PERSISTENT SYSTEMS

MPU5
WR-5100

RELIABLE CONNECTIVITY WHEN YOUR TEAM NEEDS IT MOST

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

NO NDA REQUIRED

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SPECIFICATIONS

Physical

Dimensions (Chassis Only)
1.5 x 2.6 x 4.6 in.
3.8 x 6.7 x 11.7 cm

Weight (Chassis Only)
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

Networking

Advanced Wave Relay® multicast algorithms
Seamless Layer 2 network connectivity
Integrated serial-to-Ethernet capability
Cloud Relay™
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 CNSA Algorithms
Cryptographically authenticated Over-the-Air Rekey and Key Zero
FIPS-140-2 Certified
Cloud Relay™
IPv4 and IPv6 compatible
Integrated DHCP server
USB RNDIS Host and Device

Video

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

RF Module

Interchangeable Frequency Module (Ordered Separately)

RF-1150 - 10W L-Band Freq. Range: 1350 - 1390 MHz

RF-2150 - 10W S-Band Freq. Range: 2200 - 2507 MHz

RF-2125- BAS Band Freq. Range: 2025 - 2150 MHz

RF-4100- Lower C-Band Freq. Range: 4400 - 5000 MHz

RF-5100- Upper C-Band Freq. Range: 5100 - 6000 MHz

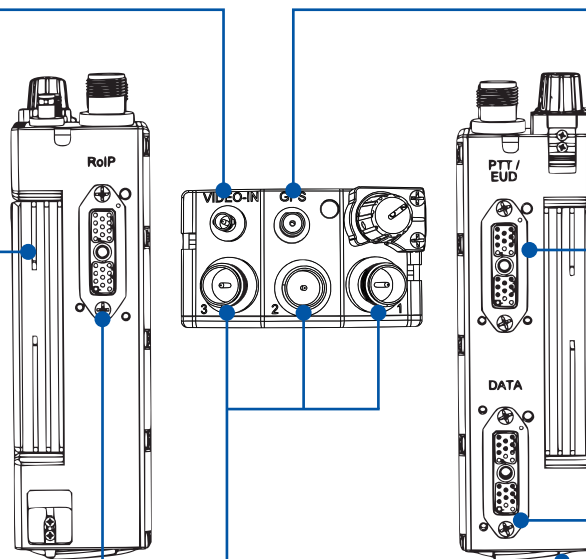**RF Modulations:**
OFDM (64-QAM, 16-QAM, QPSK, BPSK)
6W - 10W Transmit Power*

Software configurable bandwidths:
5 MHz, 10 MHz, 20 MHz,

TX/RX Operating Modes:
All modes from SISO to 3x3 MIMO

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

GPS

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

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

Data

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

Power

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

Any radio transmitting at 6W or above is for military or international sales only

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