

## Product Profile

- Dual-Radio wireless access point operates with any combination of 802.11a and 802.11g radios
- WPA security with secure roaming provides swift, seamless connectivity and enhanced mobility.
- Internal Power-Over-Ethernet eliminates need for power cables and outlets
- Enterprise Class access point to support mission critical applications
- TCP/IP Session Persistence
- IEC IP54 case withstands harsh environments (International ElectroTechnical commission)



### MobileLAN™ access WA21

MobileLAN access WA21 is the next-generation dual radio access point that accommodates radios operating on both 802.11a and 802.11g RF bands. Dual-radio access points provide easy, cost-effective migration paths to the 54Mbps technology while supporting 802.11b clients, offering unparalleled flexibility when designing or expanding wireless communication networks. MobileLAN access WA21 offers a complete mix and match choice of 802.11 radios: 2 a-radios, 1 a-radio + 1 g-radio or 2 g-radios.

MobileLAN access WA21 is equipped with WPA advanced encryption and authentication capabilities including WEP 128 with auto key rotation, 802.1x, EAP/TLS, EAP/TTLS, and EAP/PEAP authentication and RADIUS server support. Beyond securing the wireless local area network, these features enable faster roaming and enhanced mobility. The secure high-speed exchange enforces network security while maintaining a seamless connection. MobileLAN access WA21 also supports products that provide FIPS 140 security, the Federal Information Protection Standard.

The integrated Power-over-Ethernet solution eliminates the need and expense of installing separate cables and outlets. The 10/100 Base-T capability or 100 Mb Fiber optic communications enable wireless service on 100 Mbps networks. The MobileLAN access WA21 auto negotiates with connected devices allowing the data flow to be set at the highest rate at which both devices can communicate.

An enterprise class access point, the MobileLAN access WA21 provides the features necessary to support mission critical applications. Intermecc's industry leading IP tunneling enables mobile workers to roam from access point to access point without interrupting the network connection. This session persistence eliminates the need to have the routing application reside in the client device, have dedicated servers or manual entry of IP addresses. IP addresses are easier and less expensive to administer with Dynamic Host configuration Protocol (DHCP) server functionality. Network Access Translation (NAT) support enables the WA21 to assign and manage static IP addresses.

MobileLAN access WA21 uses Intermecc's hardware based packet filtering, ensuring fewer dropped packets, less network congestion and better overall performance.

For Mission Critical applications, the MobileLAN access WA21 can act as a Telnet Gateway Appliance (TGAP). TGAP enables session persistence for TCP/IP traffic providing session connectivity for up to 8 hosts.

The MobileLAN access WA21 is housed in an IEC IP54 rated case with heater options, making it the ideal access point for harsh environments where cold temperatures, small airborne particles and moisture are prevalent.

### Physical Characteristics

**Length:** 355 mm (14.0")  
**Height:** 95mm (3.75")  
**Width:** 236 mm (9.3")  
**Weight:** 2.63 kg (5.8 lb)  
**Input Voltage:** Power over Ethernet  
**Voltage Range:** 36 - 57 VDC  
**Current:** 350 mA @ 48 volts  
**Detection Methods:** 802.3af standard  
 PowerDsines' capacitance  
 Cisco's data pair (in-line)

### Optional AC power

**Voltage Range:** 100 - 240 VAC auto ranging  
**Input Power:** 15 Watts; Optional heater, additional 75 Watts

Supports dual radio and mixed dual radio operation, wireless bridging, DHCP client and server, NAT server, RADIUS server.

### Wireless Characteristics

#### IEEE 802.11a Wireless Radio

**Frequency Band:** 5.15 - 5.35 GHz frequency band  
**Radio Type:** IEEE 802.11a OFDM  
**Radio Power Output:** 15 Dbm  
**Radio Data Rate:** 54 Mbps, 48 Mbps, 36 Mbps, 24 Mbps, 18 Mbps, 12 Mbps, 9 Mbps, 6 Mbps - automatic fallback for increased ranges  
**Channels:** United States (FCC) 8 channels  
**Receiver Sensitivity:** -65 dBm @ 54 Mbps, -70 dBm @ 36Mbps, -82 dBm @ 6 Mbps.  
**Range:** approximately 10m @ 54 Mbps, 30M @ 36 Mbps, Unlimited range with roaming.  
**Compatibility:** Designed to comply with IEEE 802.11a wireless LAN standard for 5 GHz radio implementations  
**Transmit Power Levels:** 12.4 dBm @ 36-6 Mbps, 9.2 dBm @ 48 Mbps, 7 dBm @ 54 Mbps.  
**Bit Error Rate:** 10<sup>-5</sup>

#### IEEE 802.11g Wireless Radio

**Frequency Band:** 2.4 GHz, (actual frequencies vary by country)  
**Radio Type:** IEEE 802.11g High Rate (54Mbps)  
**Modulation:** Direct Sequence Spread  
**Spectrum:** (CCK, OFDM)  
**Radio Power Output:** 18 dBm

**Radio Data Rate:** 1, 2, 5.5, and 11 Mbps Legacy CCK rates; 6, 9,12,18,24,36,48, and 54 Mbps OFDM rates  
 Automatic fallback for increased range  
**Channels:** United States (FCC) 11 Channels, Europe (ETSI) 13 Channels, other countries per local regulations  
**Bit Error:** 10<sup>-5</sup>  
**Receiver Sensitivity:**  
 65 dBm@54 Mpss  
 70 dBm @ 36 Mpb  
 82 dBm@ 6 Mpbs

	*802.11b Mode	*802.11g Mode	*802.11g Mode
<b>Outdoor</b>	1Mbps	6Mbps	54Mbps
	1968 ft. (600m)	1640 ft. (500m)	98 ft. (30m)
<b>Indoor</b>	1Mbps	6Mbps	54Mbps
	377 ft (115m)	164 ft. (50m)	32 ft. (10)

\*802.11b mode: 100mW with 1dBi gain Antennas  
 \*802.11g mode: 30mW with 1dBi gain antennas

### Security

IEEE 802.11 Wired Equivalent Privacy (WEP) standard, WEP 64 and WEP 128 are supported. Support for Key Integrity Protocol (TKIP), WPA and Full hardware support for Advanced encryption Standard (AES) security.

### Network Information

**Ethernet Interface:** 10/100 BaseT, 100 Mb Fiber Optic  
**Ethernet Data Rate:** 10/100 Mbps  
**Filtering Rate:** Full Ethernet Rate  
**Filters:**  
 Protocol Filters-IP, IPX, NetBEUI, DECNET, AppleTalk  
 Other Broadcast Traffic Filters-IP, ARP, Novell RIP, SAP and LSP, Adjustable bandwidth allocation  
**Software Upgrades:** Downloadable using Web browser or TFI over the network or serial port.

### Management

**Management Interfaces:** SNMP; Secure Web browser-based manager; serial port, or Telnet via RF and Ethernet.  
**SNMP Agent:** SNMP Version 1 supported

**SNMP Traps:** Cold start, Authentication Failure, MobileLAN manager reliable traps  
**SNMP MIBs:** RFC 1213 (MIB-II), RFC 1643 (802 Dot3), MobileLAN access point MIB, SNMP v1 versions of the 802.11MIB and a MIB for the 802.1x and proprietary security related events.

### Accessories

Mounting brackets  
 Wide selection of RF antennas and cables

### Environments

**Operating Temperature:** -25°C to +70°C with 802.11b radio (other radio options vary)  
**Heater option:** -30°C to 70°C  
 10% to 90% Relative humidity, non-condensing  
**Storage Temperature:** -30°C to 75°C  
 10% to 90% Relative Humidity, non-condensing  
**Industrial Sealing:** IEC IP54 (~NEMA 3)

### Regulatory Approvals

EN 55022 / CISPR 22 Class A; FCC Part 15 & ICES-003 Class A; C tick Marked (AS 3548); CE Marked,compliant with RTT&E, EMC, LVD Directives (see separate radio approvals); UL listed, UL 1950/C22.2 #950 IEC; 60529-IP53 and C22.2 #94-ENC 3.5; TUV Licensed, EN 60950 & EN 60539-IP53; NYCE Certified, NOM 19.

### Radio Approvals

**802.11a:** FCC Part 15.407 Certified; Canada RSS 210 Certified; SCT NOM-EM121 Certified; Compliant with Australian RF Regulations; Additional Country Specific RF Type Approvals will be added over time.  
**802.11g:** FCC Part 15.247 Certified; Canada RSS 210 Certified; ETS 300 328 Type Approved; SCT NOM-EM121 Certified; Compliant with Australian RF Regulations; Additional Country Specific RF Type Approvals will be added over time

### Disclaimer

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