

Avigilon H4 License Plate Capture Camera

The Avigilon H4 License Plate Capture (LPC) camera is designed to capture vehicle license plates in applications where it is critical to obtain character recognition at typical vehicle speeds. When used with Avigilon License Plate Recognition (LPR) analytics technology, the H4 LPC camera is designed to provide accurate results in a wide variety of lighting conditions. Using infrared illumination and visible light filtering, the H4 LPC camera enables the Avigilon LPR analytics technology to accurately identify license plate characters from a range of distances.



The H4 LPC camera provides exceptional flexibility to cover a wide variety of installation scenarios. It features an integrated lens with remote focus and zoom to allow for dual-lane coverage at wide angles or long-range capture at telephoto - all from a single camera. When ordered as a complete kit, the IR illuminator and the camera's visible light filtering lens are factory calibrated and configured for high performance to help ensure proper illumination day or night.

Key Features

- Allows license plate capture up to 100 km/h or 62 mph.
- Flexible 4.7-84. mm varifocal lens, form factor, and mounting options allow for simplistic deployment in the most challenging of installation environments.
- Utilizing video capture firmware specifically designed for this application the H4 LPC camera will ensure that the most accurate image can be analyzed.
- Integrated IR illumination capability gives the camera much greater depiction of characters on reflective number plates.
- Pre-integrated with Avigilon Control Center (ACC) High Definition Network Video Management System for simple setup.
- POE + power for all components allows ease of installation.
- Temperature rating from -30 °C (-22 °F) to 50 °C (122 °F) allows for reliable operation in challenging climates.
- A three-year warranty on all components.

General Specifications

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|----------------------------------|---|
| Maximum Capture Speed | 100 km/h (62 mph) |
| Minimum Illumination | 0 lux |
| IR Illumination | 850nm, continuous, field adjustable angle |
| Maximum IR Illumination Distance | Single Lane: 30m (100ft), Dual Lane: 14m (46ft) |
| Operating Temperature Range | -30 °C (-22 °F) to 50 °C (122 °F) |
| Cold Start Delay | Up to 1.5 hours |
| Humidity | 0 - 95% non-condensing |

Camera Specifications

The following are the specifications for the camera, 3.0C-HD-LP-B1.

Image Performance

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|---------------------------|----------------------------------|
| Image Sensor | 1/2.8" progressive scan CMOS |
| Aspect Ratio | 4:3 |
| Active Pixels | 3MP: 2048 x 1536 |
| Imaging Area | 5.12 mm x 3.84 mm; 0.20" x 0.15" |
| Maximum Image Rate | 30 fps |
| 3D Noise Reduction Filter | Yes |

Lens

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|---------------|---|
| Lens | 4.7 – 84.6mm, F1.6, P-Iris, remote focus and zoom |
| Angle of View | 3.5° – 59° |

Image Control

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|--------------------------|--|
| Video Compression | H.264 (MPEG-4 Part 10/AVC), Motion JPEG, HDSM SmartCodec™ Technology |
| Streaming | Multi-stream H.264 and Motion JPEG |
| Bandwidth Management | HDSM™ |
| Motion Detection | Selectable sensitivity and threshold |
| Iris Control | Automatic, Manual |
| Day/Night Control | Automatic, Manual |
| Flicker Control | 50 Hz, 60 Hz |
| White Balance | Automatic, Manual |
| Backlight Compensation | Adjustable |
| Privacy Zones | Up to 64 zones |
| Audio Compression Method | G.711 PCM 8 kHz |
| Audio Input/Output | Line level input/output, A/V mini-jack (3.5 mm) |
| External I/O Terminals | Alarm In, Alarm Out |
| USB Port | USB 2.0 Micro |

Network

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|-----------------------------|--|
| Network | 100BASE-TX |
| Cabling Type | CAT5 |
| Connector | RJ-45 |
| ONVIF® | ONVIF Profile S |
| Security | Password protection, HTTPS encryption, digest authentication, WS authentication, user access log, 802.1x port based authentication |
| Protocol | IPv6, IPv4, HTTP, HTTPS, SOAP, DNS, NTP, RTSP, RTP, TCP,UDP, IGMP, ICMP, DHCP, Zeroconf, ARP |
| Streaming Protocols | RTP/UDP, RTP/UDP multicast, RTP/RTSP/TCP, RTP/RTSP/HTTP/TCP, RTP/RTSP/HTTPS/TCP, HTTP |
| Device Management Protocols | SNMP v2c, SNMP v3 |

Mechanical

| | |
|-----------------|--|
| Dimensions | 168 mm x 76mm x 67mm; 6.6" x 3.0" x 2.6" |
| Weight | 0.62 kg (1.4 lbs) |
| Camera Mount | 1/4"-20 UNC (top and bottom) |
| Onboard Storage | SD/SDHC/SDXC slot – minimum class 4; class 6 or better recommended |

Electrical

| | |
|--------------------|--|
| Power Consumption | 8 W |
| Power Source | VDC: 12V +/- 10%, 8W min; PoE: IEEE802.3af Class 3 compliant; VAC: 24V +/- 10%, 12VA min |
| Power Connector | 2-pin terminal block |
| RTC Backup Battery | 3V manganese lithium |

Environmental

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|---------------------|------------------------------------|
| Storage Temperature | -10 °C to +70 °C (14 °F to 158 °F) |
|---------------------|------------------------------------|

Certifications

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|---------------------------|--|
| Certifications | UL, cUL, CE, ROHS, WEEE, RCM |
| Safety | UL 60950-1, CSA 60950-1, IEC/EN 60950-1 |
| Electromagnetic Emissions | FCC Part 15 Subpart B Class B, IC ICES-003 Class B, EN 55032 Class B, EN 61000-6-3, EN 61000-3-2, EN 61000-3-3 |
| Electromagnetic Immunity | EN 55024, EN 61000-6-1 |

Enclosure Specifications

The following are the specifications for the camera, ES-HD-LP-HS.

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|-----------------------|----------------------------------|---|
| Mechanical | Dimensions (W x H x L) | 176 mm x 160mm x 514 mm (6.9" x 6.3" x 20.2") |
| | Internal Usable Area (W x H x L) | 100 mm x 70 mm x 250 mm (4.6" x 2.7" x 9.8") |
| | Tilt Range | Included wall arm: 4° up to 65° down (sunshield full forward) or 12° down to 65° down (sunshield full retracted). ES-HD-MNT-PAR: 27° down to 90° up. |
| | Weight | 3.1 kg (6.6 lbs) |
| | Window Material | Glass |
| | Finish | RAL 9002 |
| Electrical | Power Consumption | 25W |
| | Power Source | IEEE 802.3at Class 4 PoE+ |
| | Heater | Electronically controlled, Ton 20 °C ± 2 °C (68 °F ± 4 °F), Toff 23 °C ± 2 °C (73.4 °F ± 4 °F) |
| Certifications | Certifications | CE, ROHS |
| | Electromagnetic Emissions | EN 55032, EN 61000-6-3, EN 61000-3-2, EN 61000-3-3 |
| | Electromagnetic Immunity | EN 50130-4 |
| | Environmental | IP 66, Resistant to 1,000 hours of salt fog testing (ISO 9227) |

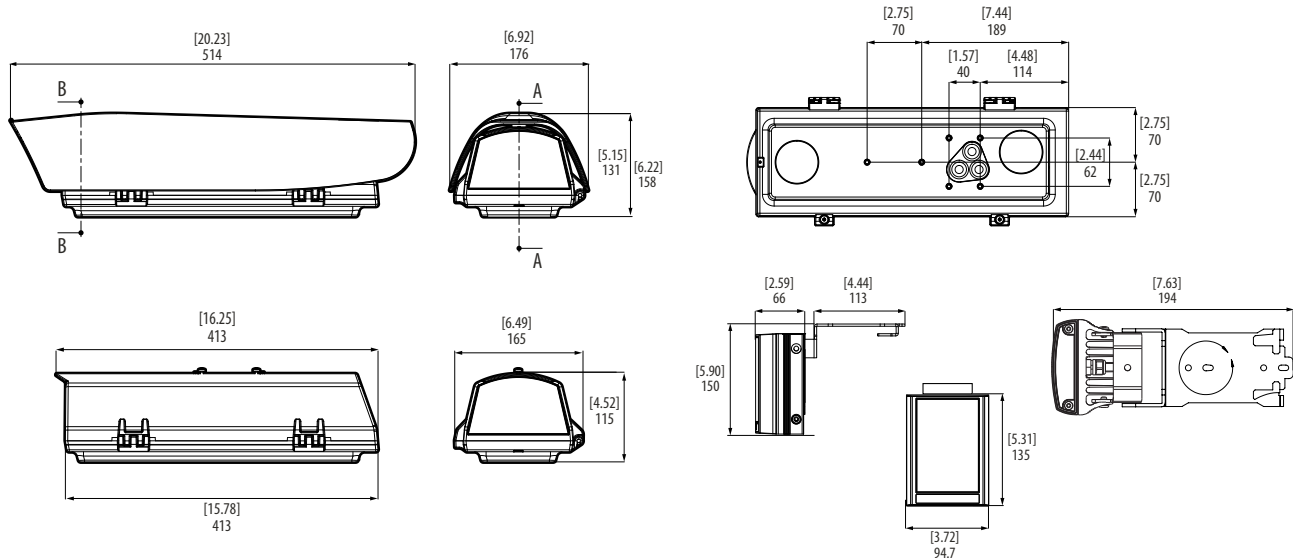
IR Illuminator Specifications

The following are the specifications for the IR illuminator of ES-HD-IR-IP6.

| | | |
|-----------------------|---------------------------|---|
| Mechanical | Dimensions (W x H x L) | 100 x 135 x 66mm (4" x 5" x 2.5") |
| | Weight | 950g (2.1lbs) |
| | Finish | Black |
| | CAT5 Cable Length | 2.5m included. Female to female CAT5 adapter included. |
| | Bracket | Included, for mounting to ES-HD-LP-HS. |
| Illuminator | Wavelength | 850nm |
| | Beam Angle | User adjustable lenses included: 35° x 10° (default), 60° x 25° or 10° circular. |
| Electrical | Power Consumption | 25W |
| | Power Source | IEEE 802.3at Class 4 PoE+ |
| Certifications | Certifications | UL, cUL, CE, ROHS, VCCI |
| | Safety | UL 1598, UL 2108, UL 8750, CSA C22.2 No. 250.0, EN 60598-1, EN 60598-2-1, EN 62471 (Risk Group 2) |
| | Electromagnetic Emissions | FCC Part 15 Subpart B Class B, EN 55015 |
| | Electromagnetic Immunity | FCC Part 15 Subpart B Class B, EN 61547 |
| | Environmental | IP 66 |

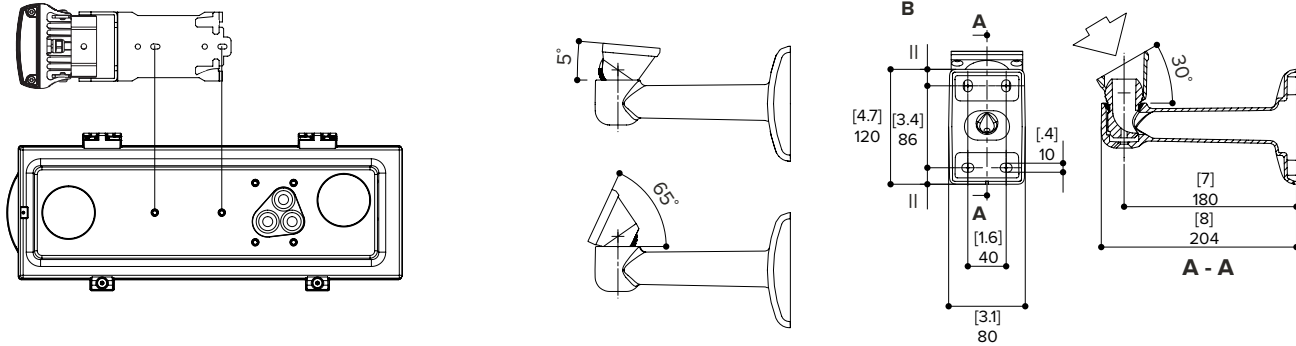
Outline Dimensions

| | |
|-------|--------|
| [X.X] | INCHES |
| X | MM |

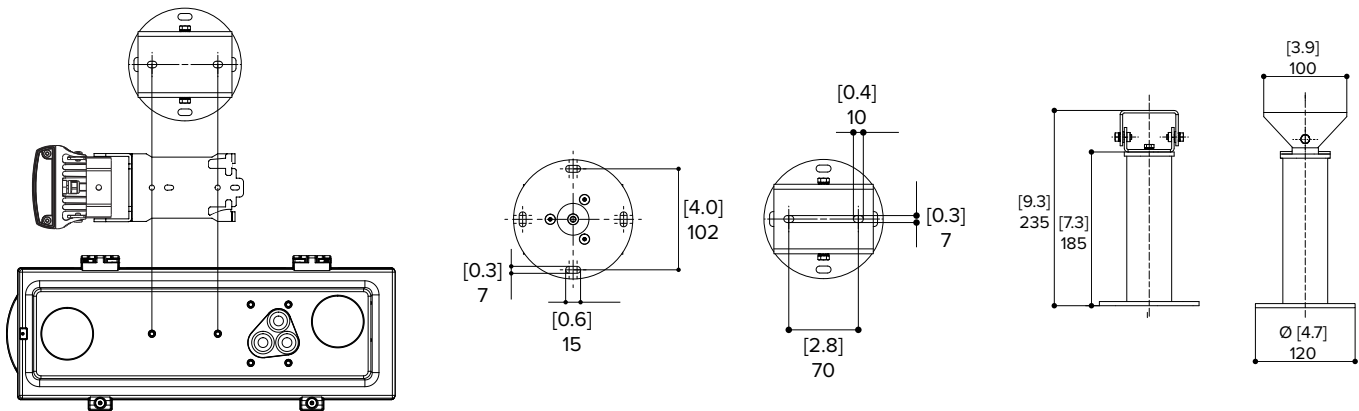


Mounting Adapters

| | |
|-------|--------|
| [X.X] | INCHES |
| X | MM |



ES-HD-MNT-PAR



Ordering Information

H4 License Plate Capture Kit

Order one of each of the following parts for an H4 License Plate Capture Camera

| | |
|---------------|--|
| 3.0C-HD-LP-B1 | Box camera, 3.0 MP, 4.7-84.6mm f/1.6 lens, with visible light blocker |
| ES-HD-LP-HS | Standard format enclosure with heater, sunshield and PoE passthrough for a camera. PoE+ powers the camera enclosure and camera using one Ethernet connection. Included mounting arm or ES-HD-MNT-PAR must be used. |
| ES-HD-IR-IP6 | IR illuminator, PoE+, Outdoor, included lens option for 60°, 35°, or 10° horizontal coverage. Included mounting adapter for use with ES-HD-LP-HS and ES-HD-MNT-PAR. |

Mounting Adapters

The following are compatible mounting adapters for use with the ES-HD-LP-HS enclosure.

| | |
|-------------------|--|
| ES-HD-MNT-PAR | Pedestal and ceiling mount for ES-HD-HWS-SM, ES-HD-HWS, ES-HD-CWS, ES-HD-HWS-LG, ES-HD-CWS-LG or ES-HD-LP-HS enclosure. |
| ES-HD-MNT-POLE-LG | Large pole mount for pole diameter 210mm (8.2 in) to 225mm (8.85 in) for ES-HD-HWS-SM, ES-HD-HWS, ES-HD-CWS, ES-HD-HWS-LG or ES-HD-CWS-LG enclosures when used in conjunction with ES-HD-MNT-PLATE. |
| ES-HD-MNT-POLE-MD | Medium pole mount for pole diameter 80mm (3 in) to 150mm (5.9 in). Compatible with wall arm included with ES-HD-HWS-SM, ES-HD-HWS, ES-HD-CWS, ES-HD-HWS-LG or ES-HD-CWS-LG enclosures when used in conjunction with ES-HD-MNT-PLATE. Up to two mounting positions. |
| ES-HD-MNT-POLE-SM | Small pole mount for pole diameter 60mm (2.5 in) to 110mm (4.3 in). Compatible with wall arm included with ES-HD-HWS-SM, ES-HD-HWS, ES-HD-CWS, ES-HD-HWS-LG or ES-HD-CWS-LG enclosures. Up to two mounting positions. |
| ES-HD-MNT-PLATE | Wall reinforcing wall plate, compatible with ES-HD-HWS-SM, ES-HD-HWS, ES-HD-CWS, ES-HD-HWS-LG or ES-HD-CWS-LG enclosures. |
| ES-HD-MNT-CORNER | Corner mount adapter. Compatible with wall arm included with ES-HD-HWS-SM, ES-HD-HWS, ES-HD-CWS, ES-HD-HWS-LG or ES-HD-CWS-LG enclosures. |