nMAP2 802.11ac MULTIFUNCTION ACCESS POINT

Each nMAP2 has two radios, providing both IEEE 802.11a/n/ac operation and 802.11a/g/n for legacy client devices. Wireless data rates up to 1.7 Gbps may be achieved with 802.11ac.
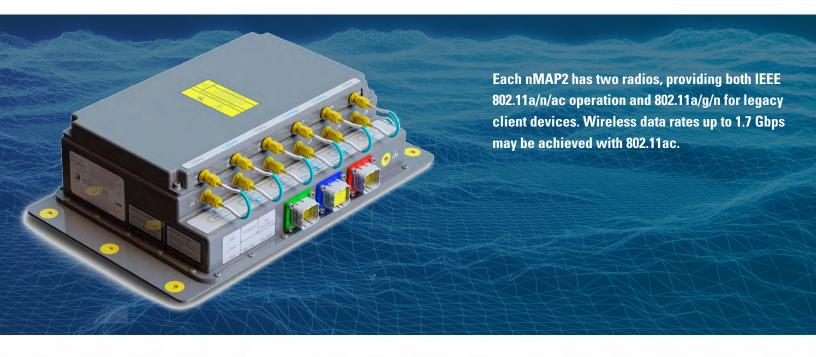
IEEE802.11ac WIRELESS FEATURING COGNITIVE HOTSPOT (CHT) TECHNOLOGY

nMAP2's are aware of their environment and adapt to cabin environments. By exchanging information with neighboring nMAP2's, they manage available resources, prevent interference, and balance the wireless network. Settings to guarantee QoS and improve overall capacity are available.

Two modes of operation are supported:

Access Point (CWLU) mode allows clients to connect to aircraft LAN via intelligent bridging.

Access Controller (Enhanced CWLU) mode adds DHCP server with routing, traffic control, and prioritization for different user VLANS or traffic to CWLU operation.

nMAP2 Features and Functions:

- 5" Integrated or detached antenna assembly reduces cost, weight, & size
- Intelligent client roaming
- Auto wireless power control
- Auto channel assignment
- Auto Load Balancing & Interference Mitigation
- Automatic Failure Recovery
- The latest advanced end to end network security
- Radio certifications for legal nMAP2 operation
- Up to 16 concurrent profiles & 64 VLANs (IEEE 802.1q) for separate user networks
- Configurable and guaranteed QOS per profile
- Mutual authentication via PEAP, EAP-FAST, EAP-TLS, EAP-TTLS, or EAP-SIM)

MILTOPE

Service Elevated

KEY DESIGN FEATURES

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 the IP address of nMAP2's

TECHNICAL SUMMARY

WIRED INTERFACES:
ETHERNET: Two IEEE 802.3ab 1000 BaseT (auto-sensing) Relay Fail-Over for nMAP2 Fault Recovery
DISCRETES: Two Input (weight on wheels interface)
IP STRAPPING: Control IP address for up to 16 nMAP2's

POWER:
Primary 97-134 Vac, 360-900 Hz and 18-36 Vdc
Power Consumption: 20 W nominal (26 W max)

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

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

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

PHYSICAL:
Weight: 3.3 lbs. (1.5 kg) nMAP2, 0.75 lbs. (0.34kg) antenna assembly
Dimensions: nMAP2 2.28" (57 mm) H x 8.89" (226mm) L x 6.39" (162mm) W

Mounting plate 11.50" (292mm) L x 6.97" (177mm) W nMAP2 + antenna assembly height 2.90" (74mm)

KEY QUALIFICATION PERFORMANCE

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

PART NUMBERS

PART NO.	DESCRIPTION
903920-2	nMAP2
903978-1	Antenna Assembly
903920-1	nMAP2 + Antenna Assembly