



## M500

LTE Industrial Multi-Carrier Router

# Augmented quality of real-time video call and offshore surveillance for maritime public safety management

## Executive Summary

The hazards of major maritime disasters, extreme sea weather condition and emergency incidents are key safety activities of the Coast Guard's most well-known missions as these can mean the difference between life and death. That is why the Coast Guard is prioritizing network efficiency as it begins updating the devices on connectivity of reliability, speed, and bandwidth to deal with extremely limited connectivity.

While Coast Guard is out doing day-to-day operations, they need high-speed and reliable network connectivity to support a variety of communications and operations. "Time is precious for the critical services", it is vitally important for Coast Guard to have a fast, reliable, and modernized technology, an industrial router that can help ensure rapid flow of data to support their important work daily.



## Challenge

The Coast Guard's missions include searching and rescuing, aids to navigation, and environmental protection, especially the port security around 5-6 nautical miles. As a result, they require secure and dynamic communications infrastructures to improve real-time data transmission.

## Solution

Most current and accurate information are vital when any emergency instance occurs. Billion M500 plays a key role in helping first responders in the field access secure, insightful, real-time data. First of all, the Dual SIMs/ Dual Modules and EWAN enhance the efficiency of communication with low latency and greater ability to process information at the edge improving the responsiveness of those applications so first responders have the most current information. Along with its embedded module offers stable 4G LTE broadband connectivity around 5-6 nautical miles, allowing coast guard to make accurate decisions based on the most current data. Secondly, its metal casing is ruggedly designed and proven by military-810G grade testing to withstand heat, and humidity and protect from shock, vibration, etc. Third, embedded Global Navigation Satellite System (GNSS) engine for GPS and GLONASS system allowing real-time location tracking. Furthermore, embedded IPsec, PPTP, L2TP, GRE, and OpenVPN, a highly customizable secure VPN connection with powerful encryption for safe transmission!



## Conclusion

When an emergency occurs at sea, an instant response with a full picture of the situation is crucial. M500 LTE M2M Industrial IoT Router extends the cover range and transmission distance. Additionally, high power antenna act as a bridge that allows the transmission has the option of a larger spread between the fleet and the cell towers. M500 LTE has approved its ability to revolutionize maritime public safety.

