

nMAP-2 802.11ac MULTIFUNCTION ACCESS POINT



Each nMAP-2 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.

nMAP-2's are aware of their environment and adapt to cabin environments. By exchanging information with neighboring nMAP-2'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 air-craft 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.

nMAP-2 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 nMAP-2 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)



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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 the IP address of nMAP-2's

Custom expansion connector allows the rapid development of "expansion packs" to meet individual customer's functional and physical interface needs:
Two USB 2.0 High Speed ports, One RS-232 serial port (3-wire), One Ethernet port 10/100/1000, One Audio input/output, One SMBus with HW assisted Interrupt-
One I2C with HW assisted Interrupt, Application level accessible GPIO, 12V Input Power.

WIRED INTERFACES:

ETHERNET: Two IEEE 802.3ab 1000 BaseT (auto-sensing) Relay Fail-Over for nMAP-2 Fault Recovery
DISCRETES: Two Input (weight on wheels interface)
IP STRAPPING: Control IP address for up to 16 nMAP-2'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: TRADIUS, 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

MANAGEMENT:

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

PHYSICAL:

Weight: 3.3 lbs. (1.5 kg) nMAP-2, 0.75 lbs. (0.34kg) antenna assembly
Dimensions: nMAP-2 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
nMAP-2 + antenna assembly height 2.90" (74mm)

ENVIRONMENTALS

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