



EZMESH™ Outdoor Dual-AP Wireless Access Point

Reliable, Intelligent, High Performance Mesh Network

- ★ Patent-pending, auto-discovery, auto-configure, real time routing, and auto-healing POP (Predictable Optimum Path) mesh routing algorithm
- ★ Real-time mesh routing based on monitoring current environment, product function change and administrator bandwidth adjustment needs
- ★ Multiple wireless path design for both backhaul and user traffic eliminates adjacent AP signal interference and provides zero performance degradation
- ★ Up to 16 separate SSID/VLAN with different authentication and encryption algorithms simultaneously
- ★ Best network throughput via layer 2 fast switching and bridging

Fully Compatible with Existing Access Servers, Routers, and Gateways

- ★ Transparent to layer 3 and up protocols, fully compatible with existing network equipment
- ★ Directly connects to existing Routers, Gateways, or APs through 10/100 Ethernet

Management and Security

- ★ Supports SNMP v2c & Web Based browser
- ★ Supports WEP encryption security across wireless mesh network
- ★ Mesh network protection with user defined Mesh ID

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Providing City-Wide Wi-Fi access to any community large or small. The E z m e s h™ provides users with a dependable, flexible network, and at the same time improves city-wide productivity, increases safety and encourages economic development. E z m e s h™ provides Wi-Fi access using wireless mesh technology with Plug-n-Play easy installation, and allows wireless service providers to deliver a true wireless network over large geographical areas or other areas where wiring is too difficult or expensive to install.

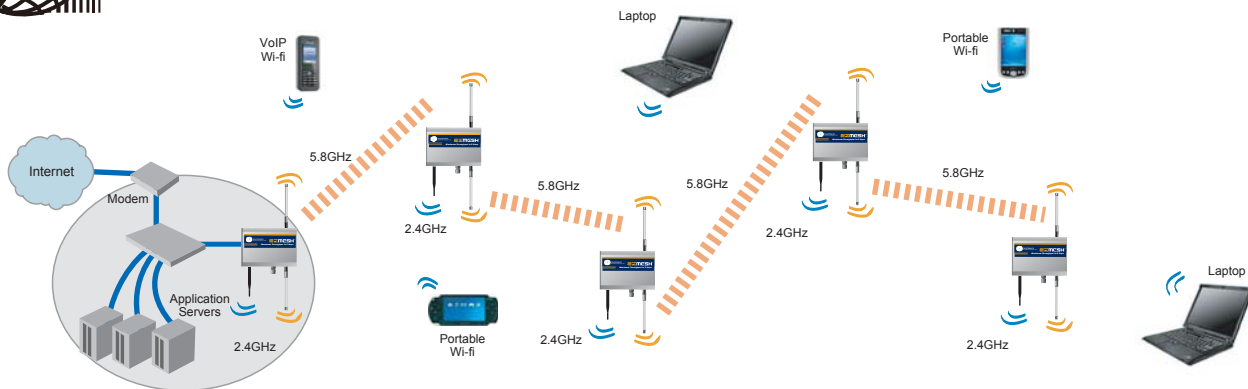
A Mesh Link is a true wireless connection (Point-to-multipoint and Point-to-point) between any two E z m e s h™ units. Teletronics' E z m e s h™ Outdoor Dual-AP will automatically discover neighboring nodes, and interconnect all the E z m e s h™ Dual-APs together to form a large coverage wireless network. Manual selection is also available.

E Z M e s h™ **Outdoor Dual-AP implements layer 2 mesh routing** which provides excellent network performance and is fully compatible with existing network equipment and applications. E z m e s h™ can support high-BW and low-latency applications like real-time video and audio.

Predictable Real-time Optimum Path (POP) routing algorithm creates a E z m e s h™ based Wi-Fi mesh network with the highest throughput, reliable mesh link, and self-discovery/self-configuration/self-healing benefits. The algorithm's human-like intelligence examines the network and makes the appropriate connections among E z m e s h™ APs in real time. It can re-establish a new network when obstacles, individual node problems, new nodes, or internet access events occur.

High Throughput Mesh Network is achieved by a non-blocking and non-interference design for clients and backhaul traffic. E z m e s h™ Outdoor Dual-AP with its a multi-radio and multi-channel architecture eliminates the wireless signal interference and traffic conflict problems that exist on many other mesh networks.

SNMP v2c and web-based (HTML) management interface enables both professional and non-technical users to easily handle network management and maintenance tasks for the E z m e s h™ Dual-AP units. The "Point and Click" browser interface permits users to monitor node condition, traffic flow, and event logs of the E z m e s h™ units on the mesh network. The Web-based topology function also allows network administrators to easily configure, update, and monitor every station on the mesh network. SNMP private MIBs are available for advanced users preferring to provide their own network manager.



Specifications

Wireless

Backhaul Radio

Number of Radio: 3
 Standards: IEEE 802.11a
 Media Access Protocol: CSMA/CA with ACK
 Frequency: 5.8GHz/5.4GHz/5.3GHz/4.9GHz
 Frequency Bands: 4.9 - 5.091GHz
 5.15 - 5.25GHz, 5.25 - 5.35GHz
 5.470 - 5.725GHz, 5.725 - 5.850GHz

Modulation
 OFDM(64-QAM, 16-QAM, QPSK, BPSK), CCK, DBPSK, DQPSK

Data Rates

1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48, 54Mbps

Tx Power

FCC/IC: 23dBm (ANT Port)
 ETSI/EU: 23dBm (ANT Port)

Receiving Sensitivity

-82dBm @36Mbps; -78dBm @48Mbps; -76dBm @54Mbps

Channels

US/Canada: 12
 Europe: 19
 Japan: 8
 China: 5
 Saudi Arabia: 8

Access Point Radio

Number of Radio: 1
 Standards: IEEE 802.11g, 802.11b
 Media Access Protocol: CSMA/CA with ACK
 Frequency: 2.4GHz ISM radio band

Frequency Bands: 2.4 - 2.462 GHz

Modulation

802.11g: OFDM(64-QAM, 16-QAM, QPSK, BPSK)
 802.11b: CCK(11, 5.5MHz), DOPSK(2Mbps), DQPSK(1Mbps)

Data Rates

802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps
 802.11b: 1, 2, 5.5, 11Mbps

Tx Power

FCC/IC: 23dBm (ANT Port)
 ETSI/EU: 20dBm (ANT Port)

Receiving Sensitivity

-82dBm @36Mbps; -78dBm @48Mbps; -76dBm @54Mbps

Channels

802.11g: USA, Canada, Saudi Arabia, Taiwan: 11
 Most European countries, China: 13
 France: 4
 Japan: 14
 802.11b: USA, Canada, Saudi Arabia, Taiwan: 11
 Most European countries: 13
 France: 4
 Japan: 14

Antenna Port No.

Backhaul: 3
 Access Point: 1

Mesh Network Performance

Up to 30Mbps backhaul throughput at 5th hop count

Maximum Operating Range

Backhaul
 Node-to-node Distance: 304m(1000ft)@54Mbps

802.11g
 Client AP: 150m(492ft)@54Mbps
 500m(1640ft)@6Mbps

(Transmission speed may vary according to the environment)

Software Feature

Security & Encryption

64bit, 128bit WEP encryption (Hardware Accelerated)
 WPA/WPA-2 (Hardware Accelerated)
 Mesh operator username/password
 Mesh ID protection
 Software RESET button to factory default

Multiple SSID/VLAN

support up-to 16 separate SSID/VLAN with different authentication and encryption simultaneously

RF Control

Tx Power Control - Settable Tx levels to adjust coverage cell size
 Automatic / Manual Channel Selection
 Automatic / Manual Mesh node selection
 Self-forming / self-healing Mesh Link

Management

Web based (HTML) Management
 SNMP v2c, Private MIB

Hardware Specifications

Network Port

(1) 10/100Mbps auto crossover Ethernet WAN Port
 (For connecting to Router or Gateway)

Power

Power Interface: POE
 Input: 48VDC 1000mA

Environment Conditions

Operating Temperature: -40°F to 131°F (-40°C to 55°C)
 Storage Temperature: -50°F to 158°F (-58°C to 70°C)
 Humidity: 95% maximum relative humidity, non-condensing

Physical Specifications

Dimension: 7.5in x 9in x 2.75in
 Weight: 7lb

Enclosure

Rating: NEMA4 weather proof
 Antenna Connector: (3) weatherproof antenna connectors
 Power Connector: (1) weatherproof Power/Data connector

Regulatory Compliance

Certification: FCC Part 15

(Please contact Teletronics for other Certifications)