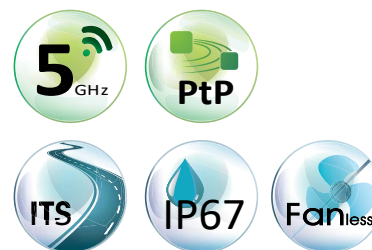


# EW75000-13

## Hardened IP67 Outdoor Wireless Bridge Subscriber Unit



## Overview

The eWAV EW75000-13 is a hardened IP67 outdoor wireless bridge subscriber unit providing high speed wireless connectivity remotely. Comprised of high-power IEEE 802.11ac MIMO wireless radios with gigabit IEEE 802.3at PoE connectivity, the EW75000-13 is hardened against extreme temperatures and water ingress for harsh and demanding environments.

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 5GHz 802.11a/n/ac for long distance Point-to-Point data transmission. Maximum transmission speeds are up to 866Mbps on the 5GHz band.

EtherWAN — "When Connectivity is Crucial."

## Spotlight

- **High bandwidth wireless connectivity**
  - Design for Point-to-Point wireless remote connectivity
  - IEEE 802.11a/n/ac providing high throughput data transmission on 5GHz up to 866Mbps
  - 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, RIPv1 & v2 and OSPFv2
  - Built in Stateful Firewall and RADIUS for security control
  - RF strength LEDs and Bandwidth Tester to ease installation effort

# Software Features

## Management

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- 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

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

## Security

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- 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

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- Static routing, RIPv1 & v2 and OSPFv2
- 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/n/ac Wireless LAN

### Performance

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

### Wireless

- RF channels  
2 Non-overlapping
- Frequency range  
5GHz: 5150-5250MHz and 5725-5850MHz
- Channel width  
5GHz: 10MHz, 20MHz, 40MHz, 80MHz
- 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

## Power

### Input

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

### Power Consumption

- 13W Max.

## Mechanical

### Casing

- UV Protected Polystyrene case with internal metal enclosure
- IP67

### Dimensions (W x H x D)

- EW75000-13:  
270 x 301.7 x 76mm  
(10.63" x 11.88" x 3")

### Weight

- EW75000-13: 3.5 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

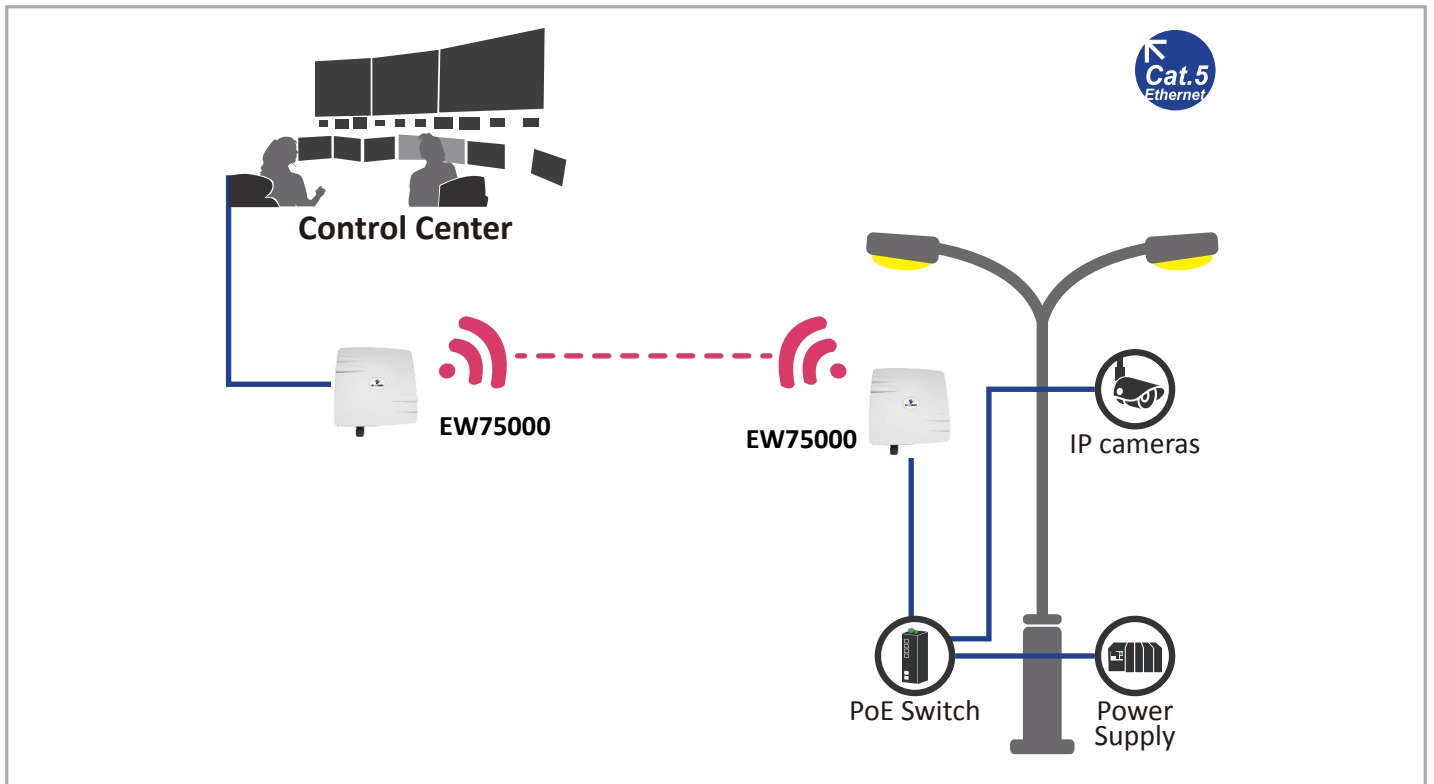
#### FCC Part 15C

### 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

**EW75000-13**

Hardened IP67 outdoor wireless bridge subscriber unit with 5GHz/19dBi Panel antenna