

EW5001 Wireless Access Point or Bridge

SINGLE RADIO 802.11 UNIT

Product Features

- 2.4 GHz (802.11g) and 5.8 GHz (802.11a) ISM Bands
- Superior Link Margin and Link Availability
- Innovative Integrated Articulated Antenna Mount
- Junction Box and Sliding Hinge for Quick Mounting
- Submersible Outdoor Environmental Rating; Meets IP68 and NEMA Type 6P Standards
- Wide Operating Temperature Range: -22° to 122°F (-30° to 50°C)
- 802.11e HCCA-Based Hidden Node Solution and Quality of Service (QoS) Guarantees
- Daylight-Readable Indicators for Easy Installation
- RSSI Port for Easy and Accurate Antenna Alignment
- 802.11i-Based WPA-PSK Security Using 128-Bit AES
- Supports Gigabit Ethernet (GbE) 802.3ab
- Power Over Ethernet (POE), 802.11af Compatible
- Auto MDI/MDIX
- Remote Configuration and Upgrade
- Endura® Wireless Auto Install (EW-AI) Means Zero Touch Configuration for Typical Installations
- Smart System Health Check Using Endura Workstation

The **EW5001** seamlessly extends the Endura® architecture beyond the confines of wired infrastructure. Designed specifically for the video surveillance market, the unit's superior link margin, high reliability design, and ease of installation set it apart from the competition.

The wireless access point/bridge unites the latest wireless technology with the Endura architecture. Any camera can be added to an Endura system in locations previously inaccessible to a wired network. Typical applications include parking lots, remote campus buildings, and remote areas in large geographical facilities. Examples include ports, airports, government facilities, citywide surveillance systems, and dams or waterways that cannot support a wired infrastructure. Using wireless industry standards and innovative technology, Pelco has expanded Endura to reach more video surveillance applications.

The incorporation of 802.11e Hybrid Controlled Channel Access (HCCA) based protocol enhancements solves the hidden-node problem. It provides QoS guarantees for video delivery while maintaining compliance with standards.



EW5001 WITH OPTIONAL INTEGRATED ANTENNA

When configured as an access point, a single **EW5001** can connect with up to 10 EW5301T wireless video encoders to provide video surveillance over a wide area. As an access point, the EW5001 and the optional dual band sector antenna provide reliable wide-area coverage.

When configured as a Layer 2 bridge unit, two **EW5001** units can join two disjointed IP networks into a single IP network. With optional high gain directional antennas, distances of over 8 miles (12.87 km) can be achieved. When used as a 5.8 GHz bridge, the optional 23 dBi antenna can be used for all distances over 1,500 ft (457 m).

Endura distributed, network-based products are available only to certified dealers/integrators. Please contact your local sales representative for details on certification applications and requirements. Additional information on Endura products and certifications may be found at <http://www.pelco.com/endura>.



IP68



C2681 / NEW 3-26-08

International Standards
Organization Registered Firm;
ISO 9001 Quality System



PRODUCT OVERVIEW

Pelco wireless units make installation quick and easy, resulting in lower installation costs. These products include an industry-first, integrated articulated antenna mount. With the integrated RSSI port, antenna alignment is simple. The custom junction box (J-Box) and slide mount hinge lets the installer position the lightweight unit out of the way to provide quick access to cable connections. Daylight-readable status indicators, “quick connect” antenna connectors, and an easy-to-close clasp simplify installation.

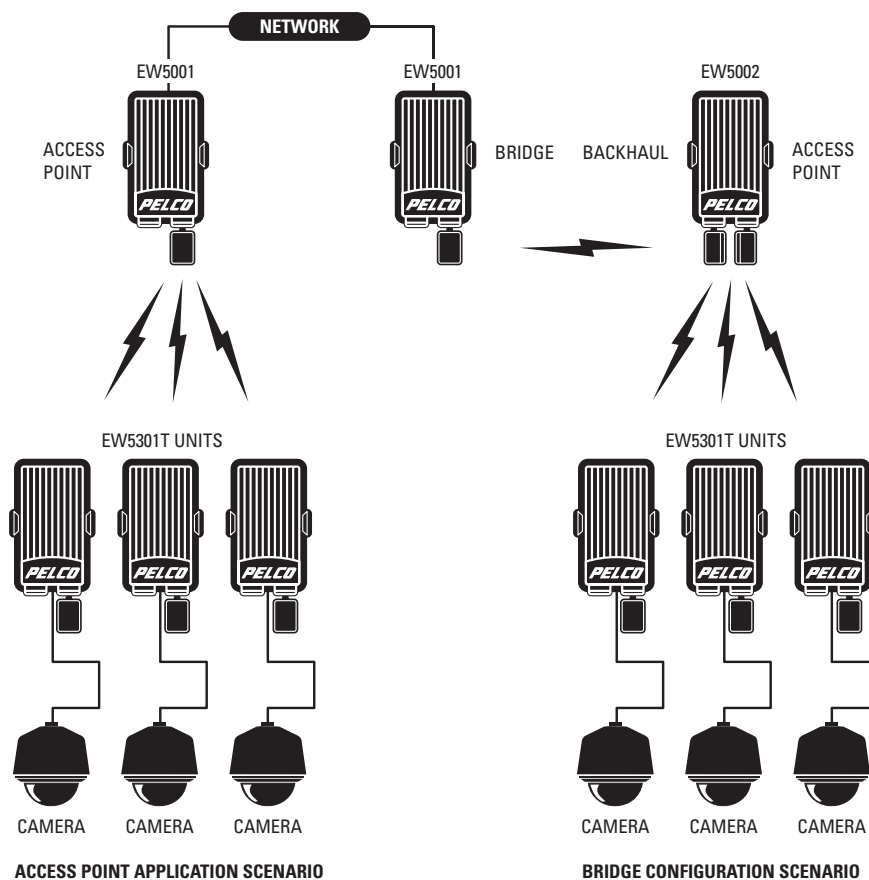
In most cases, Endura Wireless Auto Install (EW-AI) means no preconfiguration is required. Simply power up the units, align the antennas for the highest signal strength, and lock down the mounting hardware. Installers can change the configuration or update the software after installation; the Endura web-based interface allows for quick and easy remote system configuration.

For greater distances or higher gain, Pelco offers optional high gain antennas that add 6 to 9 dB of gain, double or triple the transmit power. (Optional non-integrated antennas are mounted separately and may require longer antenna cables.)

Pelco has created the first wireless units capable of supporting the reliability demanded by mission-critical surveillance applications. The **EW5001** enclosure meets IP68 and NEMA Type 6P standards. It can survive a hurricane-class event that includes submersion in water for a limited period of time.

The **EW5001** leverages 802.11i WPA-PSK 128-bit AES encryption and authentication features to deliver the highest possible wireless security. The Endura wireless system is always secure, even during installation. This integration provides complete network security between the wireless units and the rest of the Endura system.

Built upon the Endura architecture, the **EW5001** takes full advantage of Endura systems engineering. More **EW5001** units can be added to the network to accommodate changes in the size and scope of an installation. Endura compatibility also includes smart system health checks. If a noncompliant operational state occurs, such as video loss detection, the Endura system is immediately notified of the problem so the user can correct the issue before failure occurs.



IMPORTANT NOTE: PLEASE READ. The network implementation is shown as a general representation only and is not intended to show a detailed network topology. Your actual network will differ, requiring changes or perhaps additional network equipment to accommodate the system as illustrated. Please contact your local Pelco Representative to discuss your specific requirements.

TECHNICAL SPECIFICATIONS

SYSTEM

Operating System	Linux®
User Interface	Remote operation from Endura workstation or VCD5000

INDICATORS

MODE	Green, amber, red
Status (1 through 5)	Green

RADIO FREQUENCY

Wireless Radio Standards	802.11a/802.11g
Modulation	OFDM
Transmitting Frequency	
2.4 GHz	2.412 to 2.462 GHz (ISM)
5.8 GHz	5.745 to 5.825 GHz (ISM)
Channels	
2.4 GHz	11, overlapping
5.8 GHz	5, nonoverlapping
Maximum Transmit Power	
2.4 GHz	24 to 28 dBm (±1 dB)
5.8 GHz	21 to 26 dBm (±1.5 dB)
Receiver Sensitivity	
2.4 GHz	-91 to -74 dBm (±1 dB)
5.8 GHz	-91 to -74 dBm (±1.5 dB)

NOTE: Due to USA and Canada regulatory compliance, 2.4 GHz models are restricted. Power output is limited to 16.75 dBm; channels 1, 10, and 11 are unavailable.

Antenna Types and Gain	(see <i>Optional Accessories</i>)
Antenna Polarization	Vertical, horizontal
Data Modulation Rate	12 Mbps to 54 Mbps
Supported Modulation	QPSK
Supported Encryption	802.11i WPA-PSK 128-bit AES

NETWORK

Interface	1, RJ-45, 10/100/1000Base-T
Security	2 modes: secure mode (device authentication) and unsecure mode

POWER

Power Consumption (typical)	9.7 W, 33 BTU/H
Power Input	12 VDC ±10% 24 VAC ±10% 48 VDC (PoE) (802.3af-compliant)

ENVIRONMENTAL

Operating Temperature	-22° to 122°F (-30° to 50°C)
Storage Temperature	-40° to 149°F (-40° to 65°C)
Operating Humidity	20% to 95%, noncondensing
Operating Altitude	-50 ft to 10,000 ft (-16 m to 3,048 m)

PHYSICAL

Construction	Cast aluminum
Finish	White powder coat
Dimensions	8.76" D x 8.66" W x 14.49" H (22.25 x 22.00 x 36.80 cm)
Unit Weight	13.5 lb (6.13 kg)
Shipping Weight	21 lb (9.53 kg)
Effective Projected Area (EPA)	159 sq. in.
Mounting	Corner, pole, or parapet with options (for outdoor use only)

TECHNICAL SPECIFICATIONS

MODELS

EW5001-2	Wireless access point or bridge; 2.4 GHz
EW5001-5	Wireless access point or bridge; 5.8 GHz

SUPPLIED ACCESSORIES

Power Cable with Connector	1
Weatherproof Network Connector	1

OPTIONAL ACCESSORIES

EW-ANTP-2-9	Replacement planar antenna with integrated mount and cable, 2.4 GHz, 8.5 dBi gain, 75° x 60° beamwidth
EW-ANTP-5-14	Replacement planar antenna with integrated mount and cable, 5.8 GHz, 13.5 dBi gain, 40° x 35° beamwidth
EW-ANTP-5-23	Planar antenna with mount, 5.8 GHz, 23.0 dBi gain, 9° x 9° beamwidth
EW-ANTP-5-28	Planar antenna with mount, 5.8 GHz, 28 dBi gain, 4.5° x 4.5° beamwidth
EW-ANTG-2-14	Grid parabolic dish antenna with mount, 2.4 GHz, 14.0 dBi gain, 21° x 17° beamwidth
EW-ANTS-2/5-13	Dual band sector antenna with mount:
2.4 GHz	12.0 dBi gain, 120° x 15° beamwidth
5.8 GHz	14.0 dBi gain, 120° x 8° beamwidth
EW-ANTC-06	6-inch (15.24 cm) antenna cable for EW-ANTP-2-9 and EW-ANTP-5-14 integrated antennas
EW-ANTC-3	3-foot (0.91 m) antenna cable for non-integrated antennas
EW-ANTC-10	10-foot (3.05 m) antenna cable for non-integrated antennas
EW-BPS-6	6-foot (1.83 m) bench power cable
EW-SC-6	6-foot (1.83 m) service cable for bench configuration (only to be used by an Endura-certified technician)
POE20U560G	Single port Power-over-Ethernet (PoE) injector

OPTIONAL MOUNTING ACCESSORIES

ECM100	Esprit corner mount with center feedthrough hole
EPM	Esprit pole mount with center feedthrough hole
CM100/CM400	Corner mount
PA402	Pole mount
PP100/PP400	Parapet mount
PP300L/PP301L	Parapet corner mount
PP4348	Parapet rooftop mount
EA4348	Adapter plate for CM400, PA402, PP300L, PP301L, PP400, and PP4348
ES-MKIT	Esprit® marine kit; protects unit from galvanic corrosion in a marine environment

CERTIFICATIONS/RATINGS

- CE, Class A
- FCC, Class A
- UL/cUL Listed
- Meets NEMA Type 6P and IP68 standards.

STANDARDS/ORGANIZATIONS

- Pelco is a member of the MPEG-4 Industry Forum
- Pelco is a member of the Universal Plug and Play (UPnP) Forum
- Pelco is a member of the Universal Serial Bus (USB) Implementers Forum
- Pelco is a contributor to the International Standards for Organization/Electrotechnical Commission (ISO/IEC) Joint Technical Committee 1 (JTC1), "Information Technology," Subcommittee 29, Working Group 11
- Compliance, ISO/IEC 14496 standard (also known as MPEG-4)
- Compliant with International Telecommunication Union (ITU) Recommendation G.711, "Pulse Code Modulations (PCM) of Voice Frequencies"

NOTICE: Judgment as to the suitability of the products for users' purposes is solely the users' responsibility. Users should refer to the Operation manuals for cautionary statements regarding user selected options and how they might affect video quality. Users shall determine the suitability of the products for their own intended application, picture rate and picture quality. In the event users intend to use the video for evidentiary purposes in a judicial proceeding or otherwise, users should consult with their attorney regarding any particular requirements for such use.



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