

EW75200 Series

Hardened IP67 Outdoor Wireless Access Point



Overview

The eWAV EW75200 series is a family of hardened IP67 outdoor wireless access points (WAP) providing high speed wireless connectivity for harsh and demanding environments. Comprised of high-power, long-range single and dual-band IEEE 802.11ac MIMO wireless radios with gigabit IEEE 802.3at PoE connectivity, the series is hardened against extreme temperatures and water ingress.

eWAV delivers the power and range (up to 20 miles) to wirelessly connect remote networks, or extend existing networks in an efficient and cost-effective way. It supports 2.4GHz 802.11b/g/n (& 5GHz 802.11a/n/ac on EW75200-0804) for local device access like laptops, wireless IP cameras, or mobile devices, and also 5GHz 802.11ac/a/n for long distance Point-to-Point and Point-to-Multi-Point data transmission. Maximum transmission speeds are up to 300Mbps on 2.4GHz and 866Mbps on the 5GHz band.

EtherWAN — "When Connectivity is Crucial."

Spotlight

• High bandwidth wireless connectivity

- Design for Point-to-Point and Point-to-Multipoint wireless backhaul applications
- IEEE 802.11a/n/ac providing high throughput data transmission on 5GHz up to 866Mbps
- IEEE 802.11b/g/n providing local access on 2.4GHz up to 300Mbps
- 2 x 2 MIMO antennas with high gains

• Hardened grade with IP67 protection

- Wide operating temperature range for extreme environments
- Fanless and ruggedized outdoor IP67 enclosure

• Comprehensive and advanced software features

- Static routing, RIP v1/v2 and OSPF v2
- Built in Stateful Firewall and RADIUS for security control
- RF strength LEDs and Bandwidth Tester to ease installation effort

Software Features

Management

- Interface
 - Web Browser
 - SNMP v1/v2/v3
- Firmware and configuration upgrade and backup via Web Browser
- Supports DHCP Server/Client/Relay
- DNS cache and Web Proxy
- System health monitoring including temperature and voltage
- Local system log, e-mail and remote log service
- SNTP Client
- Useful tools such as Bandwidth Test, E-mail, Ping, Traceroute, Packet Sniffer and Traffic Generator

Wireless

- Encryption: WPA, WPA2, WEP, AES
- Dynamic Frequency selection
- Proprietary Nstreme and Nv2 protocols for long distance transmission

Security

- RADIUS client
- Powerful Firewall
 - Stateful packet inspection
 - Layer-7 protocol detection
 - Peer-to-peer protocols filtering
 - Traffic classification by:
 1. Source MAC address
 2. IP addresses (Network or List) and address types (Broadcast, Local, Multicast, Unicast)
 3. Port or port range
 4. IP protocols
 5. Protocol options (ICMP Type and code fields, TCP Flags, IP Options and MSS)
 6. Interface the packet arrived from or left through
 7. Internal flow and connection marks
 8. DSCP byte
 9. Packet content
 10. Rate at which packets arrive and sequence numbers
 11. Packet size
 12. Packet arrival time

Routing

- Static routing, RIP v1/v2 and OSPF v2
- Bidirectional Forwarding Detection
- Prefix List to filter and control the routing table

Hardware Specifications

Technology

Standards

- IEEE 802.3 10BASE-T
- IEEE 802.3u 100BASE-TX
- IEEE 802.3ab 1000BASE-T
- IEEE 802.11a/b/g/n/ac Wireless LAN

Performance

- Wireless transmission rate
5GHz:
11a: 108Mbps, 11n: 300Mbps, 11ac: 866Mbps
2.4GHz:
11b: 22Mbps, 11g: 108Mbps, 11n: 300Mbps
- Ethernet data rate
Up to 540Mbps (LAN to wireless 11ac)

Wireless

- RF channels
2 Non-overlapping
- Frequency range
5GHz: 5150-5250MHz and 5725-5850MHz
2.4GHz: 2412-2462MHz
- Channel width
5GHz: 10MHz, 20MHz, 40MHz, 80MHz
2.4GHz: 5MHz, 10MHz, 20MHz, 40MHz
- Data security
256-bit AES-CCM

Transmit power and receive sensitivity 5GHz

	Transmit power (dBm)	Receive sensitivity
6MBit/s	31	-96
54Mbit/s	27	-81
MCS0	30	-96
MCS7	27	-77
MCS9	22	-72

Transmit power and receive sensitivity 2.4GHz

	Transmit power (dBm)	Receive sensitivity
1MBit/s	29	-100
11Mbit/s	29	-94
6MBit/s	30	-96
54Mbit/s	27	-80
MCS0	30	-96
MCS7	24	-79

Power

Input

- 48VDC PoE Including Passive PoE, Telecom PoE, 802.3af and 802.3at

Power Consumption

- 13W Max.

Mechanical

Casing

- Aluminum Case
- IP67

Dimensions

- EW75200-0804:
270 x 765 x 76mm (W x H x D)
(10.63" x 30.12" x 3")
- EW75200-1304, EW75000-08:
270 x 565 x 76mm (W x H x D)
(10.63" x 22.25" x 3")

Weight

- EW75000-08: 3.5 lbs.
- EW75200-0804: 4.5 lbs.
- EW75200-1304: 4.2 lbs.

Installation

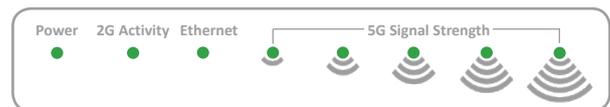
- Pole/Wall Mounting

Interface

Ethernet Port

- 10/100/1000BASE-TX PoE

LED Indicators



Environment

Operating Temperature

- -40 to 75°C (-40 to 167°F)

Storage Temperature

- -45 to 85°C (-49 to 185°F)

Ambient Relative Humidity

- 5% to 95% (non-condensing)

Wind Load

- 132N @200km/h/h

Wind Survivability

- 200km/h

Regulatory Approvals

ISO

- Manufactured in an ISO 9001 facility

EMI

FCC Part 15B Class A

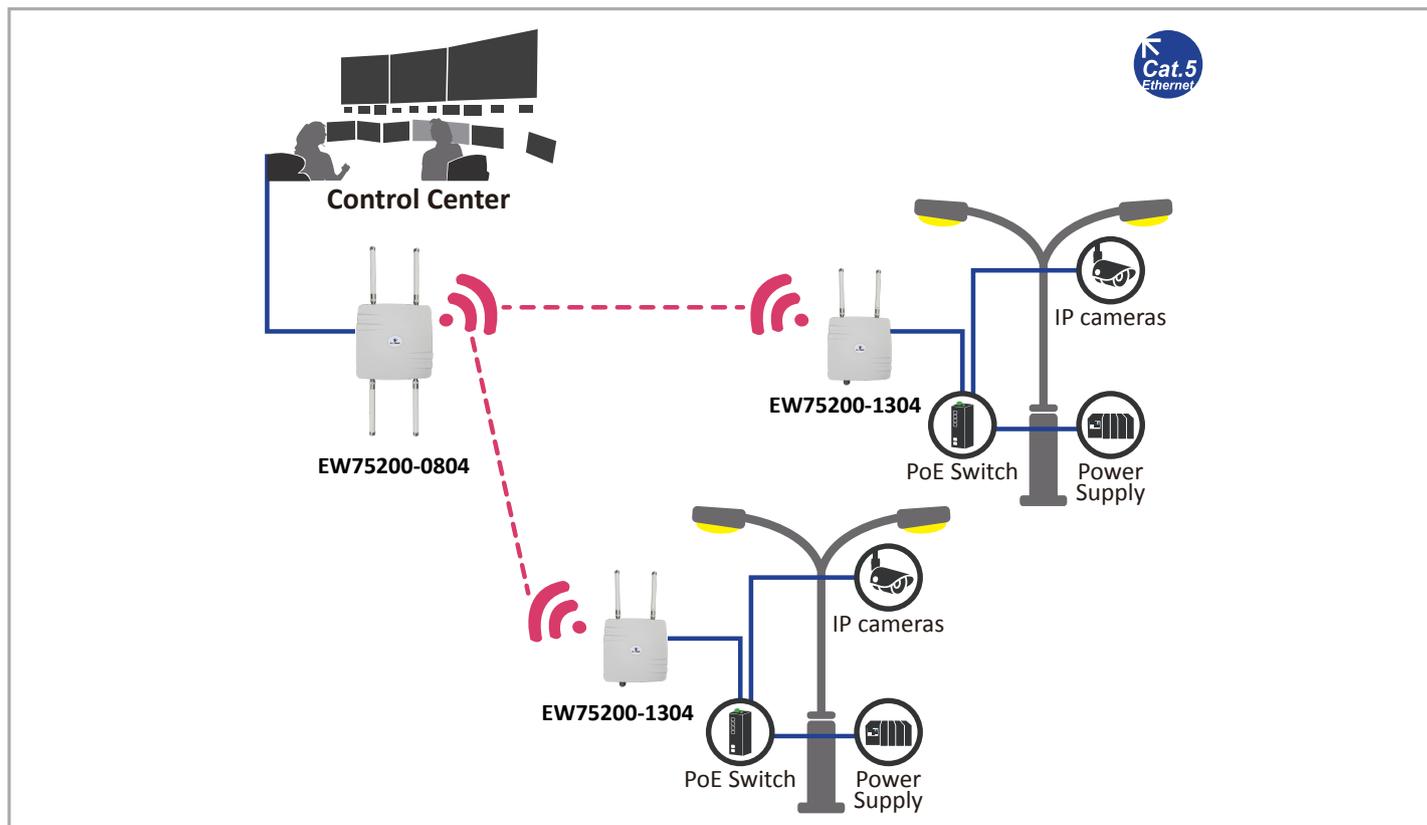
FCC Part 15C

Environmental Test Compliance

IEC 60068-2-6 Fc (Vibration Resistance)

FED STD 101C Method 5007.1 (Free fall w/package)

Application Diagram



Ordering Information

Model

EW75200-0804	Hardened IP67 outdoor wireless access point with 5GHz/8dBi Omni antenna and 2.4GHz/4dBi Omni antenna
EW75200-1304	Hardened IP67 outdoor wireless access point with 5GHz/19dBi Panel antenna and 2.4GHz/4dBi Omni antenna
EW75000-08	Hardened IP67 outdoor wireless access point with 5GHz/8dBi Omni antenna