

End-to-end security solution

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What if you could achieve real, proactive security to prevent threats from escalating?

What if you could finish an investigation in minutes, instead of days, with better accuracy?

What if you could examine more video than humanly possible with Artificial Intelligence?

What if you could combine the security and privacy of on-premises with the simplicity and reach of cloud?

Vaion enterprise security solution

Identify and prevent threats in real-time

With integrated, always-on analytics and real-time anomaly detection, Vaion helps you focus on what's truly relevant. Get alerts and notifications in case of intruders, suspicious objects, or unusual situations.

Keep your system protected from attacks and vulnerabilities

Factory-installed certificates, camera passwords set at initialization, always-on encryption for media transport and stored recordings, and detailed audit trails are Vaion's response to today's cybersecurity challenges.

Power your operators to investigate smarter and faster

Faced with enormous collections of video recordings, operators can now use our powerful Search capabilities or our playback timeline to find evidence in less time and with fewer resources.

Simple licensing and pricing model

You pay per camera to subscribe to basic solution capabilities and additionally for advanced analytics. Vaion has no hidden fees — no extra costs for the number of operators, Active Directory integrations, number of integrations, different access types (install, admin, operator), or surcharges based on the volume of users or servers.

Get analytics from all your cameras, all the time, instantly

To ensure your existing third-party cameras continue to add insights and value, we collect and analyze data from your entire deployment in real-time and without post-processing using powerful machine learning algorithms. Vaion's best in class approach allows for this intelligence with a minimal number of servers — up to 200 cameras per 2U appliance.

Add value to your existing deployment, while reducing costs

Gain occupancy information for real-time insights in property management, customer behavior analytics in retail, in-branch customer data for retail banking, and more. Improve the overall client experience and reduce unnecessary costs.

Streamline your multi-site deployment with hybrid cloud

We employ a hybrid cloud model to increase your implementation's scalability, flexibility, and security. You maintain video data access from anywhere in the world, recall, and stability whenever you need to. As importantly, you share licenses across all locations to lower your costs and add new equipment quickly without licensing delays.

The best of both worlds

* Future capability

HQ

- On-premises clustered Vaion
 vserver nodes
- Single pane of glass with high speed config and search
- Hybrid services from the cloud

Signaling and metadata Dynamic stream management Hybrid cloud services

Smaller site

- Cameras served by HQ
- Edge camera analytics and storage*

Larger site

- On-premises 2U Vaion
- All-in-one vserver node
- Full site survivability
- Hybrid services from the cloud

Remote access

 Remote access from customer site or through Vaion vcloud*



See and understand your surroundings

Covering a wide majority of security scenarios, **vcam Dome** and **vcam Pano** are fit for any deployment. With embedded privacy-proof audio analytics, you receive immediate sound alerts in case of abnormal activities. Get automatic firmware upgrades and advanced cybersecurity features.







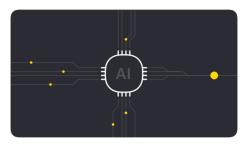












Directional audio analytics

Equipped with directional 4-microphone arrays, our cameras can perceive and identify sounds, offering your security operators a complete overview of the surroundings. The built-in audio analytics detects and identifies audio events and where they came from, and triggers notifications in real-time.

For any environment

Mounted outdoor or indoor, **vcam Dome** and **vcam Pano**, are suitable for all your environmental needs. Built using robust, high-quality materials, they are vandal-resistant yet discreet to blend in any installation type. Get the best image quality from our cameras' sensors, even in low-light conditions or complete darkness.

One-click configuration

It's never been easier to add and configure security cameras to a deployment. Our one-click configuration removes the need for user names and passwords, preconfiguration steps, and default settings. Scan the unique QR codes on our cameras to quickly and easily add them to Vaion vcore. Get instant camera firmware and software upgrades from Vaion vcloud.

Always-on security

Cybersecurity is no longer a concern, but a built-in feature of our Vaion cameras. With factory-installed certificates, camera passwords set at initialization, and encrypted media, **vcam Dome** and **vcam Pano** are the most secure cameras on the market. When paired with **vcloud**, software upgrades are seamless and instant, and you have access to regular automatic system performance checks.

AI-based bandwidth optimization*

Are you worried about the storage costs for your video footage while preserving all the forensic details you might need to solve cases? Using computer vision and AI capabilities, our cameras reduce bandwidth demands and use high video quality only when and where it matters — less storage and money for the same quality.

*Future capability















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03 Control what you see • vcam Dome



Control what you see

Versatile, robust, and sleek, **vcam Dome** is a camera like no other. Fit for both the harshest outdoor installations and discreet indoor setups, it captures every detail day and night. Hardware designed in Norway, software developed in the UK, and assembled in Taiwan, **vcam Dome** is powered by audio analytics to add more context to your surroundings and help you understand when it's time to act.

Image sensor

4K (8MP)

Lens

Focal Length: 3.6-10mm Aperture: f/1.5-f/2.8 Remote zoom and focus P-iris

Night vision

Automatic IR-cut filter 850 nm IR LED

Field of view

100°-45° Horizontal 53°-25° Vertical

Maximum resolution & Frame rate 3840x2160@30fps

Dynamic range WDR

Video compression H.265, H.264, Motion JPEG Audio

Microphone array (4x microphones) Audio classification Audio localization

Security

Factory installed certificates, No default passwords, Mandatory access authentication, HTTPS/TLS encryption

Network protocols

IPv4, HTTPS, TLS, DNS, mDNS, DNS-SD, NTP, RTSP, RTP, RTCP, ICMP, DHCP, ARP Streaming: RTP/UDP, RTP/RTSP/ HTTPS/TCP

Power source

PoE+ (802.3at Type 2)
For installation only: USB-C

Storage
MicroSD up to SDXC UHS-I

Connection

Gigabit Ethernet
USB-C for preview and setup

Installation aid
Flectronic leveler

Environmental

IEC 60068-2-1,2,6,14,27 and 78 (cold, dry heat, vibration, temperature change, shock, damp heat)
Operating temperature: -25C to +50C, non-condensing

Storage temperature: -40C to +60C Vandal resistant: IEC/EN 62262 IK10 Water protection: IEC/EN 60529 IP68

Physical characteristics

Dimensions: 152x152x96mm

Weight: 1.2 kg Body: Aluminum

Adjustment range: Pan, Tilt, Roll

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04 360° coverage beyond security • vcam Pano



360° coverage beyond security

Fit for securing large areas that would otherwise require a larger number of conventional cameras, vcam Pano doesn't miss a spot. Installed either indoors or outdoors, the camera captures wide scenes in high resolution in even the harshest of environments with low light, and seamlessly integrates with Vaion vcore. Hardware designed in Norway, software developed in the UK, and assembled in Taiwan, vcam Dome uses audio analytics to improve situational awareness in real-time.

Image sensor

12MP

Lens

Aperture: f/2.0 Fixed focus

Focus distance: 0.2m - ∞

Night vision

Automatic IR-cut filter 850 nm IR I FD

Field of view >180°

Maximum resolution & Frame rate 3000x3000@30fps

Dynamic range WDR

Video compression

H.265, H.264, Motion JPEG

Audio

Microphone array (4x microphones) Audio classification Audio localization

Security

Factory installed certificates, No default passwords, Mandatory access authentication, HTTPS/TLS encryption

Network protocols

IPv4, HTTPS, TLS, DNS, mDNS, DNS-SD, NTP, RTSP, RTP, RTCP, ICMP, DHCP, ARP
Streaming protocols: RTP/UDP, RTP/RTSP/HTTPS/TCP

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Physical characteristics

Dimensions: 152x152x77mm

Weight: 1.1 kg Body: Aluminum



One system to rule all your security operations

Agile, scalable, secure, and easy to use, Vaion **vcore** is a video management system equipped with integrated machine learning capabilities that analyze all video feeds from all your cameras all the time and in real-time. **vcore** identifies objects and events and sends instant notifications and alarms based on rules and unusual activity detection.









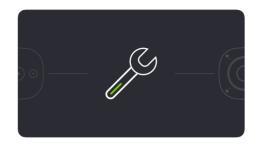


05 One system to rule all your security operations • vcore













Video wall with real-time alerts

Powered by our Spotlight capability, Vaion vcore's video wall changes video streams dynamically to bring only the relevant feeds to the attention of the operator. Real-time alerts and notifications show up on the video wall to describe the incident, the time and place it occurred.

Timeline

The rich playback timeline in **vcore**'s video wall provides thumbnail-based browsing of video and highlights people, vehicle, and overall motion separately to help your operators gain a better understanding of different events captured by the camera. It enables a clearer, more intuitive picture of what's relevant.

Maps

vcore allows you to add maps of all your locations to gain more situational awareness and insights. Each map can be configured and includes camera views, alarm views, as well as the ability to track people and objects as they move via the Smart Presence capability.

Simple configuration

Vaion vcore makes it easy to add cameras and maintain simple, scalable management with group configuration policies. You also get access to detailed camera information, activity logs, and advanced video adjustments in a single pane with focused user experience and automation.

Search

Search by event, similarity, and image and perform appearance and image detection to comb through countless hours of video, throughout your entire implementation.

Reduce forensic investigation time and gain more efficiency and accuracy with the same number of operators.

Smart Recording

Smart Recording switches the resolution stream for all your camera recordings. It automatically records with maximum resolution when people and vehicles are present or interesting events occur, and changes to as low as 360p or no recording at all to save storage space.















05 One system to rule all your security operations • vcore

Video wall with
Spotlight anomaly
detection

Playback timeline with Smart Presence

Maps with Smart Presence

Search by event, object, similarity

Dynamic stream selection

Rules, events, alarms







System

100-200 cameras per server Unlimited cameras per site Unlimited servers per site

Device support

Automatic device discovery
Third-party IP cameras & encoders
H.264 & H.265 video compression
MJPEG video compression
JPEG2000 video compression

Streaming

Dynamic stream selection

Search

Search by similarity
Search by physical characteristics
Search by event
Search by image
Search across all video
Playback timeline with embedded
thumbnails
Smart Presence

Pervasive video analytics

Unusual event detection
People counting
Forensic investigation
Intrusion detection
Real-time notifications and alerts
Spotlight

Security and privacy protection

HTTPS camera connectivity
SRTP support
AES video encryption
Digital watermarking against
tampering
RTSP over TLS
Video anonymization with
encrypted source archive

Client

Intuitive and powerful interface
HTML5 web client
Saved views
Interactive maps
Active directory import

Two-factor authentication
Multi-camera export
Multi-camera privacy masking
export
Live export
Configurable recording schedule

Other features

Email event notification
Digital input email trigger
Manual digital output trigger
Rule triggers
Self-learning video analytics event
configuration
Vaion Machine Learning server
analytics configuration
Redundant recording
Failover connections
Camera replacement





vserver

On-premises hardwareaccelerated appliances

Pre-loaded with certificates for always-on security, Vaion **vserver** is a tailored and tested appliance that ensures your deployment is easy to manage. What's more, you get hardware acceleration for machine learning and video encoding and decoding.









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Range

Vaion **vservers** come in a range of sizes supporting the deployment of different sizes and topologies. From a single **vserver** in a single site to multiple vservers globally distributed, our appliances provide a scalable solution that can grow with your requirements, while maintaining access to all your cameras throughout your installation.



Scalable

Each Vaion vserver can be configured with HDD with individual capacity from 1TB to 14TB, allowing for up to 168TB of SATA recording storage.



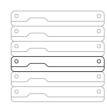
Resilient

Designed to ensure maximum redundancy and reliability, recording disk, power supply, or fan failures don't prevent the Vaion enterprise security solution from performing at full capacity. Depending on the model, appliance components are hot-swappable, allowing for simple replacements without any downtime.



Data throughput

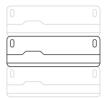
Each vserver appliance is equipped with dual 10Gb Ethernet interfaces, allowing for separate networks, and maximum data throughput.



vserver

A workstation appliance with 4 hard disks. Suitable for smaller deployments, or remote sites in distributed deployments

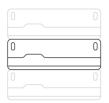
- up to 100 cameras supported
- Nvidia Quadro RTX 4000 GPU
- up to 56 TB SATA storage
- up to 5-year warranty



vserver

2U rack-mounted appliance with 12 hard disks. Suitable for medium sized deployments, or as part of larger deployments

- up to 100 cameras supported
- Nvidia Quadro RTX 4000 GPU
- up to 168 TB SATA storage
- up to 5-year warranty

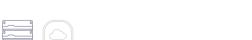


vserver

2U rack-mounted unit with 12 hard disks and 2 GPUs. Suitable for environments requiring the highest processing density

- up to 200 cameras supported
- 2 x Nvidia Quadro RTX 4000
- up to 168 TB SATA storage
- up to 5-year warranty

















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Future-proof your security deployment

Vaion **vcloud**, a cloud-based implementation model built for reliable large-scale deployments, delivers unparalleled site survivability and redundancy with nodes and between nodes. Privacy first is our mantra, and you always retain control of your data with our hybrid cloud architecture.











Instant upgrades

With Vaion **vcloud**, you get instant firmware and software upgrades for all your Vaion products. What's more, Vaion vcore's configuration is updated automatically in the cloud.



License pooling

Centrally manage licensing across all Vaion products for a proactive and controlled approach.



Simplified setup

Simplicity is key. **vcloud** makes onboarding of Vaion vcams always available for ease of use. Additionally, you can create **vcore** deployments spanning multiple sites using **vcloud** to assist.



Privacy-first

We know how important privacy is for your organization, and that is why all your video and metadata storage remains on-premises. You have increased control over your proprietary data.



Enhanced security

Remove the risks of traditional NVR and DVR systems and remain fully compliant with:

- encryption of all vcloud data
- end-to-end encryption of all remote access data without visibility by the cloud
- encryption of **vcore** backups by using a key known only by you.











08 About Vaion 08 About Vaion

About Vaion

Vaion was founded in February 2018 by a passionate team with extensive management, video, hardware, and software expertise.

Vaion exists because we believe that we can create a better, smarter way to deliver video security. We inject intelligence in our approach to security and all our products. We help organizations monitor, understand, and act on their surroundings to protect their people and assets in real-time.

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