Intermec

Product
Profile

- Dual-Radio wireless access point operates with any combination of 802.11a and 802.11b radios

- 802.1x 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

- 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 802.11b RF bands. Dual-radio access points provide easy, cost-effective migration paths to the 54Mbps 802.11a 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 b-radio or 2 b-radios, and will support 802.11g in the future.

MobileLAN access WA21 is equipped with advanced encryption and authentication capabilities including WEP 128 with auto key rotation, 802.1x, EAP/TLS and EAP/TTLS authentication and an embedded RADIUS server. 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. Intermec'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 Intermec's hardware based packet filtering, ensuring fewer dropped packets, less network congestion and better overall performance.

Intermec's enhanced user-friendly MobileLAN manager software makes managing and monitoring the access point easy. This intuitive, scalable network management software enables real-time event driven monitoring of changes and events in the network via the internet. Intermec's spanning tree technology provides visibility to the entire network from one access point. This feature enables fast roaming for security, updates to MobileLAN manger without polling the network and provides configuration and filtering options that span the network.

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: 12.4 dBm@ 6-36 Mbps, 9.2 dBm @48 Mbps, 7 dBm@54 Mbps.
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 Mpbs.
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^{-5}

IEEE 802.11b Wireless Radio
Frequency Band: 2.4 GHz, (actual frequencies vary by country)
Radio Type: IEEE 802.11b High Rate (11Mbps)
Modulation: Direct Sequence Spread Spectrum: (CCK, DQPSK, DBPSK)
Radio Power Output: 15 dBm

Radio Data Rate: 11 Mbps High/5.5 Mbps Medium/2 Mbps Standard/1Mbps low Automatic Fallback for increased range
Channels: United States (FCC) 11 Channels, Europe (ETSI) 13 Channels, other countries per local regulations
Bit Error: 10^{-5}

Range	1Mbps	2Mbps
Open Environment	1750ft (533m)	1300ft (396m)
Semi-Open	375ft (114m)	300ft (91m)
Closed Environment	165ft (50m)	130ft (40m)
Unlimited range with roaming		
Receiver Sensitivity	-95 dBm	-92 dBm

Range	5.5Mbps	11Mbps
Open Environment	885ft (270m)	525ft (160m)
Semi-Open	230ft (70m)	165ft (50m)
Closed Environment	115ft (35m)	80ft (24m)
Unlimited range with roaming		
Receiver Sensitivity	-87 dBm	-82 dBm

Security
IEEE 802.1x, 802.11 Wired Equivalent Privacy (WEP) are supported, both WEP 64 and WEP 128.

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 TFTP 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.

802.11b: 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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