



# MPU5

Built to create powerful, secure networks anywhere, the MPU5 unites all your critical data sources in real time – giving you access to the most advanced, most scalable Mobile Ad Hoc Network (MANET). Data, video, voice, and a fully integrated Android™ computer makes the MPU5 the world's first Smart Tactical Networking Device.

## SMART TACTICAL NETWORKING

- Onboard Android™ OS - the MPU5 is your computer
- Install existing Android™ apps
- Run custom apps natively
- Connect & use USB devices

## STAY CONNECTED ANYWHERE

- Uses the Wave Relay® MANET
- Designed for mass scalability - no hop limits
- Rapid self-forming & self-healing
- True peer-to-peer - no master node

## CARRY LESS. DO MORE.

- Network, voice, video, computer –all in one device
- Eliminate extra batteries, LMRs, encoders, receivers & more
- More room for mission critical equipment

## INTERCHANGEABLE FREQUENCY MODULE

- State-of-the-art MIMO technology
- High reliability in complex environments
- Cost efficient and future-proof

## STREAM HD VIDEO

- Fully integrated H.264 HD video encoding/decoding
- Connect video cameras directly to the unit
- View multiple video streams simultaneously
- HD output for connection to HDMI-compatible displays
- Stream video and voice simultaneously

## RELIABLE VOICE COMMUNICATIONS

- Monitor up to 16 channels of voice
- Dual active PTT voice -key 2 channels at once
- Voice channel prioritization & configurable talk groups

## INTELLIGENT RoIP TETHERING

- Integrated Radio Over IP (RoIP) functionality
- Bring your LMR radio onto the network
- Communicate across separate organizations seamlessly

ONE SOLUTION. INFINITE POSSIBILITIES.

# MPU5 WR-5100 SPECIFICATIONS

## DIMENSIONS (NO BATTERY)

- 1.5 x 2.6 x 4.6 in.
- 3.8 x 6.7 x 11.7 cm

## WEIGHT (NO BATTERY)

- 13.8 oz
- 391 g

## COATING

- Black Anodized
- Meets MIL-A-8625-F, TYPE III, CLASS2

## MOUNTING

- (3) #4-40 0.15" Mounting Holes

## ENVIRONMENTAL

- IP68 Certified
- IPx8 Waterproof 30 mins @ 20m or 2 hrs @ 10m rating
- IP6x Dustproof

## MIL-STD-810G

- Shock/Vibe/Salt-Fog/Rain/Humidity/Icing/Altitude/Solar Rad

## MIL-STD-461F

- RE/RS/CE/CS

## OPERATING TEMPERATURE

- 40° to +85° C
- 40° to +185° F

## MANUFACTURING

- Manufactured in USA
- ISO 9001:2015 Certified
- Designed to MIL-STD

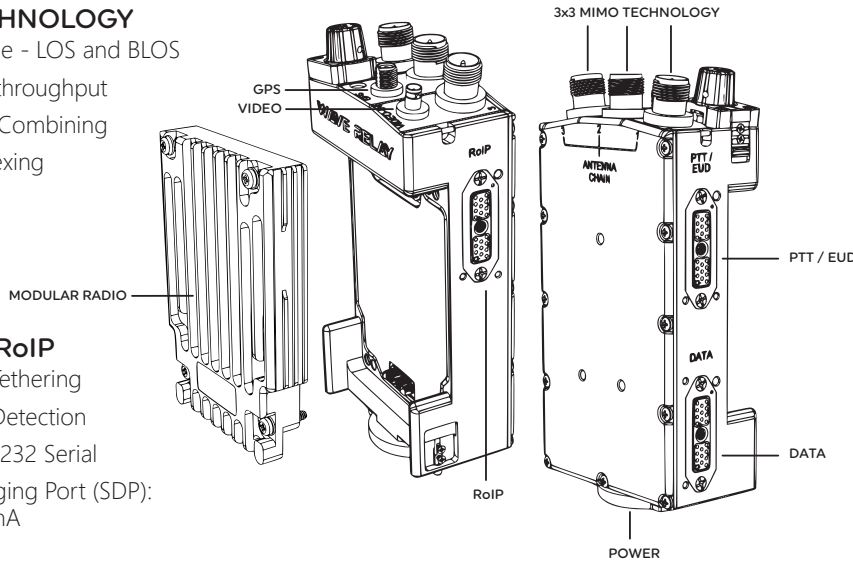
## COMMERCIAL COMPLIANCE

- FCC/IC Certified
- Japan Type Approval
- RCM

WAVE RELAY  
AUTHORIZED RESELLER

## 3x3 MIMO TECHNOLOGY

- Extended Range - LOS and BLOS
- 100+ Mbps of throughput
- Maximal Ratio Combining
- Spatial Multiplexing



## INTELLIGENT RoIP

- Legacy Radio Tethering
- Legacy Radio Detection
- USB Host / RS-232 Serial
- Standard Charging Port (SDP): Rated for 500mA

## FREQUENCY MODULE

### Interchangeable Frequency Module (Ordered Separately)

- RF-1150 – L-Band Frequency Range: 1350–1390 MHz (10W)
- RF-2150 – S-Band Frequency Range: 2200–2500 MHz (10W)
- RF-2125 – BAS Band Frequency Range 2025–2145 MHz (6W)
- RF-4100 – Lower C-Band Frequency Range: 4400–5000 MHz (6W)
- RF-5100 – Upper C-Band Frequency Range: 5100–6000 MHz (4W)

### RF Modulations:

- OFDM (64-QAM, 16-QAM, QPSK, BPSK)
- 6W - 10W Transmit Power\*

### Software configurable bandwidths:

- 5 MHz, 10 MHz, 20 MHz,

### TX/RX Operating Modes:

- All modes from SISO to 3x3 MIMO

## DATA

- USB On-the-Go
- RS-232 Serial
- Ethernet
- Standard Charging Port (SDP): Rated for 500mA

## GPS

- 3.3V Active
- Situational Awareness
- Cursor-on-Target Compliant
- 1 Second Updates

## VIDEO

- HD-BNC Connection
- 3G-SDI & Composite Input
- Integrated HD H.264 Video Encoding/Decoding

## POWER

- Low Battery Alert
- Standard Twist-Lock
- Connector 8 - 28 VDC

## PTT/EUD

- Dual Active PTT Channels
- End User Device (EUD) Data / Charging
- USB Host / RS-232 Serial
- HD Video Output
- Charging Downstream Port (CDP): Rated for 1,500mA

## NETWORKING

- Advanced Wave Relay® multicast algorithms
- Seamless Layer 2 network connectivity
- Integrated serial-to-Ethernet capability
- Cloud RelayTM
- IPv4 and IPv6 compatible
- Integrated DHCP server
- USB RNDIS Host and Device

## SECURITY

- Integrated Hardware Cryptographic Acceleration
- CTR-AES-256 Encryption
- HMAC-SHA-256 Authentication & Integrity
- Utilizes Suite-B Algorithms
- Cryptographically authenticated Over-the-Air Rekey and Key Zero
- FIPS-140-2 Certified