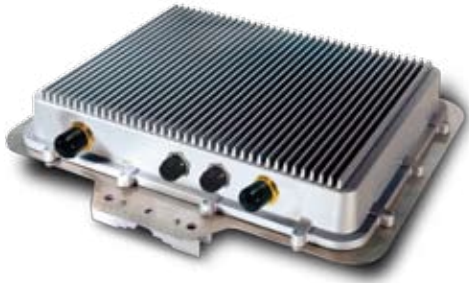


## 802.11a/b/g Outdoor MESH Access



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.

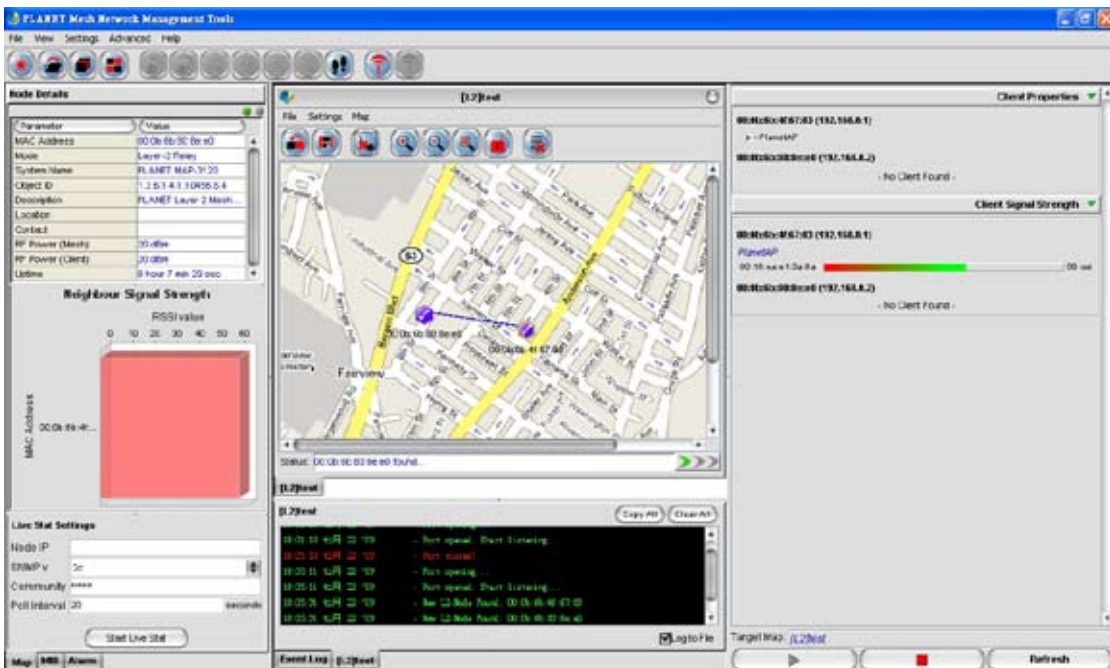
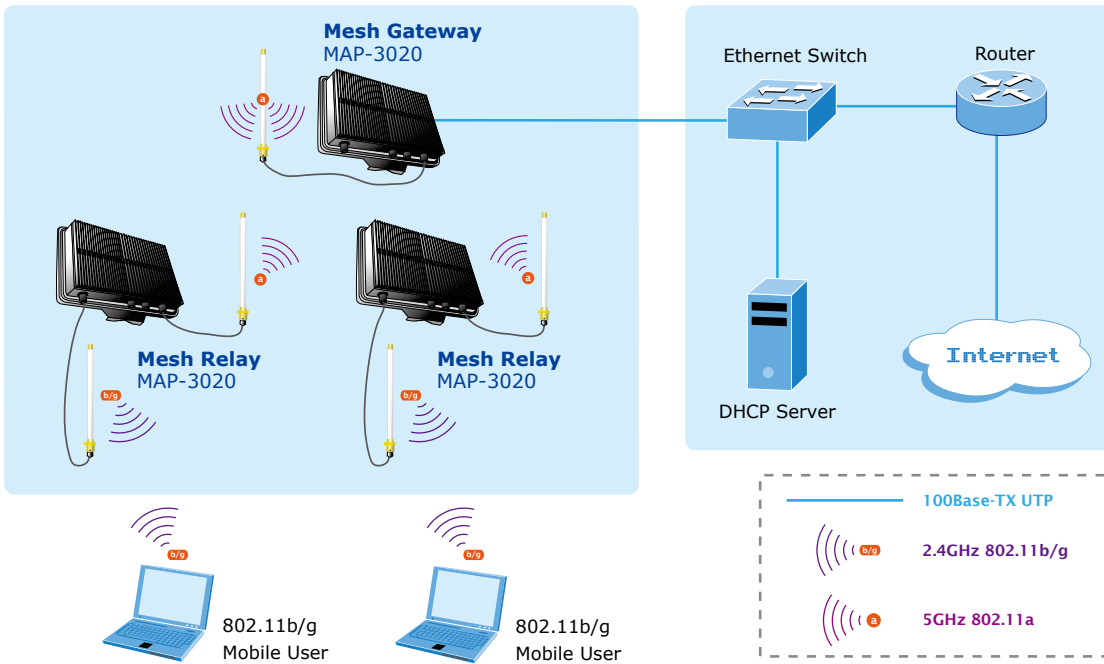
### KEY FEATURES

- 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/ WPA PSK mechanisms
- Supports QoS, SNMP v2/v3
- Power over Ethernet capable (with the proprietary injector)
- IP-68 protection housing
- Operating temperature: -20~70 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**

Product	802.11a/b/g Outdoor MESH Access Point
Model	MAP-3020
<b>Wireless LAN</b>	
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	Transmit Power value adjustable
Output Power (Max.)	802.11b: 26dBm @11Mbps 802.11g 26dBm @6~24Mbps 25dBm @36Mbps 24dBm @48Mbps 23dBm @ 54Mbps SuperG 26dBm @6~24Mbps 25dBm @36Mbps 24dBm @48Mbps 23dBm @ 54Mbps 802.11a 24dBm @6~24Mbps 22dBm @36Mbps 21dBm @48Mbps 20dBm @ 54Mbps SuperA 24dBm @6~24Mbps 22dBm @36Mbps 21dBm @48Mbps 20dBm @ 54Mbps
Operating Channels	802.11a: 12 channels 802.11b/g: 11 / 13 / 14 channels (FCC / ETSI / TELEC)
RF Connector	2 x Reversed N-Type (Mesh / WLAN)
Operating Mode	Layer 2 Gateway Layer 2 Relay
Auto-Channel Selection	Yes
WLAN Security	WEP-64/128, WPA, WPA2
Hide SSID	Yes
Wireless Separation	Yes
<b>Ethernet</b>	
Ethernet Standard	IEEE 802.3, IEEE 802.3u, 10Base-T, 100Base-TX IEEE 802.3af Power over Ethernet(PIN 1.2.3.6)
Interface	WLAN: AP Mode Mesh: Backhaul Mode LAN/Public: Ethernet LAN Port
<b>Software</b>	
Device Management Method	HTTPS Windows Management Utility SNMP v2 / v3, Trap Firmware upgrade via utility / HTTPS Syslog
Windows Management Utility Features	Mesh AP discovery Mesh AP status Mesh AP setup, upgrade, reboot, reset Wireless User status, activity
Security	MAC filtering
Supported User Amount	Per cluster up to 250 users

<b>User Authentication</b>	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
<b>Watchdog</b>	System Watchdog
<b>Protocol Compliance</b>	
<b>Protocol / Standard</b>	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
<b>Hardware</b>	
<b>Dimension (W x D x H)</b>	380 x 332 x 150 mm
<b>Weight</b>	3.05kg
<b>Power Requirement</b>	48V DC, 0.4A
<b>Environmental Specification</b>	Operating Temperature: -20 ~ 70 Degree C Storage Temperature: -30 ~ 80 Degree C Relative Humidity: 0 ~ 90% non-condensing
<b>Regulatory Compliance</b>	FCC, CE

## ORDERING INFORMATION

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

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