Neutron AP MeshCam combines ultra-fast mesh Wi-Fi and clear surveillance in a simple, space-saving design that eliminates dead zones and unsecured areas offering widespread visibility through optimized connectivity. It features smart-sensing mesh for simple setup, motion and audio-detection with email alerts, and centralized management through a Neutron Switch or ezMaster™.

Add multiple AP MeshCams to create always-there Wi-Fi and security that eliminates dead zones, even in the farthest corners, while keeping your eye on what matters most. One simplified solution forges powerful wireless mesh with crystal clear video for quick, expandable access and visibility regardless of interior size.

AP MeshCam is ideal for large homes, commercial offices, schools and anywhere both Wi-Fi and surveillance are needed. Utilize Mesh networking to expand these resources into entryways, hallways, stairwells, and lobbies and in retrofit applications where long wire runs would be difficult or costly.

Features & Benefits:
- 2-in-1: Mesh 11ac Wireless AP & IP Surveillance Camera
- Eliminate Wi-Fi Dead Zones & Get Widespread Visibility
- Fast 11ac Speeds to 867 Mbps for Smooth, Buffer-Free Connections
- View & Record Suspicious Activity With Night Visibility to 65 ft.
- Wide, 120° 2-MP Lens Captures HD Images Over a Broader Field
- Mesh Smart-Sensing Simplifies Installation & Optimizes Connectivity
- 802.3at/af-Compliant PoE Supports Flexible Device Placement
- One Device, One Install, One Wire Run Reduces Time & Material Costs
- Operate as a Stand-Alone or Expand to Centrally Manage
- Remotely View Live Video & Receive Notifications via EnVMS™ App
- Includes 16-Channel VM Software With Live Monitoring
- Eliminate the Need for Cloud Storage With Onboard SD Card Storage
- Secure Your Network While Providing Guest Access
Monitor Interiors for Whole-Space Assurance

See suspicious activity clearly in low light or total darkness up to 65 feet from the camera. Easily make out image details like facial features over a broader area with the AP MeshCam's 2-MP 1920 x 1080p HD sensor and 120-degree wide-angle lens. Set motion or audio-triggered recordings and get alerted at the first hint of trouble.

High Speed 11ac Eliminates Wi-Fi Buffering

Get smoking-fast 11ac Wi-Fi and enjoy smooth, buffer-free 4K Ultra HD streaming and rapid file loading. AP MeshCam's high-speed, dual-band performance reaches speeds to 867 Mbps on 5 GHz and rates to 300 Mbps on the 2.4 GHz frequency band, ensuring ample capacity for all your digital needs.

Wireless Mesh Simplifies Installation & Optimizes Connectivity

Mesh's smart-sensing technology adds devices quickly, optimizing routes between APs and immediately self-heals should it ever lose connection. Powerful range means better connection speed and fewer devices needed for reliable wall-to-wall coverage.

PoE Reduces Wiring Challenges, Installation Time and Costs

Reduce wiring challenges and installation time and costs with a single cable run for power and a single device install. Power each unit via one Ethernet cable with 802.3at/af Power-over-Ethernet (PoE) up to 325 feet from the power source or with a DC power input and utilize the mesh network to provide seamless Wi-Fi and IP camera connectivity.

Video Management Software (VMS)

Easily Monitor & Manage the Camera Network

View, record and monitor live video from up to 16 cameras with the included, easy-to-use video management software. Streamline camera setup and configuration with the VMS' Discovery Tool. Import building floor plans to create a camera location map through eMap and easily monitor the entire camera network locally or remotely. Additional features:
- Optional Split-Screen Camera Views
- Quickly Search Archived Video via the Time Bar
- Establish Motion & Audio Trigger Recordings & Alerts
- Schedule Recordings
Zone Coverage

Set precise zone coverage within designated areas to record activity or detect motion near entryways or around windows within the camera's field of view. Customize sensitivity in each zone for greater control and set motion and audio-triggered alerts for instant email notification of events-in-progress.

EnVMS™ Mobile App

View Video, Manage Cameras & Receive Alert Notifications

View live video and manage camera recording functionality with the EnVMS Mobile App. Receive motion or audio-triggered event alerts directly to your mobile device for instant notification of events-in-progress. Monitor cameras via EnVMS or the desktop VMS for increased functionality. EnVMS is available from the App Store® and Google Play™ Store.

Network Management

Operate Alone or Manage

The AP MeshCam supports stand-alone AP and the flexibility to deploy it as an indoor client bridge as needed.

Manage Up to 50 AP MeshCams With Neutron Switches

Neutron EWS Switches can manage the AP MeshCam and other Neutron APs. Through the switch, administrators have access to all connected Neutron devices and a full array of wireless and Layer 2 management tools. Choose between PoE+ and non-PoE switch models with flexible deployment and management options without requiring AP license or subscription fees.

ezMaster™ Centralized Network Management Software

ezMaster software offers unlimited scalability. Centrally manage hundreds of EWS AP MeshCams, APs and switches in multiple locations via ezMaster locally, remotely or via a Cloud-based service. EnGenius ezMaster provides enterprise-class features and a comprehensive at-a-glance dashboard with rich reporting and analytics and no licensing or subscription fees.

Simplified Deployment & Provisioning

In combination with Neutron Switches and ezMaster, the AP MeshCam is automatically discovered and provisioned. One-click individual or bulk configurations and upgrades also save time.
Technical Specifications

Standards
IEEE 802.11b/g/n on 2.4 GHz
IEEE 802.11a/n/ac on 5 GHz
IEEE 802.3at/af
IEEE 802.11r
IEEE 802.11k
IEEE 802.11i
IEEE 802.11x

Antenna
5dBi 5 GHz & 5dBi 2.4 GHz Internal High-Gain Antennas

Physical Interface
1 x 100/1000 Gigabit Ethernet Port
- Supports 802.3at/af PoE Input
1 x Reset Button
1 x Power Connector
1 x Micro SD/SDXC Slot
24 Pcs IR LEDs
1x Embedded Microphone

LED Indicators
1 x Power
1 x 2.4 GHz
1 x 5 GHz
1 x Ethernet
1 x Mesh

Power Source
24V Proprietary Compliant Source
12VDC/1.5A
Active Ethernet (PoE)

Power Consumption
Maximum 12.4W

Memory Capacity
Micro SD/SDXC – up to 64G

Camera
Image Sensor
Sony 1/2.9” 2-Megapixel Progressive Scan CMOS

Lens
Fixed Board Lens
Fixed-Focus, f=2.8 mm / F2.0

F.O.V.
120° (diagonal)

IR Illuminator
24 Pcs LEDs, Up to 65 Feet

Day/Night
Removable IR-Cut Filter

Minimum Illumination
Color (IR-Off): 0.01 Lux / F2.0
B/W (IR-On): 0 Lux / F2.0

Shutter Time
1/2 sec. to 1/10,000 sec.

Video
Compression
H.264/MJPEG

Stream
2x Video Streams

Frame Rates
Up to 30 FPS at 1920 x 1080P

Image Settings
Adjustable Image Size, Quality & Bit Rate (Constant Bit Rate/Variable Bit Rate)

Configurable
Brightness
Sharpness
Contrast
Saturation
Exposure
Flicker Control
Flip & Mirror
Compression
Time Stamp & Text Caption Overlay
Auto/Manual Day & Night Mode
3D Noise Reduction
Low Light Compensation (LLC)
EV Compensation
Wide Dynamic Range
Privacy Mask

Audio
Audio Streaming
1-Way

Interface
Built-In Microphone

Encoding
AAC/G711A/G711U

Networking
Wireless & Radio Specifications
Dual-Concurrent Radio

Operation Modes
Mesh: Mesh Access Point/Mesh Point
Standalone: Access Point, Client Bridge, WDS Access Point, WDS Bridge, WDS Station

Transmit Power
Up to 29 dBm on 2.4 GHz
Up to 29 dBm on 5 GHz
Max transmit power is limited by regulatory power

Radio Chains/Spatial Streams
2x2.2

Supported Data Rates (Mbps)
2.4 GHz: Max 300
5 GHz: Max 867
802.11b: 1, 2, 5.5, 11
802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54
802.11n: 6.5 to 300 (MCS0 to MCS15)
802.11ac: 6.5 to 867 (MCS0 to MCS9, NSS=1~2)

Supported Radio Technology
802.11b: Direct-Sequence Spread-Spectrum (DSSS)
802.11a/g/n/ac: Orthogonal Frequency-Division Multiplexing (OFDM)

Channelization
802.11ac with 20/40/80 MHz channel width
802.11n with 20/40 MHz channel width
802.11a/b/g with 20 MHz channel width

Supported Modulation
802.11b: BPSK, QPSK, CCK
802.a/g/n: BPSK, QPSK, 16-QAM, 64-QAM
802.11ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM

Management
Multiple BSSID
Supports up to 16 SSIDs, 8 SSIDs per Radio

VLAN Tagging
Supports 802.1q SSID-to-VLAN Tagging
VLAN Pass-Through

Spanning Tree
Supports 802.1d Spanning Tree Protocol

QoS
Compliant with IEEE 802.11e Standard
WMM

SNMP
v1, v2c, v3
### Technical Specifications continued

#### MIB
- I/II, Private MIB

#### Management Features

##### Deployment Options
- Stand-Alone (Individually Managed)
- Managed Mode (with Neutron Series Switch/ezMaster)

##### Stand-Alone Management Features
- Auto-Channel Selection
- Wireless STA (Client) Connection List
- Guest Network
- Fast Roaming (802.11k & 802.11r)
- Pre-Authentication (802.11i, 802.11x)
- PMK Caching (802.11i)
- RSSI Threshold
- Band Steering
- Traffic Shaping
- VLANs for Access Point – Multiple SSIDs
- Backup/ Restore Settings
- Auto Reboot
- E-Mail Alert

##### Wireless Management Features (with ezMaster & Neutron Switch)

#### Floor Plan View

#### Map View

#### Wireless Coverage Display

#### Secure Control Messaging (SSL Certificate)

#### Local MAC Address Database

#### Remote MAC Address Database (RADIUS)

#### Unified Configuration Import/Export

#### Bulk Firmware Upgrade Capability

#### One-Click Update

#### Intelligent Diagnostics

#### Kick/Ban Clients

#### Wi-Fi Scheduler

#### Traffic Shaping

#### Fast Roaming (802.11k & 802.11r)

#### Pre-Authentication (802.11i, 802.11x)

#### PMK Caching (802.11i)

#### RSSI Threshold

#### Band Steering

#### Traffic Shaping

#### Stand-Alone Management Features

#### Auto-Channel Selection

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#### Guest Network

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#### Map View

#### Wireless Coverage Display

#### Secure Control Messaging (SSL Certificate)

#### Local MAC Address Database

#### Remote MAC Address Database (RADIUS)

#### Unified Configuration Import/Export

#### Bulk Firmware Upgrade Capability

#### One-Click Update

#### Intelligent Diagnostics

#### Kick/Ban Clients

#### Wi-Fi Scheduler

#### Traffic Shaping

#### Fast Roaming (802.11k & 802.11r)

#### Pre-Authentication (802.11i, 802.11x)

#### PMK Caching (802.11i)

#### RSSI Threshold

#### AP Client Limiting

#### Client Fingerprinting

#### AP VLAN Management

#### VLANs for AP - Multiple SSIDs

#### Secured Guest Network

#### Captive Portal

#### Access Point Status Monitoring

#### Rogue AP Detection

#### Wireless Client Monitoring

#### Background Scanning

#### Auto Transmit Power

#### Auto Channel

#### Email Alert

#### Wireless Traffic & Usage Statistics

#### Real-time Throughput Monitoring

#### Visual Topology View

#### Video Buffer

#### 5-Seconds Pre-Alarm & Post-Alarm

#### Video Playback

#### PC/VMS

#### iPhone®/Android™ via EnVMS App

#### Schedule Recording

#### System Requirements

##### Viewing
- **Operating System**
  - Microsoft® Windows® 7 & 10
- **Web Browser**
  - Edge, IE, Safari, Chrome, Firefox, Opera
- **Video Management Software**
  - Microsoft Windows 7 & 10
- **ezMaster System Requirements**

#### Recommended environment for managing up to 500 APs
- **CPU:** Intel® Core™ i3 3.6 GHz dual-core or above
- **RAM:** 4 GB minimum
- **HDD:** 500 GB (actual requirement dependent on log size)
- **OS:** Microsoft® Windows® 7 or later + VMware® Player 7.0 or compatible virtualization software

#### Recommended environment for managing up to 1,000+ APs
- **CPU:** Intel® Core™ i5 3.2 GHz quad-core or above
- **RAM:** 4 GB minimum
- **HDD:** 500 GB (actual requirement dependent on log size)
- **OS:** Microsoft® Windows® 7 or later + VMware® Player 7.0 or compatible virtualization software

#### Browser Requirements
- **Edge**
  - Internet Explorer 10 or better
- **Firefox**
  - Firefox 34.0 or better
- **Chrome**
  - Chrome 31.0 or better
- **Safari**
  - Safari 8.0 or better

#### Network Topology Requirements
- **At sites where APs are deployed:** A DHCP-enabled network for APs to obtain an IP address

#### Environment & Mechanical

##### Temperature Range
- Operating: 32°F to 122°F, 0°C to 50°C
Technical Specifications continued

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humidity (Non-condensing)</td>
<td>Operating: 80% or less</td>
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<tr>
<td></td>
<td>Storage: 80% or less</td>
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<tr>
<td>Device Dimensions &amp; Weights</td>
<td>Weight: 1.11 lbs.</td>
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<tr>
<td></td>
<td>Diameter: 5.27” (134 mm)</td>
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<td>Height: 3.81” (97 mm)</td>
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<td>Packaging</td>
<td>Weight: 2.05 lbs. (0.93 kg)</td>
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<td>Width: 6.37” (162 mm)</td>
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<td>Length: 8.74” (222 mm)</td>
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<tr>
<td></td>
<td>Height: 4.88” (124 mm)</td>
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<td>Master Carton</td>
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<td></td>
<td>12V/1.5A Power Adapter</td>
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<td>T-Rail Mounting Kit</td>
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<td>RJ45 Ethernet Cable</td>
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<td>Quick Installation Guide</td>
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<td>Warranty</td>
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<tr>
<td>Certifications</td>
<td>FCC, IC</td>
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Maximum data rates are based on IEEE 802.11 standards. Features and specifications subject to change without notice. Trademarks and registered trademarks are the property of their respective owners. For United States of America: Copyright ©2017 EnGenius Technologies, Inc. All rights reserved.

EWS1025CAM

- Built-In Lens
- IR LEDs
- Built-In Microphone
- Reset Button
- Micro SD Card Slot
- Power Connector
- Ethernet Port
- 10/100/1000 Mbps
- Mounting Holes

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Version 1.25 03/21/2017
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