



The aerial component of a network is often the most complex and critical with regards to mission success. The Avwatch AIR300.x provides a Mobile Ad Hoc Networking (MANET) datalink capability utilizing Wave Relay® MPU5 technology to ensure sensor data is efficiently and consistently received and distributed.

The Avwatch AIR300.x simplifies the aerial component of a tactical network and provides critical data to end-users in real time so that decisions can be made based on accurate data.

Integrated video encoding allows for streaming to dismounts and command centers alike. Avwatch delivers a turnkey system, ready to plug and play with existing IP networks.



WAVE RELAY

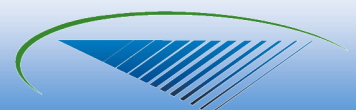


The AIR300.x uses the Wave Relay® MPU5 to unite critical data sources in real-time, providing an end user with the situational awareness needed to make critical decisions. The AIR300.x comes with Cloud Relay™ allowing a seamless networked solution to bridge Beyond Line of Sight (BLoS) to Line of Sight (LoS) networks.



AIR300.1

Part Number	Description
AIR300.1	Air Kit in a Standard 19" Server Rack
AIR300.2	Air Kit in a Standard 19" Server Rack Drawer
AIR300.3	Air Kit in a Ruggedized Carry Case



Key Features & Capabilities

- **Aviation Certified.** Aviation grade wiring and hundreds of flight hours both in testing and operational scenarios.
- **Interchangeable Frequency Modules.** By having the option to rapidly install different frequency modules, your solution is both cost effective and future proof, providing high reliability in complex environments.
- **Onboard Android™ OS.** Install existing Android apps or run custom apps natively right on your Vehicle Kit. The AIR300.x is your computer.
- **Stream HD Video.** Integrated H.264 HD video encoding/decoding with the ability to view multiple feeds simultaneously.
- **Voice Communication.** Up to 16 VoIP channels, and Radio over IP (RoIP) functionality.
- **Unprecedented Throughput Over Distance.** By utilizing 3x3 Multiple Input Multiple Output (MIMO) technology on multiple antennas, the AIR300.x provides the additional Mbps needed to stream multiple HD video feeds and other data through a network. With 6 watts of transmit power, MIMO allows for maximal ratio combining and spatial multiplexing providing high reliability in complex environments.
- **Turnkey Solution.** The purpose of the AIR300.x is to take all the complexities of a network and make one simple solution, allowing an end user to focus on getting the job done.

Frequency Modules*

Part Number	Description
RAD1100	L-Band Radio Module 1350-1390 MHz
RAD2100	S-Band Radio Module 2200-2500 MHz
RAD3100	C-Band Low Radio Module 4400-5000 MHz
RAD3110	C-Band High Radio Module 5000-6000 MHz

*Frequency Modules are each sold separately

Specifications

POWER

Input Power	8-36 VDC
Amperage	12A at Start/ 9A Nominal (12VDC)
Power	108W Nominal

ENVIRONMENTAL

Temperature Environment	-5° to 85° C
Water Resistant	Ruggedized for Outdoor Use
Submersible	Yes
	No

RADIO

Frequencies	See <i>Frequency Modules</i>
Power Output	6 watts, (2 watts, 3 chains)
Impedance	50 Ω
Range	100+ Nautical Miles *Antenna and Environment Dependent

DIMENSIONS

AIR300.1 & 2	
Rack Space	4U

DIMENSIONS

AIR300.3	
Length	15 in
Width	10.5 in
Height	6.2 in
Weight	35 lbs

CONNECTIONS

RF Connections	N-f (x3)
Wave Relay Ports	RJ45 (x2)
WAN Port	RJ45 (1)
Voice	NATO 6-pin
Power In	Amphenol PT06A-8-4S(025)
Cellular Antennas	TNC-f (x2)
GPS Antenna	SMA-f
Video In	BNC-f
Video Out	HDMI-f
Accessories	USB Type A