

Application and Features

Advantages of GX500G in a 5G-Embedded House
and IoT data on ONENET Essential Platform
Activate Your New 5G House!



TRITOM[®]

Tri Cascade Inc[®]
Taking Internet of Things Further

www.tricascadeinc.com



A **TRITOM GX500g IoT 5G Modem** in a 5G-Embedded House offers numerous advantages, enhancing connectivity, efficiency, and smart home integration. Here are some key benefits.

TRITOM GX500g IoT 5G Modem



Superior Internet Connectivity

High-Speed Internet:

- Provides access to ultra-fast 5G internet speeds, significantly surpassing traditional broadband capabilities.
- Ideal for high-bandwidth activities such as HD video streaming, online gaming, and large file downloads.

Low Latency:

- Ensures real-time responsiveness, crucial for applications like video conferencing, online gaming, and remote work.
- Enhances the overall internet experience by reducing delays and buffering times for smart IoT devices.



Enhanced Network Reliability

Stable Connection:

- Offers a more stable and reliable connection compared to traditional wired networks, less susceptible to outages.
- Acts as a robust backup network, automatically switching to 5G in case of wired network failure.

Seamless Connectivity:

- Provides consistent internet access across all areas of the home, even in locations where wired connections are impractical.



Smart Home Integration

Device Compatibility:

- - Connects various smart home devices, such as smart thermostats, security systems, and appliances, enabling seamless integration and control.
- - Supports many devices simultaneously, ensuring smooth operation for all connected devices.

Remote Access and Control:

- - Allows users to control and monitor their smart home devices remotely via smartphones or tablets, leveraging the 5G network for anytime, anywhere access.
- - Facilitates real-time monitoring and control of home security systems, providing instant alerts and high-definition video streaming.



Improved Home Office Efficiency

Enhanced Remote Work Capabilities:

- Provides reliable, high-speed internet essential for remote work, supporting video conferencing, cloud collaboration, and large file transfers.
- Low latency ensures smooth and efficient remote desktop control and real-time collaboration.

Secure Connectivity:

- Offers advanced security features, reducing the risk of network attacks and data breaches.
- Ensures the safety and privacy of data, critical for remote work and online transactions.



Future-Proof Technology

IoT and Smart City Integration:

- Supports a wide range of IoT devices, enabling more complex and intelligent home automation scenarios.
- Integrates seamlessly with smart city and smart community infrastructure, enhancing the overall smart living experience.

Support for Emerging Technologies:

- Facilitates the use of emerging technologies such as Virtual Reality (VR) and Augmented Reality (AR) within the home, providing new entertainment and educational opportunities.

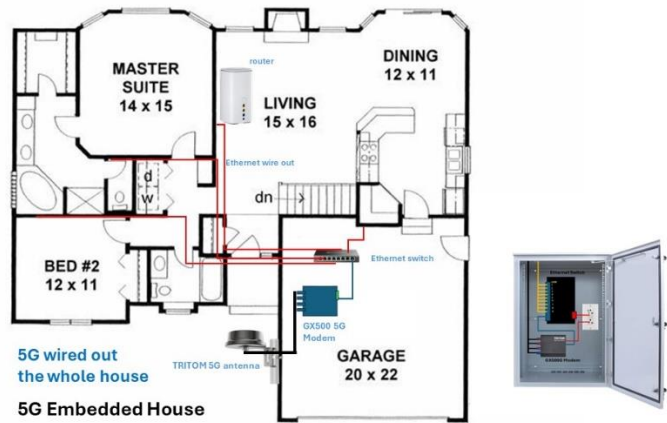


Ease of Installation and Management

Simple Installation:

- Typically designed as plug-and-play devices, requiring minimal technical expertise for setup. When a new homeowner receives their new house, simply use the mobile app to activate their own 5G Internet and then plug the router to the wall to have instant high speed Internet service.
- Eliminates the need for extensive wiring - reducing installation time and costs.

5G Embedded House concept and diagram



Network RJ45 jack



5G box in the garage



5G modem and network switch box



Outdoor 5G antenna installation





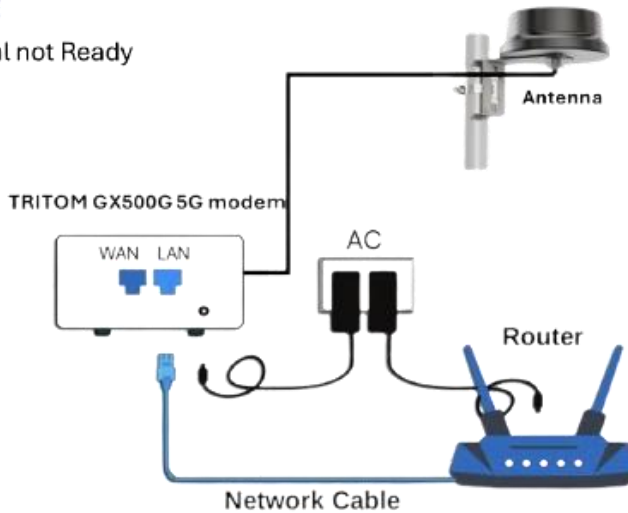
User-Friendly Management

- Offers intuitive management interfaces for easy configuration and monitoring of the home network.
- Supports remote diagnostics and troubleshooting, enabling efficient network management and optimization.

TRITOM GX500G 5G fixed wireless home Internet

STAGE ONE

Fiber Optical not Ready



The **5G Fixed Wireless Home Internet solution** integrates **GX500G - 5G IoT modem**, **5G Antenna**, and **Router**, working together to deliver high-speed internet access to homes.

5G Fixed Wireless Home Internet solution create a robust, high-performance 5G home internet solution that eliminates the need for traditional wired broadband, offering faster speeds and greater flexibility in installation and usage.

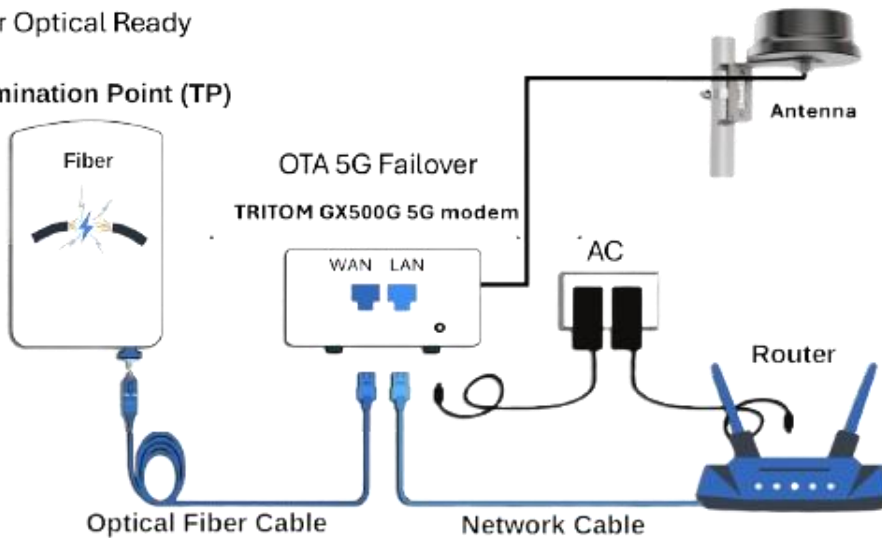
TRITOM GX500G IoT 5G Modem

TRITOM GX500G 5G failover with Fiber Optical

STAGE TWO

Fiber Optical Ready

Termination Point (TP)



The **5G Fixed Wireless Home Internet solution** is not only enhances internet resilience with high-speed, low-latency backup but also provides an easily deployable and cost-effective alternative to secondary fiber optic connections. This makes it an ideal 5G failover solution for ensuring continuous, high-performance connectivity in the event of fiber disruptions.

TRITOM GX500G IoT 5G Modem

Conclusion

In summary, a TRITOM GX500G in a 5G-Embedded House offers substantial advantages, including superior internet connectivity, enhanced reliability, seamless smart home integration, improved remote work capabilities, future-proof technology, and ease of installation and management. These benefits collectively enhance the home's functionality, efficiency, data security and user experience.





ONENET Essential is a cloud-based Internet of Things (IoT) platform developed by Tri Cascade, Inc, designed to provide an efficient, flexible, and secure environment for IoT devices and data management. Below are some of its key features and benefits:

ONENET Essential



1. Device Management:

- ✓ Supports remote management of a large number of IoT devices.
- ✓ Device registration, configuration, and lifecycle management.
- ✓ Real-time monitoring and control of connected devices.

2. SIM Management

- Provides a unified platform to manage multiple SIM cards across different devices, locations, and networks.
- Enables remote provisioning and configuration of SIM cards without physical access to the devices.
- Tracks SIM card status in real-time, such as activation, data usage, signal strength, and network connectivity.
- Provides detailed information on the location, status, and usage of each SIM, helping administrators stay updated on the health of their IoT deployments.



3. Data Collection and Processing:

- Capable of collecting data from a variety of IoT devices and sensors.
- Provides real-time data analytics and visualization.
- Customizable data processing pipelines to handle specific use cases.

4. Scalability:

- Designed to scale for large IoT ecosystems, allowing the management of millions of devices and data points.
- Support for horizontal scaling to meet growing IoT demands.



5. Multi-Protocol Support:

- Supports multiple IoT communication protocols, including MQTT, HTTP, and CoAP, ensuring compatibility with various device types.

6. API Integration:

- Rich API ecosystem that enables seamless integration with third-party applications and services.
- Allows developers to build custom applications on top of the ONENET Essential.

7. Security:

- Provides secure communication between devices and the platform through encryption protocols.
- Features access control and user authentication to ensure data security and integrity.



8. Event Management:

- Configurable event-driven triggers and alerts based on real-time device data, such as threshold violations or abnormal behaviors.

9. Cloud Storage:

- Offers secure cloud-based storage for device data, which can be retrieved, analyzed, and archived.
- Flexible storage options depending on the type and volume of data.

10. Data Visualization:

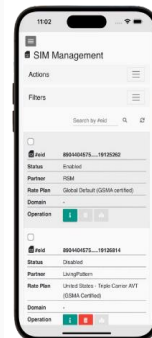
- Provides dashboards for visualizing data trends, metrics, and insights.
- Customizable widgets for real-time or historical data views.



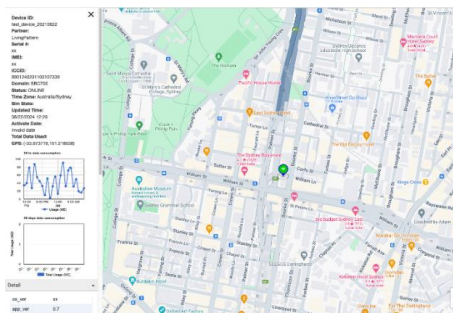
11. Crossed Devices & OS Supported:

- Desktop, Laptop, Mobile phone, tablet and Pad Devices Supported.
- Windows, Linux, MacOS, iPadOS and Android supported.
- Allows users to be more mobile and work from anywhere.
- Teams can work with the most up-to-date information across multiple platforms.
- User Friendly

ID	App	Status	Partner	Rate Plan	Domain	Operation
890440475...1912623	Enabled	RSM	Global Default (GSMA certified)			
890440475...1912614	Disabled	LongPattern	United States - Triple Carrier A/T (GSMA Certified)			
890440475...1912620	Enabled	LongPattern	United States - Triple Carrier A/T (GSMA Certified)	SBC700		
890440475...1912641	Enabled	LongPattern	United States - Triple Carrier A/T (GSMA Certified)	SBC700		
890440475...1912628	Enabled	TiCascade	Global Default (GSMA certified)			
890440475...1912613	Enabled	LongPattern	Global Default (GSMA certified)			
890440475...1912622	Enabled	TiCascade	AT&T Native Core OIG Enabled			
890440475...1912642	Enabled	LongPattern	United States - Triple Carrier A/T (GSMA Certified)			
890440475...1912623	Enabled	LongPattern	United States - Triple Carrier A/T (GSMA Certified)			



<SIM Management>



<Live Map>



12. Development Tools:

- Provides SDKs and development tools for various programming languages, facilitating faster development and deployment of IoT solutions.

13. Marketplace Integration:

- Offers an IoT marketplace where users can find and deploy third-party IoT applications or modules to extend the platform's functionality.

14. User Friendly Interface:

- Intuitive UI enables users to navigate, and provides a seamless experience for users.
- Helps users Immediately understand functionality.

Key Benefits

01

Ease of Use

Simplifies IoT application development and management with an intuitive user interface and comprehensive set of tools.

02

Cost-Effective

Reduces the infrastructure and operational costs associated with large-scale IoT deployments by utilizing a cloud-based infrastructure.

03

Rapid Deployment

Enables quick integration and deployment of IoT devices and applications, accelerating time-to-market for IoT solutions.

04

Real-Time Insights

Allows users to gain actionable insights from IoT data through real-time monitoring, reporting, and data analysis.

05

Enhanced Interoperability

By supporting multiple IoT standards and protocols, ONENET enhances device interoperability, making it easier to connect devices from different vendors.

06

Flexibility and Customization

Users can customize data processing workflows, event triggers, and dashboards according to their specific business needs.

07

Global Accessibility

As a cloud-based platform, ONENET provides global access to IoT data, enabling businesses to manage and monitor devices across different geographical locations.

08

Reliability and Availability

Built on China Mobile's infrastructure, ONENET offers high availability and reliability, ensuring that mission-critical IoT applications run smoothly.

Other Use Case



Smart Cities

For managing urban infrastructure, traffic systems, and utilities



Industrial IoT (IIoT)

Used in manufacturing for real-time monitoring of equipment and predictive maintenance.



Smart Agriculture

Helps in monitoring soil conditions, weather, and crop health.



Healthcare

Supports remote monitoring of patients' vital signs and wearable devices.