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**

MobileLAN™ access WA22

MobileLAN access WA22 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. **Mobile**LAN access WA22 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 WA22 is equipped with advanced encryption and authentication capabilities including WEP 128 with auto key rotation, 802.1x, EAP/TLS and EAP/TTLS 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. **Mobile**LAN access WA22 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 Communication enables wireless service on 100 Mbps networks. The **Mobile**LAN access WA22 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 **Mobile**LAN access WA22 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 WA22 to assign and manage static IP addresses.

MobileLAN access WA22 uses Intermec's hardware based packet filtering, ensuring fewer dropped packets, less network congestion and better overall performance.

Intermec's enhanced user-friendly **Mobile**LAN 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 **Mobile**LAN manger without polling the network and provides configuration and filtering options that span the network.

The **Mobile**LAN access WA22 is the ideal enterprise-class access point for light industrial applications.

MobileLAN™ access WA22

Physical Characteristics

Length: 250 mm (9.84″)
Height: 38 mm (1.49″)
Width: 159 mm (6.27″)
Weight: .625kg (1.38 lbs)
Input Voltage: Power over Ethernet
Voltage Range: 36 to 57 VDC
Current: 350 mA @ 48 volts
Detection Methods: 802.3af standard
PowerDsine's capacitance
Cisco's data pair (in-line)

Wireless LAN 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: 54Mbps, 48 Mbps, 36 Mbps, 24 Mbps, 18 Mbps, 12 Mbps, 9 Mbps, 6 Mbps - with automatic fallback for increased range.
Channels: United states (FCC) 8 channels
Receiver Sensitivity: -65 dBm @ 54 Mbps, -70 dBm @ 36 Mbps, -82 dBm @ 6 Mpbs.
Range: approximately 10m @ 54 Mbps, approximately 30M @ 36 Mbps, Unlimited Range with roaming.
Compatibility: Designed to comply with IEEE 802.11a wireless LAN standard for 5 GHz radio implementations
Bit Error Rate: Better than 10^{-5}

IEEE 802.11b Wireless Radio

Frequency Band: 2.4 GHz, actual frequencies vary by country
Radio Type: IEEE 802.11b High Rate (11 Mbps)
Modulation: Direct Sequence Spread Spectrum (CCK, DQPSK, DBPSK)
Radio Power Output: 15 dBm
Radio Data Rate: 11Mbps High/5.5 Mbps Medium/2 Mpbs Standard/1 Mbps Low Automatic Fallback for increased range
Channels: United States (FCC) 11 Channels, Europe (ETSI) 13 Channels, other countries per local regulations
Bit Error Rate: Better than 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 WEP64 and WEP128

Network Information

Ethernet Interface: 10/100 BaseT, 100Mb 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 Inferfaces: 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, **Mobile**LAN manager reliable traps
SNMP MIBs: RFC 1213 (MIB-II), RFC 1643 (802 Dot3), **Mobile**LAN access point MIB, SNMP v1 versions of the 802.11 MIB and a MIB for 802.x and proprietary security related events.

Accessories

Mounting Brackets
Serial Console Cable
Wide selection of RF antennas and cables

Environment

Operating Temperature: Standard Unit -20°C to +55°C with 802.11b radio (other radios options vary
Storage Temperature: -30° C to +75° C 10% to 90% Relative Humidity, non-condensing

Regulatory Approvals

EN 55022/CISPR 22 Class A; FCC Part 15 & ICES-003 Class A; C tick Marked (AS 3548); CE Market, Compliant with RTT&E, EMC, LVD Directives; (See separate radio approvals); UL Listed, UL 1950 & IEC 60529-IP53; CSA Certified, C22.2 #950 & C22.3 #94-ENC 3.5; TUV Licensed, EN 60950 & EN 60529-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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