

802.11a/b/g Outdoor MESH Access



For truly Wireless network connectivity, PLANET Mesh Access Point, MAP-3020, is designed with IEEE 802.11a/b/g standards and addressed on providing a high performance Mesh network. It provides local wireless connectivity at any location over a self-adaptation mesh backhaul. All mesh nodes can operate at 2.4GHz for long range and better penetration, or at 5GHz to minimize the frequency interference. The two detachable N-Type antennas design allows users to use proper antennas for various deploying requirements.

Multiple interfaces (LAN, WLAN, Backhaul) integrated in MAP-3020 are all bridged with one single IP. The layer 2 infrastructure is suitable for smaller scale mesh network. Compared with the layer 3 operation, the configurations and installations of a layer 2 infrastructure will be simpler and easier. Without the extra resource consuming on routing, the overall performance of layer 2 operation is better than layer 3 operation.

To facilitate the administration task throughout the mesh network, PLANET provides a centralized managing software: MAP Management System. This software is built based on SNMP protocol and can be installed in the computer. After launching, this software can locate and monitor all MAP-3020 in the same network. It's graphical interface allowing the administrator to know the whole network status in seconds, including all the mesh nodes and connected wireless clients.

KEY FEATURES

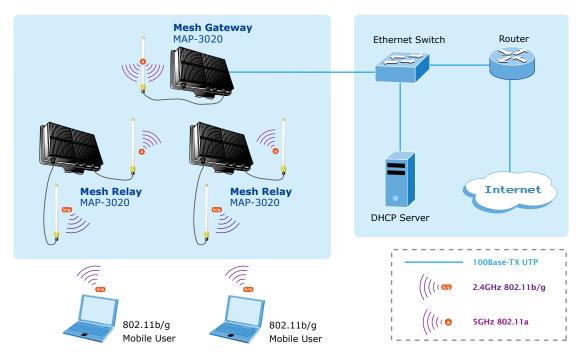
- Dual wireless interfaces for independent Backhaul link and local clients connection
 - 2 x IEEE802.11a/b/g adapters
 - 2 x N-Type connector
- Completes AODV (Ad-Hoc On Demand Vector) routing (layer 2) between all node APs
- Adjustable output power
- Central management software
- AES backhaul communication
- Supports 802.1x/ WPA2-PSK mechanisms
- Supports SNMP v2/v3
- Power over Ethernet capable
- IP-68 protection housing
- Operating temperature: -20~60 Degree C

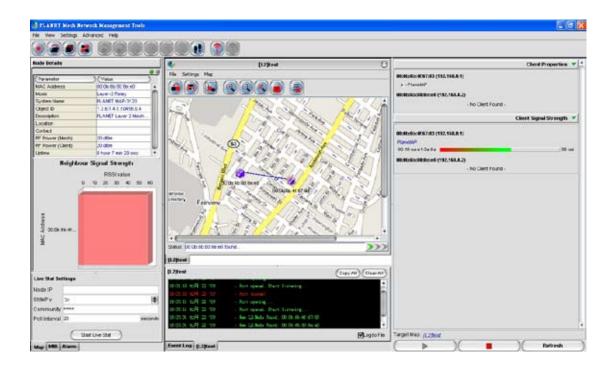


APPLICATIONS

Enterprise / Warehouse Deployment

Each MAP-3020 forms an individual operational node, and it will automatically locate and associate to the existing Mesh network. Deploying with single IP segment, the MAP-3020 builds a Layer 2 mesh network, which is easy in installation and management. When more equipment is installed, the infrastructure can be expanded more flexible and easier. Thus it makes the perfect solution for medium scale deployment (less than 250 users), such as the warehouses and the Enterprise buildings.







SPECIFICATION

IEEE 802.11bg IEEE 802.11bc IEEE 802.11b		
IEEE 802.116 IEEE		MAP-3020
Wireless Frotocol	Wireless LAN	
RF Modulation 902.11s; OFDM 802.11b; DSS5 27.11mbps, Auto 802.11b; DSS5 802.11b; 17.55.2.7.11mbps, Auto 802.11mb; 54.7.48 / 36.7.24.7.18.7.12.7.9.7.6Mbps, Auto 17ansmit Power value adjustable 802.11s 26dlem @11Mbps 802.11g 26dlem @14Mbps 22dlem @36Mbps 2.5dlem @36Mbps 2	Wireless Standard	
RF Modulation 802 1 15 OFDM 802 115 15 55 2 7 1 1 1 1 1 2 9 6 6 1 1 1 1 1 1 1 1	Media Access Protocol	CSMA / CA
B82 116 DSSS		802.11a: OFDM
### 802.1 lis. 11 / 5.5 / 2 / 1 Mibrs, Auto ### 802.1 lis. 25 / 4.8 / 36 / 24 / 18 / 12 / 9 / 6 Mibps, Auto ### 802.1 lis. 26 film ## 802.1 lis. 26 film #	RF Modulation	802.11g: OFDM
Transmit Power Transmit Power value adjustable		802.11b: DSSS
Security	Data Rate	802.11b: 11 / 5.5 / 2 / 1Mbps, Auto
802.11b:	Data Nate	802.11a/g: 54 / 48 / 36 / 24 / 18 / 12 / 9 / 6Mbps, Auto
266lBm @6-24Mbps 256lBm @6-24Mbps 256lBm @6-24Mbps 246lBm @6-24Mbps 246lBm @6-24Mbps 246lBm @6-24Mbps 256lBm @6-2	Transmit Power	Transmit Power value adjustable
Social Channels Social Cha	Output Power (Max.)	26dBm @11Mbps 802.11g 26dBm @6~24Mbps 25dBm @36Mbps 24dBm @48Mbps 23dBm @ 54Mbps SuperG 26dBm @6~24Mbps 25dBm @36Mbps 24dBm @48Mbps 25dBm @36Mbps 24dBm @48Mbps 21dBm @6~24Mbps 802.11a 24dBm @6~24Mbps 22dBm @36Mbps 21dBm @48Mbps 21dBm @48Mbps 21dBm @48Mbps 21dBm @48Mbps 20dBm @ 54Mbps SuperA 24dBm @6~24Mbps 22dBm @36Mbps 21dBm @48Mbps 21dBm @48Mbps 21dBm @6~24Mbps
RF Connector 2 x Reversed N-Type (Mesh / WLAN) Layer 2 Gateway Layer 2 Relay Auto-Channel Selection Yes WLAN Security WEP-64/128, WPA, WPA2 Hide SSID Yes Wireless Separation Yes Wireless Separation Yes Ethernet Ethernet Standard EEE 802.3, IEEE 802.3u, 10Base-T, 100Base-TX IEEE 802.3af Power over Ethernet(PIN 1.2.3.6) WLAN: AP Mode Mesh: Backhaul Mode LAN/Public: Ethernet LAN Port Software HTTPS Windows Management Whithout Syslog Mesh AP discovery Windows Management Mesh AP setup, upgrade, reboot, reset Wireless User status, activity Mech AP Setup, upgrade, reboot, reset Wireless User status, activity Mac filtering	Operating Channels	802.11a: 12 channels
Auto-Channel Selection Yes WLAN Security WEP-64/128, WPA, WPA2 Hide SSID Yes Wireless Separation EEEE 802.3, IEEE 802.3u, 10Base-T, 100Base-TX IEEE 802.3af Power over Ethernet(PIN 1.2.3.6) WLAN: AP Mode Mesh: Backhaul Mode LAN/Public: Ethernet LAN Port Software HTTPS Windows Management Method Windows Management Mesh AP setup, upgrade, reboot, reset Wireless User status, activity MAC filtering	RF Connector	
Auto-Channel Selection Yes WLAN Security WEP-64/128, WPA, WPA2 Hide SSID Yes Wireless Separation Ethernet Ethernet Standard IEEE 802.3, IEEE 802.3u, 10Base-T, 100Base-TX IEEE 802.3af Power over Ethernet(PIN 1.2.3.6) WLAN: AP Mode Mesh: Backhaul Mode LAN/Public: Ethernet LAN Port Software HTTPS Windows Management Method Mesh: Syslog Mesh AP discovery Mesh AP setup, upgrade, reboot, reset Wireless User status, activity MAC filtering MAC filtering		·
WLAN Security WEP-64/128, WPA, WPA2 Hide SSID Yes Wireless Separation Yes Ethernet Ethernet Standard IEEE 802.3, IEEE 802.3u, 10Base-T, 100Base-TX IEEE 802.3af Power over Ethernet(PIN 1.2.3.6) WLAN: AP Mode Mesh: Backhaul Mode LAN/Public: Ethernet LAN Port Software HTTPS Windows Management Method Mesh AP discovery Windows Management Mesh AP discovery Mesh AP status Windows Management Windows Management Mesh AP status Mesh AP status Mesh AP status Mesh AP status Mesh AP setup, upgrade, reboot, reset Wireless User status, activity Mesh AC filtering	Operating Mode	
Hide SSID Wireless Separation Yes Ethernet Ethernet Standard IEEE 802.3, IEEE 802.3u, 10Base-T, 100Base-TX IEEE 802.3af Power over Ethernet(PIN 1.2.3.6) WLAN: AP Mode Mesh: Backhaul Mode LAN/Public: Ethernet LAN Port Software HTTPS Windows Management Method Mesh Wash AP discovery Windows Management Wireless User status, activity Mech AP Setup, upgrade, reboot, reset Wireless User status, activity Mech Mech AP Setup, upgrade, reboot, reset Wireless User status, activity Mech Mech AP Setup, upgrade, reboot, reset Wireless User status, activity Mech Mech Mech Mech Mech Mech Mech Mech	Auto-Channel Selection	Yes
Wireless Separation Ethernet Ethernet Standard IEEE 802.3, IEEE 802.3u, 10Base-T, 100Base-TX IEEE 802.3af Power over Ethernet(PIN 1.2.3.6) WLAN: AP Mode Mesh: Backhaul Mode LAN/Public: Ethernet LAN Port Software Pevice Management Method Method Mesh: Backhaul Mode LAN/Public: Ethernet LAN Port Windows Management Utility SNMP v2 / v3, Trap Firmware upgrade via utility / HTTPS Syslog Mesh AP discovery Mesh AP status Mesh AP setup, upgrade, reboot, reset Wireless User status, activity MAC filtering	WLAN Security	WEP-64/128, WPA, WPA2
Ethernet Standard IEEE 802.3, IEEE 802.3u, 10Base-T, 100Base-TX IEEE 802.3af Power over Ethernet(PIN 1.2.3.6) WLAN: AP Mode Mesh: Backhaul Mode LAN/Public: Ethernet LAN Port Software HTTPS Windows Management Windows Management Utility SNMP v2 / v3, Trap Firmware upgrade via utility / HTTPS Syslog Mesh AP discovery Windows Management Utility Features Mesh AP setup, upgrade, reboot, reset Wireless User status, activity MAC filtering	Hide SSID	Yes
IEEE 802.3, IEEE 802.3u, 10Base-TX IEEE 802.3af Power over Ethernet(PIN 1.2.3.6)	Wireless Separation	Yes
IEEE 802.3af Power over Ethernet(PIN 1.2.3.6) WLAN: AP Mode Mesh: Backhaul Mode LAN/Public: Ethernet LAN Port Software HTTPS Windows Management Windows Management Utility SNMP v2 / v3, Trap Firmware upgrade via utility / HTTPS Syslog Mesh AP discovery Windows Management Utility Features Mesh AP setup, upgrade, reboot, reset Wireless User status, activity MAC filtering	Ethernet	
Interface Mesh: Backhaul Mode LAN/Public: Ethernet LAN Port Software HTTPS Windows Management Windows Management Utility SNMP v2 / v3, Trap Firmware upgrade via utility / HTTPS Syslog Mesh AP discovery Windows Management Utility Features Mesh AP setup, upgrade, reboot, reset Wireless User status, activity MAC filtering	Ethernet Standard	IEEE 802.3, IEEE 802.3u, 10Base-T, 100Base-TX
Mesh: Backhaul Mode LAN/Public: Ethernet LAN Port Software HTTPS Windows Management Utility SNMP v2 / v3, Trap Firmware upgrade via utility / HTTPS Syslog Mesh AP discovery Windows Management Utility Features Mesh AP setup, upgrade, reboot, reset Wireless User status, activity MAC filtering	Ethernet Standard	IEEE 802.3af Power over Ethernet(PIN 1.2.3.6)
LAN/Public: Ethernet LAN Port Software HTTPS Windows Management Utility SNMP v2 / v3, Trap Firmware upgrade via utility / HTTPS Syslog Mesh AP discovery Windows Management Utility Features Mesh AP setup, upgrade, reboot, reset Wireless User status, activity MAC filtering		WLAN: AP Mode
HTTPS Windows Management Utility SNMP v2 / v3, Trap Firmware upgrade via utility / HTTPS Syslog Mesh AP discovery Windows Management Utility Features Mesh AP setup, upgrade, reboot, reset Wireless User status, activity MAC filtering	Interface	Mesh: Backhaul Mode
HTTPS Windows Management Utility SNMP v2 / v3, Trap Firmware upgrade via utility / HTTPS Syslog Mesh AP discovery Windows Management Utility Features Mesh AP setup, upgrade, reboot, reset Wireless User status, activity MAC filtering		LAN/Public: Ethernet LAN Port
Windows Management Utility SNMP v2 / v3, Trap Firmware upgrade via utility / HTTPS Syslog Mesh AP discovery Windows Management Utility Features Mesh AP setup, upgrade, reboot, reset Wireless User status, activity MAC filtering	Software	
Mesh AP discovery Windows Management Mesh AP status Utility Features Mesh AP setup, upgrade, reboot, reset Wireless User status, activity Security MAC filtering	Device Management Method	Windows Management Utility SNMP v2 / v3, Trap Firmware upgrade via utility / HTTPS
-	Windows Management Utility Features	Mesh AP discovery Mesh AP status Mesh AP setup, upgrade, reboot, reset Wireless User status, activity
Supported User Amount Per cluster up to 250 users	Security	3
	Supported User Amount	Per cluster up to 250 users



User Authentication	HTTPS login 802.11i (WPA, WPA2) 802.1x (EAP-TLS / TTLS) 802.1Q VLAN, multiple VLAN / SSID client access Remote RADIUS server authentication Real time status display on Web / Syslog / Utility
Watchdog	System Watchdog
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 1119 SNTPv2 RFC 2865, 2866 RADIUS
Hardware	
Dimension (W x D x H)	380 x 332 x 150 mm
Weight	3.05kg
Power Requirement	48V DC, 0.4A
Environmental Specification	Operating Temperature: -20 ~ 60 Degree C Storage Temperature: -30 ~ 80 Degree C Relative Humidity: 0 ~ 90% non-condensing
Regulatory Compliance	FCC, CE

ORDERING INFORMATION

MAP-3020	Layer 2 Outdoor MESH AP; 2 x RF (802.11a/b/g), PoE

MAP-3100	Layer 2 / Layer 3 Indoor MESH AP, 2 x RF(802.11a/b/g), PoE
MAP-3120	Layer 2 Indoor MESH AP; 2 x RF (802.11a/b/g), PoE