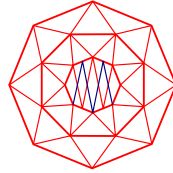


Outdoor Wireless Broadband Solutions

Telecommunication and Security Application

Model: ZOE-MAP4100/4200/4400/4700
IEEE11a/b/g Layer3 Mesh Access Point



IP 68
Outdoor

-20 ~ +70
°C

ZOE-MAP4000 series MESH AP is an Layer 3 IEEE802.11s AODV routing protocol compliant Mesh WiFi Access Point design for Enterprises Public Access wireless broadband application.

The Mesh AP comes in IP68 compliant Solid housing design to operate in extreme outdoor environment with the designed operating temperature of -20~+70 °C.

Design with security, VLAN, management and mobility into one, ZOE-MAP4000 series Mesh AP extends the capability of WiFi technologies (IEEE802.11) from Local Area Network coverage to wider reach Metropolitan Area Network coverage without the messy wiring and wired backbone.



Features Highlight

- Networking Processing Platform based on Intel IXP425 (533MHz)
- Dual WiFi on IEEE802.11a/b/g Compliance – Atheros 802.11a/b/g Chipset
- WAN and LAN Port Extension
- Full SNMP V1,2c,3 & MAP-NMS Support
- Zero-Configuration, Proxy bypass, DNS feed through, Mobile IP, IAPP, QoS (IEEE802.11e), Traffic Shaping, HTTP/HTTPS (SSL), AAA RADIUS, etc...
- Support WPA, AES, IEEE802.1x, Firewall, VPN, MAC Access Control, etc...

Accessories



25M Outdoor Cat5 Cable
[Optional]



1.5m Antenna cable



2.0-6.0GHz
Arrestor x2[Optional]



Power Supply
with PoE Injector



Antenna
[Optional]

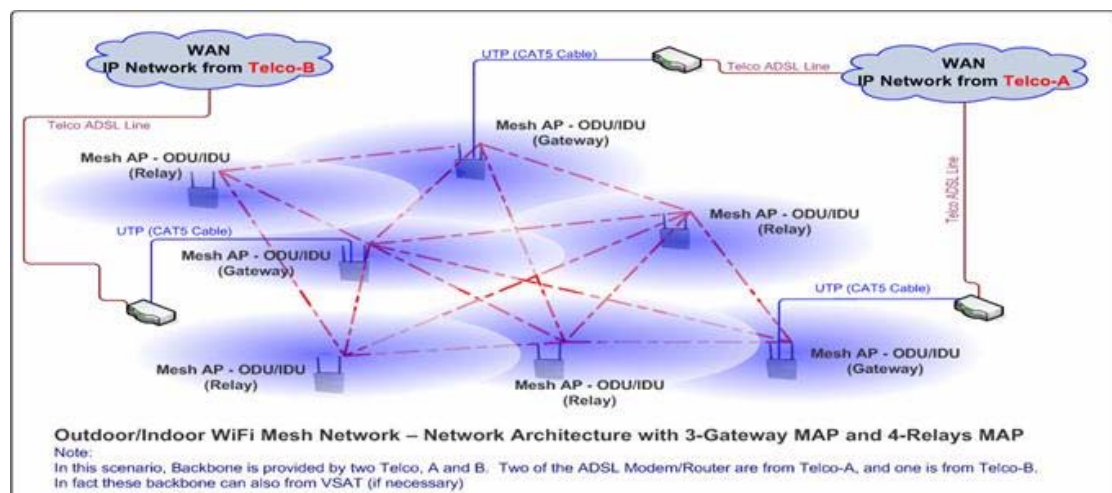
Outdoor Wireless Broadband Solutions

MAP1000 series General Specification:

- Backhaul Mesh (20dBm~26dbm)
 - IEEE802.11g (2.4GHz) or .11a (5.8GHz, recommended)
 - Antenna : 8~12dBi Omni-directional or Patch Antenna
 - Interconnection range : 120~160m, (250m for 23dBm and 500m for 26dBm)
 - Data rate ~ 54Mbps
 - AES Protection between links
- Client Access Point (20dBm~28dbm) – with conventional Notebook
 - IEEE802.11b/g (2.4GHz)
 - Antenna : 8~12dBi Omni-directional
 - Client access range : 50~60m, (120m for 23dBm and 250m for 26dBm)
 - Data rate ~ 11 or 54Mbps
 - Full Security

Topography:

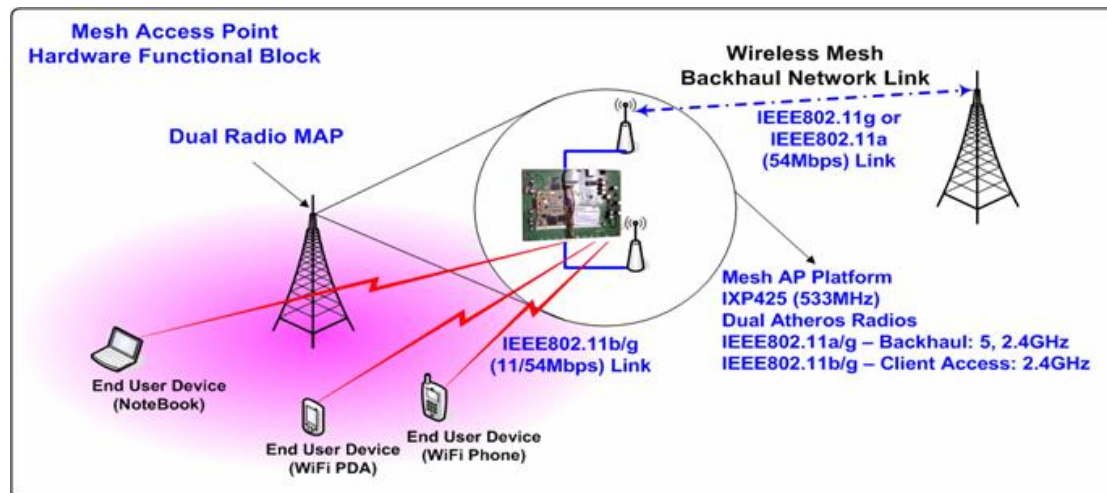
- WiFi Mesh Metropolitan Area Network Solution includes
 - Point-to-point and Point-to-Multipoint architecture
 - External omni-direction or directional/sector antenna
 - Integrated routers with adaptive routing and security capabilities
 - Single Equipment with Software configurable to Gateway, Relay or Bridge Topology
 - Dorado™ also equips with feature for (wired or wireless) LAN extension via LAN port connection
 - Mesh Network – Backbone WAN connection can be via ADSL, Lease Line, Cable, VSAT, etc...
 - Recommended 1 Gateway with 4 Relay Linear deployment scenario



Outdoor Wireless Broadband Solutions

Telecommunication and Security Application

Mesh AP Architecture:



Security:

- Mesh AP built-in with standard and enhanced security features for which protecting the Backhaul mesh connection as well as the Client end-user access
- Privacy & Security is established via the different combination of the following features provided
 - 64/128 Bit WEP encryption
 - AES and IEEE802.1x
 - Both WEP and AES and WPA1/2
 - Firewall (User configuration)
 - VPN (all VPN protocol pass thought, such as PPTP, L2TP & X.509) .
 - HTTP Login
 - HTTPS Login with SSL encryption
 - Authentication via RADIUS server
 - Zero Configuration for Clients Interface, with Proxy bypass, including DNS feed through

Network Services & Features

- Mesh AP equips with 2 x 10/100Mbps RJ-45 Auto-negotiation network interface for WAN/LAN (or other options) and/or Local Server connection, and also to provide network extension via UTP Cable (when necessary)
- PoE (IEEE802.3af) via WAN Port or Alternative DC Power Supply via Adapter
- The following are the Services that provided within the MAP Solution
 - Static IP address
 - VLAN (Depending on Customer Specification)
 - PPPoE client with PAP, CHAP
 - IPv6 Ready
 - PPTP Client
 - 200kB Internal Web Space (Optional) at each Mesh AP
 - Firewall
 - NAT

Outdoor Wireless Broadband Solutions

Telecommunication and Security Application

Specifications ZOE-MAP4000 series

Mother Board	Intel IXP425BB/533MHZ Dual Mini PCI Slots
Standards Compliance	IEEE 802.11a/b/g IEEE 802.3 IEEE 802.3u
Radio Frequency Type	DSSS/OFDM
Frequency Band	11b/g: America/FCC: 2.412~2.462 GHz (11 channels), Europe CE/ETSI: 2.412~2.472 GHz (13 channels), 11a: 5.15~5.35GHz,5.50~5.70GHz,5.725~5.850GHz
Transmission Power	100mW~700mW version Mini PCI card available
Transmission Rate	54/48/36/24/18/12/9/6Mbps auto fallback
Access Point Interfaces	Auto sensing MDI/ MDI-X Ethernet 10/100 Base-TX; RJ-45
Sensitivity	11b/g: -88dBm @ 11Mbps,PER< 8%; -74dBm @ 54Mbps,PER< 10% 11a: 6Mbps: -88dBm; 9Mbps: -87dBm; 12Mbps: -86dBm; 18Mbps: -84dBm; 24Mbps: -81dBm; 36Mbps: -76dBm; 48Mbps: -72dBm; 54Mbps: -68dBm; 108Mbps: -64dBm
Antenna Type	2 x N type Female connector for External antenna
Security Systems	WPA, AES, IEEE802.1x, Firewall, VPN, MAC Access Control, etc...
Wireless Setting	Operation Mode : Gateway, Relay selection, Radio1-ADHOC, Radio2-AP mode
Software/Firmware	DHCP Radius Authentication access control SNMP network management interface FTP Web-based configuration via popular browser (MS IE, Netscape...) Firmware upgrade and configuration backup via Web Yufu's Network Management System S/W supported.
Operating Environment	Operating Temperature: -20 ~ +70°C
Power	DC 24 V ± 5%; 1.37A (Max.); AC adapter 100V ~ 240V
Network Management System OS Support	Windows 2000/XP
Warranty	One year limited