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.

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.

**KEY BENEFITS:**

- 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
**nMAP2 with Antenna Assembly**  
**Part No:** 903920-1

### KEY DESIGN 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 nMAP-2 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

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

### 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
  - DO160G, Section 21, Category M plus HF notch
- **Radiated RF Emissions**
  - DO160G, Section 21, Category A for AC, Category M plus HF notch

#### 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)

### PART NUMBERS:

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<td>nMAP2</td>
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<tr>
<td>903978-1</td>
<td>Antenna Assembly</td>
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<tr>
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