The MPU5 enables you to encode and stream live audio and video without the need for external hardware encoders by directly connecting HD and SD camera systems via 3G-SDI, HDMI, and Composite video inputs. The MPU5 encodes and streams H.264 feeds at resolutions ranging from 320x240 to Full HD 1080p and 720p60. The onboard hardware accelerated video encoder supports RTP as well as both unicast and multicast UDP streaming in an MPEG-TS transport stream. The MPU5 also provides hardware accelerated H.264 video decoding, enabling you to watch up to four video streams simultaneously.

Direct from the scene to the studio
By building a Wave Relay® network in your city, you can transmit both live and prerecorded HD video directly back to the studio. The MPU5, powered by the Wave Relay® MANET, allows a distributed and decentralized group of fully mobile users to communicate continuously and efficiently without the need for fixed infrastructure. Every MPU5 on the Wave Relay® network communicates with each other, forming a true peer-to-peer mobile network with no master node or base station. Add and subtract MPU5s from the network without losing connectivity or reconfiguring your devices. This means that your reporters can go anywhere in your networked area and maintain a constant, private, and secure connection directly back to your studio. And, not only are your reporters communicating directly back to the studio, the studio can talk directly to your reporters on the same network to make sure they know where they need to be and are ready to go live.

Benefits of the MPU5
▶ Eliminates the need for an ENG truck, which reduces labor, infrastructure, and operational costs
▶ Transmit up to 20 miles with omnidirectional antenna
▶ Excels in non-Line-of-Sight environments
▶ Onboard Video Encoder/Decoder with 720p59.94 capability
▶ Seamless integration with any camera that has 3G-SDI, Composite, or HDMI output
▶ 16 Talk Groups and Dual Active PTT can support multiple microphones, IFBs, and RTS simultaneously
▶ Full duplex HD video supports video transmission and return
▶ Allows multiple broadcast feeds on the same frequency
▶ Quick to deploy, quick to strike
▶ RTP Unicast, UDP Unicast and Multicast
▶ Create private, broad-area networks
▶ Serial channel for CCU control
▶ Data channel for Teleprompter, Weather Radar, etc.

Own the network
No more sharing the network with 4G/LTE users. By owning the network you use to transmit live video from the scene, you are in control. Eliminate cellular network bonding and stop relying on microwave transmission, thus reducing your costs and increasing your reliability and flexibility. With a one-time purchase of Wave Relay® equipment, you also eliminate monthly 4G service charges. The Wave Relay® MANET gives you your own exclusive bandwidth for whatever the ratings demand. Quickly access your network anywhere, meaning your network does not limit where you report from. Additionally, wide frequency bands mean that you are not bound to a crowded channel, giving you the control you need to transmit crystal clear video.

Superior voice capability
With the MPU5’s superior audio capability, your field reporters will never miss an update from the studio. The MPU5 has 16 configurable talk groups and dual active push-to-talk (PTT) voice, meaning you can stream audio for your broadcast and communicate instructions to your team simultaneously. The MPU5 seamlessly integrates with multiple microphones and interruptible foldbacks (IFBs). Stay in constant communication throughout your network.

Expand your network
You can’t always predict where reporting opportunities present themselves. Own a network that can go wherever you need it to. Equip every reporter, camera, news van, and helicopter with MPU5s and access every asset for nonstop coverage whenever you need it. The Wave Relay® MANET routes data from radio to radio, enabling the network to grow, adapt, and extend as more MPU5s are added. Massively scalable and incredibly intelligent – the MPU5 keeps you connected and ready for anything.

In addition to scaling up your network, the MPU5 has multiple video inputs. Connect any video camera that has an HD-SDI, HDMI, or Composite output directly to the MPU5 with a single cable.