MAP-2100

802.11a/b/g Indoor MESH Access Point

The MAP-2100 is designed with IEEE 802.11a/b/g standards and addressed on providing a high scale mesh network. All mesh nodes can operate at 2.4GHz for long range and better penetration, or at 5GHz to minimize the frequency interference. The detachable antennas design allows users to use proper antennas for various deploying requirements.

Enhanced with the advanced MDOLSR (Modified Dynamic Optimal Link State Routing) protocol, the data is always transferred with the optimal path. The MAP-2100 offers a WAN interface for Internet connection and a LAN interface for Ethernet connectivity. Whenever a new mesh node is added, the redundant and multiple paths are also added accordingly for the network resiliency.

The MAP-2100 incorporates the highest security mechanism to protect information over wireless links. The security features include AES backhaul link, WPA2 level client access, SSL for web management, and MAC filter.

To facilitate the administration task throughout the large scale mesh network, PLANET provides a centralized managing software: MAP Management System. This software is built based on SNMP protocol and can be installed in a computer. After launching, this software can locate and monitor all Mesh APs in the same network. The graphical interface allows administrator to understand the whole network status in seconds.

KEY FEATURE

Dual wireless interfaces for independent Backhaul link and local clients connection

- 2 x IEEE 802.11a/b/g adapters
- 2 x SMA connector

Supports full dynamic routing (layer 3) between all node APs

- MDOLSR, modified dynamic optimized link state routing protocol

Adjustable output power: 50mW, 25mW, 13mW, and 6mW

Central management software

- AES backhaul communication

Supports 802.1x / WPA / WPA2 mechanisms

Supports QoS, SNMP v2/v3

Supports PPPoE / DHCP / Fixed IP WAN connection

MAP-2100

SPECIFICATION

Product		11a/b/g Indoor Mesh AP Gateway / Relay
Model		MAP-2100
Wireless LAN		
Wireless Standard		IEEE 802.11a IEEE 802.11b/g
Media Access Protocol		CSMA/CA
RF Modulation		802.11a: OFDM 802.11g: OFDM 802.11b: DSSS
Data Rate		802.11b: 11/5.5/2/1Mbps, Auto 802.11a/g: 54/48/36/24/18/12/9/6Mbps, Auto
Transmit Power		17dBm max. Four levels adjustable (max/-3dB/-6dB/-9dB)
Sensitivity	802.11b:	-95dBm @1Mbps -94dBm @2Mbps -92dBm @5.5Mbps -90dBm @11Mbps
	802.11g:	-90dBm @6Mbps -89dBm @9Mbps -87dBm @12Mbps -85dBm @ 18Mbps -82dBm @24Mbps -79dBm @ 36Mbps -76dBm @48Mbps -74dBm @54Mbps
	802.11a:	-88dBm @6Mbps -87dBm @9Mbps -85dBm @12Mbps -83dBm @ 18Mbps -80dBm @24Mbps -75dBm @ 36Mbps -73dBm @48Mbps -71dBm @54Mbps
Operating Channels		802.11a: 5-Channels 802.11b/g: 11/13/14 channels
RF Connector		2 x SMA (WLAN1 / WLAN2)
Operating Mode	WLAN1 WLAN2	Backhaul (WDS) mode AP mode
Auto Channel Selection		Yes
WLAN Security		WEP-64/128, WPA, WPA2
Hide SSID		Yes
Ethernet		
Ethernet Standard		IEEE 802.3, IEEE 802.3u, 10Base-T, 100Base-TX
Operating mode		WAN, Internet connection LAN, local service
Ethernet Connector		2 x RJ-45 Port 10/100Base-TX, auto-negotiation

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Product	11a/b/g Indoor Mesh AP Gateway / Relay

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Model	MAP-2100
Software	
Device Management Method	HTTP / HTTPS, Telnet Windows Management Utility SNMP v2/v3, private MIB, Trap Firmware upgrade via utility/HTTPS Syslog
Windows Management Utility Features	AP discovery AP status AP setup, upgrade, reboot, reset User status, activity
System Operating Mode	Gateway Relay
WAN Connection Type **(Gateway mode)**	Fixed IP PPPoE DHCP client
Security MAC filtering	MAC filtering VPN pass-through
Supported User	Per unit up to 250 users maximum
Login Service	Customize Login Page for service provider Walled garden Portal Page iPass
User Authentication	HTTP login HTTPS login 802.1x Local database authentication Remote RADIUS server authentication Real time user activity, status can be found through Web / Syslog / Utility
Protocol Compliance	
Protocol / Standard	IEEE 802.3 (Ethernet) IEEE 802.3u (Fast Ethernet) IEEE 802.11a (5GHz WLAN) IEEE 802.11b/g (2.4GHz WLAN) RFC 768 UDP RFC 791 IP RFC 792 ICMP RFC 793 TCP RFC 826 ARP RFC 1034, 1035 DNS RFC 1058 RIP RFC 1119 SNTPv2 RFC 1541/2131/3046 DHCP client / Server RFC 1631 NAT RFC 2068/ 2616 HTTP RFC 2516 PPPoE RFC 2865,2866 RADIUS
Hardware	
Dimension	135 x 127 x 37 mm
Weight	300 g
Power Requirement	12V DC, 1A
Environmental Specification	Operating Temperature: 0 ~ 50 Degree C Storage Temperature: -10 ~ 70 Degree C Relative Humidity: 0 ~ 90% non-condensing
Regulatory Compliance	FCC, CE

Data Sheet

MAP-2100

APPLICATIONS

Enterprise/Warehouse Deployment

Each Mesh AP forms an individual operational node, and it will automatically locate and associate to the existing Mesh network. With the advanced MDOLSR protocol, the data is always transferred with the shortest and reliable route. Meanwhile, the network redundancy and high reliability are guaranteed. As more equipments installed, the infrastructure can be expanded more flexible and easily. Thus makes it the perfect solution for large scale deployment, such as warehouses, and the Enterprise buildings.
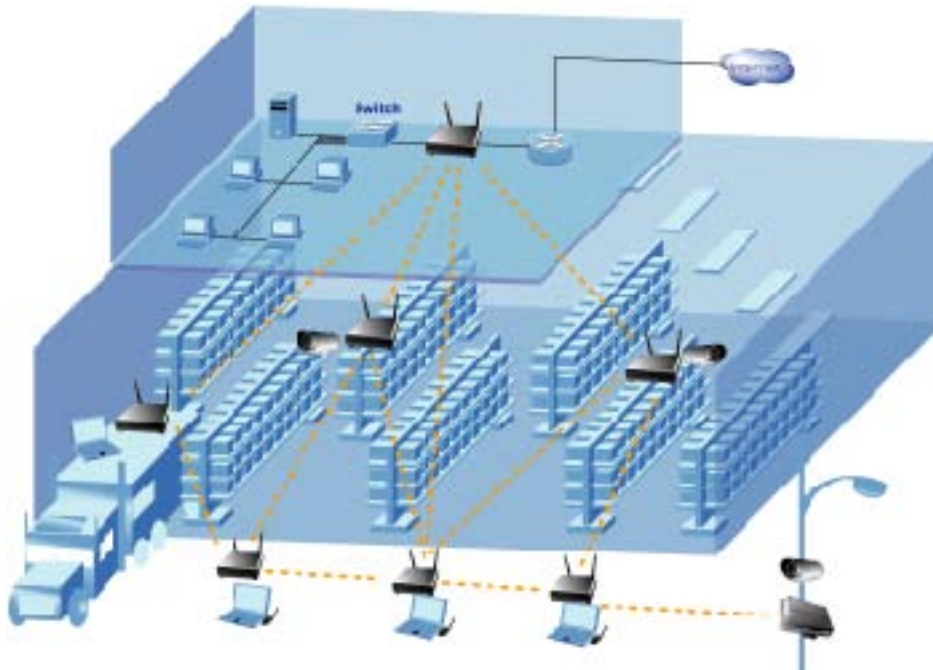
ORDERING INFORMATION

MAP-2100	Indoor MESH AP, 2 x RF(802.11a/b/g), 108Mbps

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