

# AXIS P1378-LE Network Camera

Excellent details in 4K for the great outdoors

With a robust design, AXIS P1378-LE offers excellent details in 4K resolution and can withstand extreme temperatures ranging from -40 °C to 60 °C (-40 °F to 140 °F). For extra protection an optional weathershield is available. It delivers excellent details in challenging or low light and includes Axis OptimizedIR for surveillance in pitch darkness. Designed as a deterrent, it includes electronic image stabilization, shock detection, tampering alarm and video streaming indicator. Axis Zipstream supporting H.264/H.265 provides exceptional savings on bandwidth and storage. Plus, with CS mount and support for motorized i-CS, you can easily change lens to meet your requirements.

- > **4K resolution**
- > **OptimizedIR and Forensic WDR**
- > **Signed firmware and secure boot**
- > **Electronic image stabilization**
- > **Zipstream supporting H.264 and H.265**



# AXIS P1378-LE Network Camera

<b>Camera</b>		ONVIF® Profile G, ONVIF® Profile M, ONVIF® Profile S and ONVIF® Profile T, specification at <a href="http://onvif.org">onvif.org</a>
<b>Image sensor</b>	1/1.8" progressive scan RGB CMOS	
<b>Lens</b>	IR corrected, CS-mount lens, P-Iris Varifocal 3.9–10 mm, F1.5 <b>With IK10 protection in front window</b> Horizontal field of view: 115°–45° Vertical field of view: 61°–25° <b>Without IK10 protection in front window</b> Horizontal field of view: 119°–45° Vertical field of view: 62°–25°	<b>Video management systems</b> Compatible with AXIS Camera Station Edge, AXIS Camera Station Pro, AXIS Camera Station 5, and video management software from Axis' partners available at <a href="http://axis.com/vms">axis.com/vms</a> .
<b>Day and night</b>	Automatically removable infrared-cut filter	<b>Onscreen controls</b> Electronic image stabilization Day/night shift Defogging Wide dynamic range
<b>Minimum illumination</b>	4K 25/30 fps with Forensic WDR and Lightfinder: Color: 0.15 lux, at 50 IRE F1.5 B/W: 0.03 lux, at 50 IRE F1.5 0 lux with IR illumination on	<b>Event triggers</b> Analytics, shock detection, open casing, edge storage events, supervised external input, audio level, time scheduled MQTT subscribe
<b>Shutter speed</b>	1/8500 s to 1/5 s	<b>Event actions</b> File upload: FTP, SFTP, HTTP, HTTPS, network share and email Notification: email, HTTP, HTTPS and TCP External output activation Video recording to edge storage, Play audio clip Pre- and post-alarm video buffering PTZ preset, Guard tour, Overlay text Day/Night switching, Status LED activation MQTT publish Send SNMP trap
<b>System on chip (SoC)</b>		<b>Built-in installation aids</b> Focus assistant, pixel counter, remote back focus, autorotation, remote focus and zoom and with optional i-CS lens.
<b>Model</b>	ARTPEC-7	<b>Analytics</b>
<b>Memory</b>	2 GB RAM, 512 MB Flash	<b>Applications</b> <b>Included</b> AXIS Object Analytics, AXIS Scene Metadata, AXIS Live Privacy Shield <sup>a</sup> , AXIS Video Motion Detection <b>Supported</b> AXIS Perimeter Defender, AXIS License Plate Verifier Support for AXIS Camera Application Platform enabling installation of third-party applications, see <a href="http://axis.com/acap">axis.com/acap</a>
<b>Compute capabilities</b>	Machine learning processing unit (MLPU)	<b>AXIS Object Analytics</b> Object classes: humans, vehicles Scenarios: line crossing, object in area, crossline counting, time in area Up to 10 scenarios Other features: triggered objects visualized with trajectories, color-coded bounding boxes and tables Polygon include/exclude areas Perspective configuration ONVIF Motion Alarm event
<b>Video</b>		<b>AXIS Scene Metadata</b> Object classes: humans, faces, vehicles (types: cars, buses, trucks, bikes), license plates Confidence, position
<b>Video compression</b>	H.264 (MPEG-4 Part 10/AVC) Baseline, Main and High Profiles H.265 (MPEG-H Part 2/HEVC) Motion JPEG Controllable frame rate and bandwidth	<b>Cybersecurity</b>
<b>Resolution</b>	3840x2160 (4K) to 160x90	<b>Edge security</b> 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 Hardware: Secure boot
<b>Frame rate</b>	25/30 fps (50/60 Hz)	<b>Network security</b> IEEE 802.1X (EAP-TLS, PEAP-MSCHAPv2), IEEE 802.1AE (MACsec PSK/EAP-TLS), HTTPS/HSTS, TLS v1.2/v1.3, Network Time Security (NTS), X.509 Certificate PKI, host-based firewall
<b>Video streaming</b>	Multiple, individually configurable streams in H.264, H.265, and Motion JPEG Axis Zipstream technology in H.264 and H.265 Controllable frame rate and bandwidth VBR/ABR/MBR H.264/H.265 Low latency mode Video streaming indicator	<b>Documentation</b> <i>AXIS OS Hardening Guide</i> <i>Axis Vulnerability Management Policy</i> <i>Axis Security Development Model</i> AXIS OS Software Bill of Material (SBOM) To download documents, go to <a href="http://axis.com/support/cybersecurity/resources">axis.com/support/cybersecurity/resources</a> To read more about Axis cybersecurity support, go to <a href="http://axis.com/cybersecurity">axis.com/cybersecurity</a>
<b>Multi-view streaming</b>	Up to 8 individually cropped out view areas	<b>General</b>
<b>Image settings</b>	Saturation, contrast, brightness, sharpness, Forensic WDR: Up to 120 dB depending on scene, white balance, day/night threshold, exposure mode, exposure zones, local contrast, tone mapping, compression, orientation: auto, 0°, 90°, 180°, 270° including Corridor Format, mirroring of images, dynamic text and image overlay, privacy masks, defogging, electronic image stabilization, barrel distortion correction, scene profiles: forensic, vivid, traffic overview	<b>Casing</b> IP66-, IP67- and NEMA 4X-rated, IK10 impact-resistant polymer enclosure with aluminium base and intrusion alarm switch Weathershield with black anti-glare coating Color: White NCS S 1002-B
<b>Pan/Tilt/Zoom</b>	Digital PTZ Uploadable PTZ driver (Pelco D pre-installed)	<b>Sustainability</b> PVC free
<b>Audio</b>		<b>Power</b> 12–28 V DC, max 25.5 W (incl. front heater), typical 11.1 W Power over Ethernet (PoE) IEEE 802.3af/802.3at Type 1 Class 4, max 25.5 W (incl. front heater), typical 11.7 W Power redundancy
<b>Audio streaming</b>	Two-way, full duplex	
<b>Audio encoding</b>	AAC LC 8/16/32/48 kHz, G.711 PCM 8 kHz, G.726 ADPCM 8 kHz, Opus 8/16/48 kHz, LPCM 8/16/32/48 kHz Configurable bit rate	
<b>Audio input/output</b>	External microphone input, line input, digital input with ring power, line output, automatic gain control	
<b>Network</b>		
<b>Network protocols</b>	IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTPS, HTTP/2, TLS, QoS Layer 3 DiffServ, FTP, CIFS/SMB, SMTP, mDNS (Bonjour), UPnP™, SNMP v1/v2c/v3 (MIB-II), DNS/DNSv6, DDNS, NTP, NTS, RTSP, RTP, SFTP, SRTP/RTSPS, TCP, UDP, IGMPv1/v2/v3, RTCP, ICMP, DHCPv4/v6, ARP, SSH, LLDP, CDP, MQTT v3.1.1, Secure syslog (RFC 3164/5424, UDP/TCP/TLS), Link-Local address (ZeroConf)	
<b>System integration</b>		
<b>Application Programming Interface</b>	Open API for software integration, including VAPIX® and AXIS Camera Application Platform, specifications at <a href="http://axis.com/developer-community">axis.com/developer-community</a> . AXIS Video Hosting System (AVHS) with One-Click Connection One-click cloud connection	

<b>Connectors</b>	RJ45 10BASE-T/100BASE-TX/1000BASE-T I/O: 6-pin 2.5 mm terminal block, for 2 supervised alarm inputs and 2 outputs RS485/RS422, 2 pcs, 2 pos, full duplex, terminal block DC input, terminal block 3.5 mm mic/line in, 3.5 mm line out i-CS connector (compatible with P-Iris and DC-iris)	IEC/EN 60529 IP66/IP67, NEMA 250 Type 4X, NEMA TS 2 (2.2.7-2.2.9), 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 62262 IK10 <b>Network</b> NIST SP500-267
<b>IR illumination</b>	Optimized IR with power-efficient, long-life 850 nm IR LEDs Range 50 m (164 ft) or more, depending on the scene	<b>Dimensions</b> 404 x 159 x 168 mm (15.9 x 6.3 x 6.6 in)
<b>Storage</b>	Support for microSD/microSDHC/microSDXC card Support for SD card encryption (AES-XTS-Plain64 256bit) Support for recording to network-attached storage (NAS) For SD card and NAS recommendations see <a href="http://axis.com">axis.com</a>	<b>Weight</b> 2.4 kg (5.3 lb)
<b>Operating conditions</b>	-40 °C to 60 °C (-40 °F to 140 °F) Maximum temperature according to NEMA TS 2 (2.2.7): 74 °C (165 °F) Humidity 10–100% RH (condensing) Wind load (sustained): 55 m/s (123 mph)	<b>Included accessories</b> Installation guide, Windows® decoder 1-user license, wall mount bracket, sunshield, connector kit IK10 tool Torx® T20 screw driver, Torx® T30 screw bit AXIS P13 Weathershield Kit A Pre-mounted AXIS Fixed Box IR Illuminator Kit A
<b>Storage conditions</b>	-40 °C to 65 °C (-40 °F to 149 °F) Humidity 5–95% RH (non-condensing)	<b>Optional lenses</b> Lens CS 4–10 mm F0.9 P-Iris Lens i-CS 3.9–10 mm F1.5 8 MP Lens i-CS 9–50 mm F1.5 8 MP
<b>Approvals</b>	<b>EMC</b> EN 55032 Class A, EN 50121-4, IEC 62236-4, EN 61000-3-2, EN 61000-3-3, EN 55024, EN 61000-6-1, EN 61000-6-2, FCC Part 15 Subpart B Class A, ICES-003 Class A, VCCI Class A, RCM AS/NZS CISPR 32 Class A, KCC KN32 Class A, KN35 <b>Safety</b> IEC/EN/UL 62368-1, CAN/CSA C22.2 No. 62368-1, IEC/EN/UL 60950-22, CAN/CSA-C22.2 No. 60950-22, IEC 62471, IS 13252 <b>Environment</b>	<b>Optional accessories</b> Axis mounts, Axis lenses, Axis midspans, Axis microphones AXIS P13 Weathershield Extension A AXIS T8355 Digital Microphone AXIS T99A10 Positioning Unit 24 V AC/DC For more accessories, see <a href="http://axis.com">axis.com</a>
		<b>Languages</b> English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Traditional Chinese, Dutch, Czech, Swedish, Finnish, Turkish, Thai, Vietnamese
		<b>Warranty</b> 5-year warranty, see <a href="http://axis.com/warranty">axis.com/warranty</a>

a. Available for download