

# **Integrated Communications Solutions for Multi-Functional IT Needs**



### **About AGILE**

When wireless, interoperable, mission critical secured communications are an absolute requirement; businesses, government, law enforcement, first responders, emergency managers and others turn to AGILE (<a href="www.AlSinterop.com">www.AlSinterop.com</a>). US Headquartered and a global innovator, AGILE has a focused mission

of being the leading provider of secured communications technologies. AGILE delivers powerful, solid-state, ruggedized, seamless, portable, lightning-fast and the most flexible platforms available offering the broadest range of voice, messaging and data on 4G and 5G solutions in the industry. AGILE's full line of products and services support both land and marine applications. Unlike our competition, CORE protects your investment with a backward and forward compatible software and hardware architecture that is expandable and upgradeable. We have always ensured that all of our development, design, engineering, manufacturing and parts are sourced in the US and Germany.

# Easy to Use, Easy to Interconnect

Organizations need communications solutions for field use that have high levels of capability, security of communications, interoperability, upgradeable and ruggedized to withstand ongoing use to adapt to rapidly advancing communications technology. Our solution is built with easy training and flexibility so operators can maintain focus on their job. We understand these requirements and needs to easily operate within IT Systems to enhance and leverage established platforms. AGILE builds solutions to address virtual platforms (fixed and portable), private networks, and building local and wide area networks connected through LTE cell towers. Environment communications analysis is performed in the fields for maximum effect, where it is imperative that the communications solution is easy to operate.

### **The Comprehensive Solution**

Our solutions are built on communications devices, such as the Mobile CORE, which uses the same operating system as the CORE for ease of use. They are built and installed where they are needed in/at the field locations, vehicles, military spec backpacks and hardened cases with built-in batteries. These systems can operate on their own or with a central management server, our virtual SIM platform (the Fusion Server).

### **CORE**

AGILE CORE represents the state-of-the-art communications hub that provides Secured Interoperable Communications with a complete solution to combine hardware, software and mobile applications. It provides communications over LTE, LTE advanced, 3G, LMR, satellite, landline and Wi-Fi, which provides real-time video updates, SMS,



ne video updates, SMS, MMS, and Cellular (Voice & Text) between multiple

parties/agencies for a secured agnostic platform. GPS tracking is embedded in the unit.







#### **Mobile CORE**



The Mobile CORE platform is flexible, which enables us to develop the solutions needed to address communications needs. The Mobile CORE is a small, ruggedized, and durable device that integrates bonded multichannel cellular LTE, Wi-Fi, GPS, and Land Mobile Radio capabilities. Mobile CORE was built for ease of use and utilizing leading edge technology that grows with your needs. The Mobile CORE has sophisticated software onboard to manage cell tower(s) hand-off as you

move, to maximize signal strength and contains the ability to automatically search for the best throughput connections. The bonded LTE aggregates all cellular connections to maintain session persistence, even if one or more cell connections drop due to the vehicle travelling out of range. The LMR extension functions in the background to detect loss of service to the trunked radio network and sends the transmission over the secured VPN LTE connection. This requires no action by the operator.

# **Key Features of the Mobile CORE Hardware (Cellular + WI FI + Router)**

- 4 cellular LTE radios onboard that can hold SIM cards directly in the unit or virtually from the SIM library maintained in your datacenter
- Wi-Fi with a large effective range and are secured for authorized devices
- Passively cooled for a wide range of temperatures
- Dual processers onboard for significant and redundant performance
- Native DC power
- Large coverage area secured Wi-Fi for body cams and other devices
- LTE-LPI = Low Probability of Intercept of LTE transmission due to varying of power input and misdirection, greatly reducing the likelihood of detection
- GPS tracking embedded in the unit
- Interconnect points for mobile data units, biometric equipment and other devices
- May be deployed singularly or throughout a large enterprise
- Full router capabilities WAN, LAN, firewall, dynamic routing

# **Key Features of the Mobile CORE Software**

- Direct management of best cell tower connection for throughput and QOS
- Dynamic management connection source to change from carrier to carrier based on configuration and logic assigned, as well as satellite uplink if connected to Mobile CORE
- Highly Secured Encryption and VPN
- Wirelessly meshed units for communications where no outside network sources are available

# **CORE PATROL**



## The Basics

- Waterproof, light weight
- Long Battery Life
- No moving parts to be affected by movement
- Passively cooled for a wide range of temperatures
- 4 cellular LTE chips
- Large coverage area secure WI-FI
- GPS tracking embedded in the unit
- Interconnect points for providing data to other equipment
- May be deployed singularly or peer-to-peer mesh with multiple backpacks
- Central Server option to remotely manage multiple units



### **MARINE CORE**



The Marine CORE is a LTE communications solution for yachts and ships to reduce satellite costs and to provide a bigger internet connection when near shore. Marine CORE has sophisticated software onboard to manage cell tower hand offs as you move to maximize signal strength and the ability to automatically search for the best throughput connection available. The bonded LTE aggregates all cellular connections to maintain session persistence even if one or more cell connects drop due to the ship travelling out of range. The LMR extension functions in the background to detect loss of service to the trunked radio network and send the transmission over the VPN secure LTE connection. This requires no action by the operator.

#### What does it do?

- Smart routing for automatic switching between LTE and satellite services and back to LTE to reduce sat usage
- Intelligent software to scan for the best LTE connection available all the time.
- . No moving parts to be affected by ship movement
- 4 cellular LTE radios (carrier agnostic)
- · Automatic switching between carriers for expanded coverage.
- Onboard sim cards directly in the unit and virtual downloaded from a datacenter sim library
- Large coverage area secure WI-FI for multiple devices and calling via compatible cell phones
- · GPS tracking embedded in the unit
- Interconnect points for mobile data units.
- Conformally coated boards and billet aluminium construction for durability
- Passively cooled for a wide range of temperatures

# Stay connected even at sea with MARINE CORE:

- Stream video and music
- · Call, text, chat and FaceTime with Wi-Fi calling
- Browse the Internet
- Check email

- Hee ann
- Post on Social Media
- Video Conference

#### **Fusion Server**

- Virtual SIM capability to remotely send a cellular carrier's SIM to the Mobile CORE for use when that carrier network is detected as the preferred communications service and dynamically change carrier as the circumstances dictate
- Remote gateway management server to monitor, configure and check in on all gateways reducing maintenance and skill set requirements onsite to support the units
- All Mobile COREs registered to the server automatically when turned on and provide GPS location the Fusion Server that may be mapped real-time



At AGILE, we are a technology company that continuously refines its expertise in our chosen field to bring the best possible solutions to our customers. AGILE is in constant coordination with the customer to ensure that their expectations exceeded.

AGILE is a qualified Small Business.

**Case Studies:** All proven and field tested.

## DRONE APPLICATIONS – reaching further off the grid

Many public safety and government agencies operating in remote and rural areas of the country struggle with cost effective and capable communications backhaul solutions for their wireless access points. This need includes a long reach to the existing infrastructure, long duration of operations with the capacity to send back data, multiple voice and video feeds from the



operations group in the remote area to the field. The solution is a tethered drone, a private LTE picocell, offering an extensive coverage footprint (approx. 20 miles) in the remote areas to in-field users for voice, data, and sharing the backhaul with mobile surveillance video system, radar, and critical apps running on data devices such as tablets and smartphones. AGILE Virtual SIM device provides the ability to manage a library of multiple SIM cards from large cellular LTE and

regional local mobile carriers. It maintains a small global wireless control channel link to all mobile gateway devices in the network. When a mobile gateway moves through the network, the server automatically monitors the GPS location and sends the optimum SIM card to the mobile unit.

# MINING APPLICATIONS – bringing new comms to an industry

Communications in the mining industry is currently restricted with limitations because the blasting devices, whether surface mining or subsurface mining, are connected via cables/wires and sensitive to signal input. With AGILE's CORE, a secured and device agnostic communications hub, the blasting machines are connected wirelessly via Wi-Fi, cellular or Satellite, creating a mesh network that extends the range of operation. This



allows the interface application on a PC or tablet to optimize the display interface, streamline the development effort, improve overall safety and precision of the project. Communication capability is provided in known Dead-Zones, and Real-Time Analytics are compiled from collected data, shared, and reported back to the command center for real-time updates on the blast model for the next explosion.

# NASCAR CASE STUDY - clearing a path in an overloaded communications environment



Multi-element communications solution to provide higher bandwidth data and more flexible voice communications in a congested frequency environment (over 100,000 people using the same carrier tower) by providing an expanded ecosystem. Providing a bridge to various radio systems to achieve interoperable communications amongst the teams. Voice and data communication were exchanged, from the car-pit-command center, interchangeably. Optimization of data transfer rate, speed and reliability, and various antennas were tested to expand the

frequency range that is normally overly expanded.

### **WE ARE AGILE**

We engineer the hardware. We design the software. We build the solution. With committed support.

