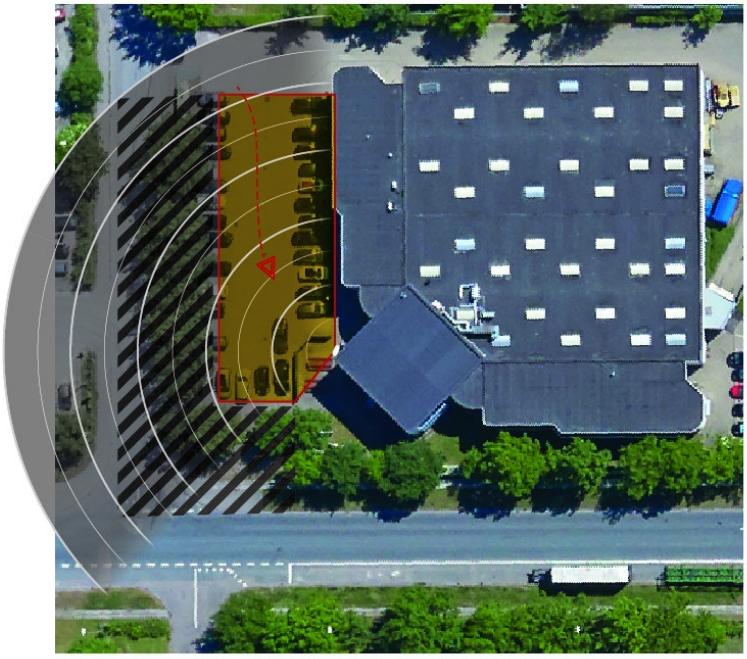
AXIS D2050-VE Network Radar Detector

Accurate breach detection

AXIS D2050-VE Network Radar Detector is a reliable and accurate radar which detects approaching trespassers on your premises and provides accurate incident notifications in all weather conditions around the clock. With 120 degrees horizontal detection coverage and up to 50 meter/164 feet range, AXIS D2050-VE delivers exact position, angle of movement, and velocity of a moving object. Vandal protected and robust in outdoor environments, AXIS D2050-VE minimizes false alarms triggered by rain, snow, insects, or shadows. AXIS D2050-VE serves as a complement to video surveillance and enables filtering on distance, customizable detection zones, and AXIS Radar Autotracking for PTZ cameras.

- > Accurate incident notifications at night and in all weather conditions
- > Ability to filter on distance
- > 120 degrees horizontal detection and up to 50 meter/164 feet range
- > Compatible with major VMS suppliers
- > Power over Ethernet Plus (PoE+)



AXIS D2050-VE Network Radar Detector

Radar	
Sensor	Phased array FMCW (Frequency Modulated Continuous Wave)
Object data	Range, direction, velocity, object type
Frequency	24.05–24.25 GHz (channels 1 and 2)
RF transmit power	<100 mW (EIRP) License free. Unharmful radio-waves.
Recommended mounting height	3.5 m (11 ft)[a]
Detection range	Min: 4.5 m (15 ft)[b] Max: up to 50 m (164 ft)[b]
Radial speed	Up to 35 km/h (22 mph)
Field of detection	Horizontal: 120°
Distance accuracy	0.9 m (3 ft)
Angle accuracy	± 0.5°
Spatial differentiation	2.5 m[c]
Data refresh rate	10 Hz
Coverage	2500 m^2 (27000 sq ft)
Object classification	Small object, human, vehicle
Radar controls	Filter, multiple detection areas, reference map, grid opacity, color scheme, trail lifetime, detection sensitivity
System on chip (SoC)	
Model	ARTPEC-6
Memory	1024 MB RAM, 512 MB Flash
Video	
Video compression	H.264 (MPEG-4 Part 10/AVC) Baseline, Main and High Profiles Motion JPEG
Resolution	1920x1080 HDTV 1080p to 640x360
Frame rate	Up to 30 fps in all resolutions
Video streaming	Multiple, individually configurable streams in H.264 and Motion JPEG Controllable frame rate and bandwidth VBR/ABR/MBR H.264
Image settings	Compression, rotation: 0°, 90°, 180°, 270° including corridor format, dynamic text and image overlay
Audio	
Audio streaming	Audio output via edge-to-edge technology
Audio input/output	Network speaker pairing
Network	
Security	Password protection, IP address filtering, HTTPS[d] encryption, IEEE 802.1X (EAP-TLS)[d] network access control, digest authentication, user access log, centralized certificate management, brute force delay protection, signed firmware
Supported protocols	IPv4/v6, ICMPv4/ICMPv6, HTTP, HTTP/2, HTTPS[d], SSL/TLS[d], QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, mDNS (Bonjour), UPnP™, SNMP v1/v2c/v3 (MIB-II), DNS/DNSv6, DDNS, NTP, RTSP, RTP, TCP, UDP, IGMPv1/v2/v3, RTCP, ICMP, DHCPv4/v6, ARP, SOCKS, SSH, LLDP, CDP, MQTT v3.1.1, Syslog, Link-Local address (ZeroConf)
System integration	
Application Programming Interface	Open API for software integration, including VAPIX® and AXIS Camera Application Platform; specifications at *axis.com* ONVIF® Profile G and ONVIF® Profile S, specification at *onvif.org*
Analytics	Radar Motion Detection, Autotracking, Crossline, Speed filter Support for AXIS Camera Application Platform enabling installation of third-party applications, see *axis.com/acap*
Event conditions	Analytics, object data, external input, edge storage events, time scheduled Radar motion detection Casing open
Event actions	File upload: FTP, SFTP, HTTP, HTTPS, network share and email Notification: email, HTTP, HTTPS and TCP External output activation, relay activation Video recording to edge storage Pre- and post-alarm video buffering Overlay text Status LED activation Send SNMP trap
Data streaming	Event data Analytics data with object GPS[e] position and velocity
Built-in installation aids	Reference map calibration
General	
Casing	IP66-, NEMA 4X- and IK08-rated Aluminum and plastic casing Color: White NCS S 1002-B
Sustainability	PVC free
Power	Power over Ethernet (PoE) IEEE 802.3at, Type 2 Class 4, typical 9 W, max 15 W
Radar angle adjustment	Horizontal positions: 0° (default), -25°, +25°[f]
Connectors	RJ45 10BASE-T/100BASE-TX PoE Relay: 2-pin terminal block I/O: 6-pin 2.5 mm terminal block for four configurable inputs/outputs
Relays	1x 1 form A, 1 NO, max 5A, 24 V DC Expected lifetime 25,000 operations
Storage	Support for microSD/microSDHC/microSDXC card Support for SD card encryption (AES-XTS-Plain64 256bit) Recording to network-attached storage (NAS) For SD card and NAS recommendations see *axis.com*
Operating conditions	-40 °C to 60 °C (-40 °F to 140 °F) Humidity 10–100% RH (condensing)
Storage conditions	-40 °C to 65 °C (-40 °F to 149 °F)
Approvals	**Radar** EN 300440 **EMC** EN 55032 Class A, EN 301489-1, EN 301489-3, EN 55024, EN 61000-6-1, EN 61000-6-2, FCC 47 CFR PT 15.249 and RSS-310 issue 4, FCC 47CFR 15B Class A, ICES-003 Class A **Safety** IEC/EN/UL 62368-1, IEC/EN/UL 60950-22 **Environment** 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 IP66, IEC/EN 62262 IK08, NEMA 250 Type 4X
Dimensions	285 x 206 x 152 mm (11.2 x 8.1 x 6.0 in)
Weight	2.5 kg (5.5 lb)
Included accessories	Installation guide, connector kit, pipe adapters, cable gland, cable gaskets, Windows® decoder 1-user license
Optional accessories	AXIS T91R61 Wall Mount AXIS T91B47 Pole Mount AXIS T94R01B Corner Bracket AXIS T8415 Wireless Installation Tool For more accessories, see *axis.com*
Supporting software	AXIS Radar Autotracking for PTZ (Slew to Cue) For supported cameras, see *axis.com/products/axis-radar-autotracking*
Video management software	AXIS Camera Station, video management software from Axis Application Development Partners available at *axis.com/vms*
Languages	English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Traditional Chinese
Warranty	5-year warranty, see *axis.com/warranty*

a. *Mounting at another height affects the detection range. For more information, go to axis.com*

b. *Measured at 3.5 m (11 ft) mounting height, when detecting a person.*
c. *Minimum distance between moving objects.*
d. *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).*
e. *Enter the radar's GPS position manually to get the objects' GPS position in the data stream.*
f. *Internal radar module*

Environmental responsibility:

axis.com/environmental-responsibility