

xMAP 802.11ax MULTIFUNCTION ACCESS POINT



INNOVATION:

The xMAP is foundational to VT Miltope's software-driven platform for wireless data transmission in the aircraft cabin.

Whether it's streaming rich cached content, the ping-pong of emails through the Internet, the automated transmission of cabin IoT or crew communications, our software-adaptable wireless infrastructure manages and optimizes data flow and cybersecurity throughout the aircraft and your fleet.

xMAP is the 5th generation culmination of our experience designing and producing more than 20,000 airborne wireless access points over the last 20 years.

xMAP highlights:

802.11ax: Exceptional performance for the dense aircraft cabin environment. Incorporates two radios configurable in any combination of 5.0GHz and/or 2.4GHz (i.e. 5.0/2.4, 5.0/5.0 or 2.4/2.4)

CHT: Enhanced Cognitive Hotspot™ Technology (CHT) optimizing wireless cabin communications.

Cybersecurity: Advanced cyber security intrusion detection protecting network communications. (Optional)

Fiber: Fiber optic interface for fast throughput.

Hotspot 2.0: Intelligent client connection & roaming.

Server: Embedded 4 TB SSD server providing distributed content caching and fast access across the cabin network. Employs powerful processing capable of managing 50 plus simultaneous high bandwidth video streams. (Optional)

WPA3: The latest 802.11 wireless connectivity security protocol.

xMAP Features and Functions:

- IEEE 802.11ax Multi-User MIMO (MU-MIMO)
- 4 x 4 MIMO antenna array
- Optimized for dense aircraft cabin installations
- The latest advanced RazorSecure Delta cybersecurity
- Enhanced Galgus Cognitive Hotspot™ Technology (CHT) Optimization
- Hotspot 2.0 intelligent client connection & roaming
- WPA3 wireless connectivity security protocol
- Local Embedded Data Storage
- Integrated antenna assembly reduces cost, weight & size
- Auto Wireless Power Control & Channel Assignment
- Auto Load Balancing & Interference Mitigation
- Automatic Failure Recovery
- Country radio certifications for legal xMAP operation
- Up to 8 concurrent profiles & 32 VLANs (IEEE 802.1q) for separate user networks
- Configurable and guaranteed QoS per profile

SPECIFICATIONS

FEATURES:

ARINC 763-3, 836, and 628a Part 1
Loadable software
Compact, waterproof design
Proven reliability, No maintenance
IP strap pin configuration allows physical control of the IP address of multiple xMAPs

WIRED INTERFACES:

ETHERNET: Two IEEE 802.3ab 1000 BaseT (auto-sensing) Relay Fail-Over for xMAP Fault Recovery
DISCRETES: Two Input (weight on wheels interface)
IP STRAPPING: Control IP address for up to 8 xMAPs

FIBER OPTIC INTERFACE:

TBD. Fiber Optic interface compatible with ARINC specifications.

SECURITY/VPN:

WPA3
VPN: IPsec with IKEv1, IKEv2, NAT Traversal;
SSLv3 Open VPN client and server, PPTP, L2TP;
5 VPN Tunnels
ENCRYPTION: DES, 3DES and AES
AUTHENTICATION: TRADIUS, TACACS+, SCEP
MAC Address Filtering; VLAN support; Ethernet Isolation Stateful inspection firewall with scripting

ROUTER/FIREWALL:

NAT, NAT, Ethernet bridging
Routing: PPP, PPPoE, GRE, RIP, OSPF, SRI, BGP, iGMP (multicast) IP Failover: VRRP, VRRP+TM; RSTP
DHCP, Dynamic DNS client

MANAGEMENT:

HTTP, HTTPS
SMTP, SNMP (v1/v2c/v3), SSH CLI and SOAP (optional)

PHYSICAL:

Weight: 4.0 lbs. (1.8 kg)
Dimensions: 2.90" (74 mm) H x 8.89" (226 mm) L x 6.39" (162mm) W
Mounting plate 11.50" (292 mm) L x 6.97" (177 mm) W

DO-160G CERTIFICATION SUMMARY

THERMAL:

DO160G, Section 4, Category A2

VIBRATION:

DO160G, Section 8, Category R, curve C/C1

POWER INPUT:

DO160G, Section 16, Category A (WF) for AC, Category A for DC

RADIATED RF EMISSIONS:

DO160G, Section 21, Category M plus HF notch

PRELIMINARY: Subject to change without notice