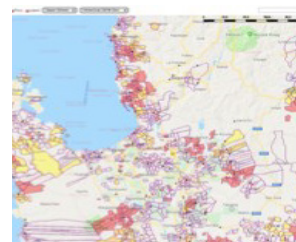


	CURRENT		NEW	
	Speed (Mbps)	Monthly Cap (GB)	Speed (Mbps)	Monthly Cap (GB)
Bronze Offer	0	0	0	0
Silver Offer	0	0	0	0
Gold Offer	0	0	0	0
Bronze Offer	0	0	0	0
Silver Offer	0	0	0	0
Gold Offer	0	0	0	0
Zone	Network			
Traffic change	%			

### CPE Management

Maximum speed / Best outdoor installation / Best indoor installation / Eligibility

SECTOR	User connection speed (Mbps)												
	Near Cell			Center Cell			Median Cell			Edge Cell			Std dev.
DL	UL	Traffic: 0-300m	DL	UL	Traffic: 0-300m	DL	UL	Traffic: 1-400m	DL	UL	Traffic: 1-400m	DL	UL
S-MAN_0001_C01_303_N3	17.3	13.80	22%	12.77	10.77	74%	8.18	8.00	2%	3.22	8.15	0%	5.40
S-MAN_0001_C01_303_R	10.24	9.37	9%	13.93	9.37	8%	10.34	4.45	77%	7.24	3.92	3%	1.69
S-MAN_0001_C01_303_R	9.17	5.24	8%	8.23	5.20	37%	11.28	3.81	50%	10.36	3.32	0%	1.55
S-MAN_0001_C01_303_R	10.71	8.36	18%	10.05	7.70	78%	8.33	6.93	7%	3.72	4.99	0%	2.27
S-MAN_0001_C01_303_R	10.47	4.38	10%	1.63	3.58	66%	0.49	2.07	19%	0.07	2.82	1%	0.04
S-MAN_0001_C01_303_R	10.24	3.19	8%	2.44	3.34	72%	1.82	3.14	18%	1.12	3.05	0%	0.16
S-MAN_0001_C01_303_R	10.11	4.51	40%	0.64	4.43	52%	0.28	4.22	7%	1.11	3.81	1%	0.35



# Forum Members



## How to be added to this Catalogue

To be added to the FWA Device Ecosystem Company Directory your company needs to be a Partner or Member of the 4G-5G FWA Forum. Please email [FWAForum@gsacom.com](mailto:FWAForum@gsacom.com) for an application form.

## How to join 4G/5G FWA Forum

Any supplier in the FWA ecosystem can request to join the [4G-5G FWA Forum](#) as a Partner or as a Member.

For an application form email [admin@gsacom.com](mailto:admin@gsacom.com).

## How to join GSA

GSA Membership is open to all companies that supply products or services to the global mobile industry. GSA membership categories can include, but are not limited to, network suppliers, semiconductor suppliers, test equipment manufacturers, application developers, device manufacturers, companies providing support services and mobile consultants. Membership terms are for a minimum of one year and commence on receipt of the membership subscription fee.

For an application form email [membership@gsacom.com](mailto:membership@gsacom.com)

Alternatively, companies can get full access to GSA's unique resources including Member Reports and GAMBoD databases by subscribing as an Associate. Subscription discounts are available for industry regulators, government agencies and mobile operators with licensed spectrum. Email [admin@gsacom.com](mailto:admin@gsacom.com) for more details and an application form.

# ABOUT GSA

GSA is the voice of the global mobile ecosystem and has been representing mobile suppliers since 1998.

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<https://gsacom.com>

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