

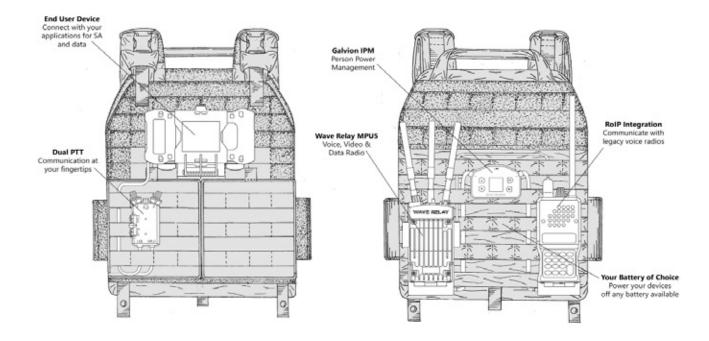
CHANGING THE WAY YOU COMMUNICATE



DISMOUNT SOLUTION

Create your Tactical Advantage

In this world of increasing technology, tactical soldiers and first responders seem to be carrying more instead of less. Overloading these integral members of Defence and Emergency Services departments is an easy way to create injuries and minimize effectiveness on the front line. We provide a solution that solves this problem: fewer cables, fewer batteries, fewer worries, without ever sacrificing capability.



ONE SOLUTION. INFINITE POSSIBILITIES.

WAVE RELAY® MPU5

Create your Tactical Advantage

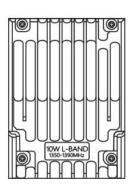
The Wave Relay® MPU5 is the world's most efficient and scalable MANET network, which provides a flat Layer-2 network for all your users. With a fully capable smart radio you can decrease the amount of equipment you have to carry so you can focus on the task at hand. Your network will deliver mission critical data where it needs to go, enabling leaders to make decisions faster.

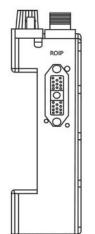
The MPU5 thrives in complex RF environments, and will move your data faster even where your communications have never worked before.

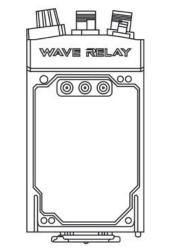
Teams equipped with the MPU5 will stay connected and be able to share critical information as assignments unfold. The MPU5 enables leaders to make better decisions by providing them with accurate data, faster. You can track everyone's positions and movements with integrated GPS and capture, distribute, and view full motion HD video to investigate, coordinate, and complete your mission. Stay in the know.

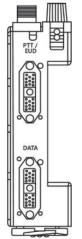


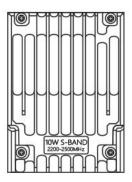
The MPU5 is the world's first "Smart Radio" with an on-board Android Operating System that includes everything you need built in. You will spend less time gathering and organizing gear and more time accomplishing the task at hand. State-of-the-art radio technology combined with the Wave Relay® MANET allows you to go farther and faster than ever before.







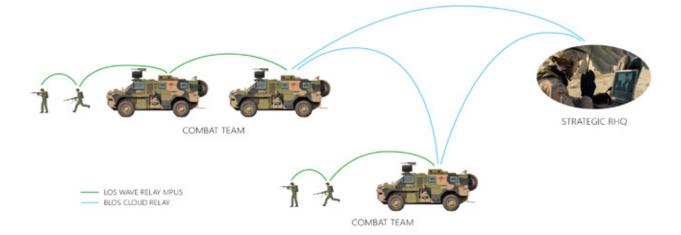




The MPU5 is the result of years of meticulous design and engineering - from the interchangeable frequency module to the multi-functional side connectors - to ensure optimal functionality and performance for you and your team. Designed to withstand extreme conditions in the harshest environments, the MPU5 is rated to the highest standards for temperature, water immersion, shock, salt fog, and security. Wherever your assignment takes you, the MPU5 is ready to go to work.



The Wave Relay[®] MPU5 is used in tactical environments all around the world. The radio is designed to withstand all environments, assuring you will have communications when you need it the most. The MPU5 is the world's first smart radio and was designed to create secure and powerful networks anywhere in the world, where there is no prefabricated infrastructure, tying together all your critical data in real time, providing Command and Control (C2) throughout the entire battlespace. The radio provides high speed data, video, voice and an on-board Android computer system, making this the most scalable, advanced and efficient Mobile Ad-Hoc Networking radio in the world.



In order to integrate with the MPU5 compute partition which holds the Android Operating System, Persistent Systems have developed a Rugged MPU5 Display which connects to the radio through the Dual-PTT. This display contains no compute internally and simply displays the Operating System running on the MPU5 radio, ensuring that data at rest is contained solely on the radio itself. All elements of this system (MPU5, Dual-PTT, MPU5 Display) are IP68 and submersible to 20 metres for 30 minutes.

Providing integration with apps running directly on a networked device allows for users to participate in network operations without having to carry multiple Digital Data Link (DDL) devices. Specialist users can not only view ISR gimbals, but also control unmanned ground, surface and air vehicles via LOS and BLOS networks from the one networked device. Providing this capability on a submersible system means that divers can view ISR, control UGV's and maintain situational awareness of the battlefield whilst remaining submerged underwater.



Not only does the Wave Relay® MPU5 provide high-speed voice, video and data to the user on the ground, but each radio will act as a relay node for the rest of the network. RATEL procedures have been used in the past to rectify LOS communications black spots, but generally cause confusion throughout the network. The Wave Relay® MPU5 will retransmit data on all voice networks, including the TalkGroups the user is not subscribed to, ensuring information transparency throughout the entire network.



DUAL PUSH-TO-TALK

One Radio, Two Talk Groups, At Your Fingertips

The Dual PTT allows you to access 16 TalkGroups and communicate on 2 TalkGroups from one single radio simultaneously - but that's just the beginning. The two independant channel and volume knobs allow you to select your TalkGroups and control their volume independantly. You can talk on both TalkGroups individually or simultaneously using the two PTT buttons.

When using a stereo headset, your selected TalkGroups are routed individually to your left and right ears, allowing you to keep track of all incoming information in any stressful situation. When the user changes TalkGroup on the selection knob, the newly selected TalkGroup is audibly announced in the correct ear, so there's no need to count your 'clicks' anymore.

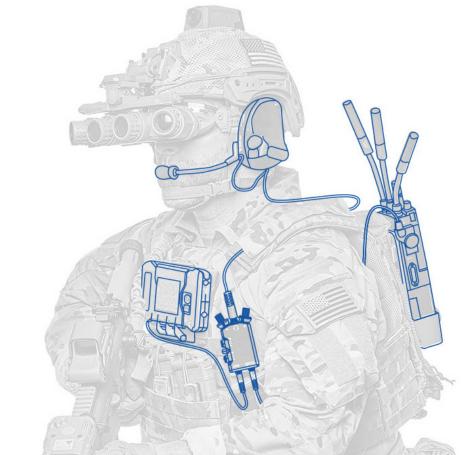
With a simple double tap of the PTT buttons, you can access a Full Duplex Audio channel which allows hands free communications within your team while still accessing your 16 TalkGroups as normal. To communicate on all TalkGroups simultaneously, there is a Flash Override channel which can allows prioritization of communication as well as broadcast communications on all TalkGroups.

The Dual PTT's crystal clear digital audio architecture keeps your team in constant contact to enhance situational awareness, improving success and keeping your team safe . The Dual PTT Device receives all required power from the MPU5; no additional batteries required. Never worry about your PTT running out of power in the middle of a mission.

The Dual PTT is IP68 Rated and can be operated 20m underwater for up to 30 minutes. Every connector on the device is IP68 Rated. The buttons were purposefully engineered to prevent activation due to water pressure at 20 meters. The Dual PTT doesn't just survive at 20m, it remains operational.

Rigorous EMI emissions testing and MIL-STD qualification ensure that you can take the Dual PTT anywhere without interfering with other equipment.







SITUATIONAL AWARENESS

See, Hear and Coordinate Your Team

Using Persistent System's MPU5 display and the Dual-PTT providing power and data, you can minimize dangerous cable runs through quick release body armour, and still maintain Situational Awareness. The MPU5 display will connect seamlessly with the Wave Relay MPU5, displaying the radio's on board operating system to provide access to all voice, video and chat that is presented through the network.

Using battle management applications, command and control can be presented at any location on the battlefield, allowing tactical dismounted commanders to have access to all the information to make better informed decisions. Enable leaders to make better decisions by providing them with better data, faster. Capture, distribute, and view full motion HD video to investigate, coordinate, and complete your mission. Stay in the know.





Access all capabilities on a single device through Wave Relay® Ecosystem devices that communicate on a standardized, common network. You no longer need to carry separate radios for separate devices and capabilities, reducing weight on your kit and allowing you to view live data streams from any networked asset at anytime from anywhere. By sharing a common network, battlefield systems can talk to each other and share data between devices to eliminate monitoring endless loops of raw data. The integrated Android[™] computer allows you to build a foundation for data fusion, artificial intelligence, edge computing, and in-network computing, which will revolutionize the battlefield.



POWER MANAGEMENT

The Power To Communicate

The Individual Power Manager (IPM) is the next generation of rugged, intelligent and portable power management. Smaller, lighter and more streamlined than other portable power management solutions, the IPM integrates with more than 200 types of batteries and electronic equipment, seamlessly supporting a wide range of missions and shifting user demands. The Individual Power Manager can draw power from any source – vehicle or aircraft power outlet, solar blanket, primary and secondary batteries, and more – anywhere in the world. With its built-in intelligent power management software, the IPM can power a variety of equipment and recharge batteries simultaneously – no reprogramming required.



With the Galvion Individual Power Manager, you can conduct post-mission profiles to track your power usage. This means that you can accurately estimate the number of batteries required for each mission, instead of overestimating and overloading your pack. Grams add up to kilograms, and we want to reduce load carriage, and increase your capacity.



The Individual Power Manager seamlessly handles data pass through, prioritizes battery usage, reports power levels, and automatically alerts the operator to any issues. Because it integrates data and power in a single device, it eliminates the need for additional batteries and separate power and data cables.

The IPM ensures continuous operation of mission-critical equipment – radios, satellite phones, GPS units, tablets, laptops, medical equipment, EOD equipment, power tools, UAV batteries, and more, helping the individual solider reduce the weight burden and operate more effectively – especially in remote or austere environments

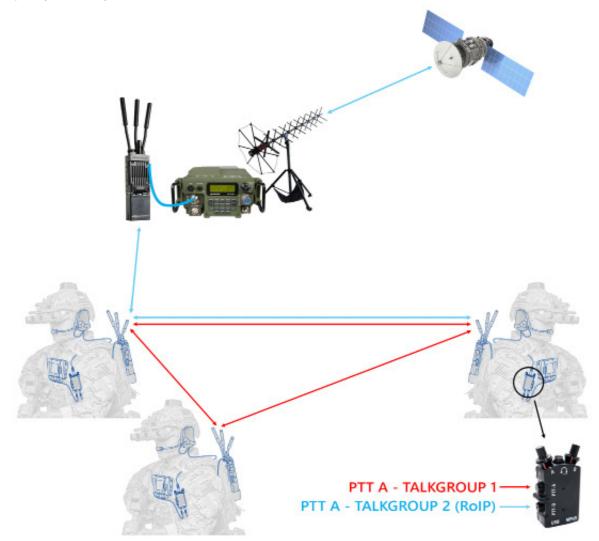


RoIP INTEGRATION

Put LMR Radios On The Network

Gone are the days that radios need to be carried on each person to be accessible. With the Wave Relay MPU5 RoIP integration, you can access legacy voice radios from any where in the network. Simply attach your in service radio to the RoIP port of an MPU5 and choose the TalkGroup to associate to that radio, and any member on the network with access to that TalkGroup can transmit and receive on that radio.

No longer do you have to dispose of old radios to upgrade your network. Now, you can simply integrate your older radios with the Wave Relay MPU5 enhanced capabilities. Mount your AN/PRC 117G with a 20W amplifier in a helicopter and use the Wave Relay MPU5 RoIP extension capability to extend your MPU5 voice network over another bearer.



Contact us for more information about how we can reduce your agency's load carriage, and increase your capability on the ground.



