# AXIS P8815-2 3D People Counter
## Complete, sophisticated 3D people counter

Combining 3D imaging software and hardware in one device, this device counts people in both directions simultaneously and can also estimate occupancy levels in real-time. It can also detect tailgating and direction and notify you if more than one person enters within a set time interval, or if people move in the wrong direction. The device generates a 3D depth map for reliable counting even in challenging conditions. Data from the counter helps you evaluate site performance and analyze visitor trends, allowing you to make informed decisions to optimize operational efficiency. For wide area coverage, it's easy to connect two counters.

> **3D people counting**

> **Integrated software and hardware**

> **Optimized for challenging conditions**

> **Estimate occupancy levels**

> **Gain insights into visitor trends**

# AXIS P8815-2 3D People Counter

## Application

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|---|---|
| **Functionality** | Bi-directional counting.<br>Estimating occupancy.<br>Detecting tailgating.<br>Detecting wrong-way passages.<br>Flexible counting area (for example for revolving doors).<br>Supports wide entrances by using two counters.<br>Video stream anonymization.<br>Excludes objects below ~110 cm (43 in)<br>Configurable events based on occupancy and number of passages.<br>Automatic upload of counting data to separately sold AXIS Store Reporter.<br>Upload to third-party software through API.<br>Counting data stored up to 90 days. |
| **Configuration** | Web configuration interface included |
| **Compute platform** | Edge |

## Scenarios

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| **Typical applications** | Entrances and exits in retail environments such as stores and shopping malls as well as public buildings such as museums or libraries. |
| **Mounting height** | 250 cm to 600 cm (98 in to 236 in) |
| **Counting-area coverage** | Maximum size of counting area when mounted at:<br>250 cm (98 in): 199 x 46 cm (78 x 18 in)<br>300 cm (118 in): 306 x 100 cm (120 x 39 in)<br>400 cm (157 in): 400 x 208 cm (157 x 82 in)<br>500 cm (197 in): 400 x 225 cm (157 x 89 in)<br>600 cm (236 in): 400 x 225 cm (157 x 89 in) |

## Camera

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| **Image sensor** | 1/2.9" progressive scan RGB CMOS |
| **Lens** | Fixed iris<br>2.8 mm, F2.2 |
| **Minimum illumination** | 5 lux |
| **Shutter speed** | 1/28000 s to 2 s with 50 Hz<br>1/33500 s to 2 s with 60 Hz |

## System on chip (SoC)

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| **Model** | ARTPEC-6 |
| **Memory** | 1024 MB RAM, 512 MB Flash |

## Video

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| **Video compression** | H.264 (MPEG-4 Part 10/AVC) Baseline, Main and High Profiles<br>Motion JPEG |
| **Resolution** | 1920x1080 HDTV 1080p to 160x90 |
| **Frame rate** | 30/25 fps (60/50 Hz) |
| **Video streaming** | Multiple, individually configurable streams in H.264 and Motion JPEG<br>Axis Zipstream technology in H.264<br>Controllable frame rate and bandwidth<br>VBR/MBR H.264 |

## Network

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| **Security** | IP address filtering, HTTPS[a] encryption, IEEE 802.1X[a] network access control, user access log, centralized certificate management |
| **Network protocols** | IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTP/2, HTTPS[a], TLS[a], QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, mDNS (Bonjour), UPnP®, SNMP v1/v2c/v3 (MIB-II), DNS/DNSv6, DDNS, NTP, NTS, RTSP, RTP, SRTP/RTSPS, TCP, UDP, IGMPv1/v2/v3, RTCP, DHCPv4/v6, SSH, LLDP, CDP, MQTT v3.1.1, Secure syslog (RFC 3164/5424, UDP/TCP/TLS), Link-Local address (ZeroConf) |

## System integration

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| **Application Programming Interface** | Open API for software integration, including VAPIX® and AXIS Camera Application Platform; specifications at *axis.com*<br>ONVIF® Profile G and ONVIF® Profile S, specification at *onvif.org* |
| **Event conditions** | Analytics, external input, edge storage events, virtual inputs through API<br>MQTT subscribe |
| **Event actions** | Record video: network share<br>Upload of images or video clips: FTP, SFTP, HTTP, HTTPS, network share and email<br>Pre- and post-alarm video or image buffering for recording or upload<br>Notification: email, HTTP, HTTPS, TCP and SNMP trap<br>Overlay text<br>MQTT publish |
| **Data streaming** | Event data |

## Cybersecurity

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| **Edge security** | **Software:** Signed OS, brute force delay protection, digest authentication and OAuth 2.0 RFC6749 OpenID Authorization Code Flow for centralized ADFS account management, password protection, AES-XTS-Plain64 256bit SD card encryption<br>**Hardware:** Secure boot |
| **Network security** | IEEE 802.1X (EAP-TLS, PEAP-MSCHAPv2)[a],<br>IEEE 802.1AE (MACsec PSK/EAP-TLS), IEEE 802.1AR,<br>HTTPS/HSTS[a], TLS v1.2/v1.3[a], Network Time Security (NTS), X.509 Certificate PKI, host-based firewall |
| **Documentation** | *AXIS OS Hardening Guide*<br>*Axis Vulnerability Management Policy*<br>*Axis Security Development Model*<br>AXIS OS Software Bill of Material (SBOM)<br>To download documents, go to *axis.com/support/cybersecurity/resources*<br>To read more about Axis cybersecurity support, go to *axis.com/cybersecurity* |

## General

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| **Casing** | Aluminum casing and plastic faceplate<br>Colors: white NCS S 1002-B, black NCS S 9000-N<br>For repainting instructions of casing and impact on warranty, contact your Axis partner. |
| **Sustainability** | PVC free |
| **Power** | Power over Ethernet (PoE) IEEE 802.3af/802.3at Type 1 Class 3<br>Typical 4.4 W, max 6 W |
| **Connectors** | RJ45 10BASE-T/100BASE-TX PoE |
| **Storage** | Recording to network-attached storage (NAS) |
| **Operating conditions** | 0 °C to 50 °C (32 °F to 122 °F)<br>Start-up temperature: 0 °C (32 °F)<br>Humidity 10–85% RH (non-condensing) |
| **Storage conditions** | -40 °C to 65 °C (-40 °F to 149 °F)<br>Humidity 5-95% RH (non-condensing) |
| **Approvals** | **EMC**<br>EN 55032 Class A, EN 61000-6-1, EN 61000-6-2,<br>FCC Part 15 Subpart B Class A, ICES-3(A)/NMB-3(A), VCCI Class A,<br>RCM AS/NZS CISPR 32 Class A, KC KN32 Class A, KC KN35<br>**Safety**<br>IEC/EN/UL 62368-1, IS 13252<br>**Environment**<br>IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27, IEC 60068-2-78, IEC/EN 60529 IP40<br>**Network**<br>NIST SP500-267, IPv6 USGv6 |
| **Dimensions** | 168 x 78 x 30 mm (6.61 x 3.07 x 1.18 in) |
| **Weight** | 450 g (1 lb) |
| **Included accessories** | Installation guide, Windows® decoder 1-user license |
| **Optional accessories** | AXIS TP8201 Recessed Mount, AXIS TP8101 Pendant Kit, AXIS T91B21 Stand, AXIS T91B53 Telescopic Ceiling Mount, AXIS T91E61 Wall Mount<br>For more accessories, see *axis.com* |
| **Video management software** | AXIS Camera Station, video management software from Axis<br>Application Development Partners available at *axis.com/vms* |
| **Languages** | English |

**Warranty** 5-year warranty, see *axis.com/warranty*

a. *This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (openssl.org), and cryptographic software written by Eric Young (eay@cryptsoft.com).*

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