VIVOTEK
A Delta Group Company



# VORTEX

## AI-Powered Cloud Surveillance Platform

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## Product Introduction

VORTEX is AI powered, cloud-native video surveillance-as-a-service (VSaaS) designed to transform how businesses approach security. By combining powerful edge computing with the flexibility of the cloud, VORTEX goes beyond traditional recording to provide a proactive, data-driven security ecosystem. It empowers users to monitor complex environments—from single locations to large-scale multi-site operations—through a single, intuitive interface, ensuring that comprehensive protection is always within reach.

## Why VORTEX

### Unified Cloud - One platform. Total visibility.

**One platform** to manage cameras, access control, smart sensors, and AI-powered intelligence—delivering centralized visibility across every site and system.

### Hybrid Scalability - Modernize Without Disruption.

Seamlessly support **direct-to-cloud deployment, VIVOTEK on-prem VMS (VSS) & Core+AI NVRs**, and **cloud bridging of legacy systems via VORTEX Connect**—enabling modernization without rip-and-replace.

### Total Simplicity - Smarter insights. Faster action

An intuitive interface with **Generative-AI search & alerts, real-time notifications, and visual investigation features**—reducing workload, accelerating responses, and simplifying daily operations.

VORTEX BY VIVOTEK

# Hybrid Cloud Architecture




# Specification

| Product Edition | xLite | xStd | xPro |
|---|---|---|---|
| Overview | Freely establish your small business with ease via cloud | Manage cloud and on-premises cameras seamlessly with one platform for multiple sites | Unlock automated and AI powered solution for enterprise with cross regions |
| **Organization** | | | |
| Maximum Number of Devices Per Organization | 128 | Unlimited | |
| Maximum Number of User Account Per Organization | 10 | Unlimited | |
| **Hybrid Deployment** | | | |
| Direct to Cloud Device | VORTEX cameras | VORTEX camera, third party device including IoT sensor and access control [1] | |
| Bridge to Cloud Device | VIVOTEK NVR NR/ND series[2] & cameras, network speakers, Onvif cameras | VIVOTEK NVR ND series & cameras, network speakers, Onvif cameras | |
| **Site Management** | | | |
| Maximum Number of Site Per Organization | 10 | Unlimited | |
| **Live View** | | | |
| View Mode | View by site, customized view | | |
| View Layout | Equal: 1x1, 2x2, 3x3, 4x4<br>Focus: 1M+5, 1M+7, 1M+12<br>Panorama: 1P+3, 1P+6, 2P+3<br>Vertical: 1V+6, 2V+3, 3V | | |
| Carousel View | • | | |
| Fisheye Display Mode | 1O, 1R, 1P | | |
| PTZ Control | Preset, patrol, drag on view cell, area zoom | | |
| Talk Down | - | •[3] | |
| VCA Display | - | • | |
| **Playback** | | | |
| Playback Control | 0.25~8x speed control, next/previous 10 secs, next frame | | |
| Playback by Event | • | | |
| Playback Timeline | Event interval display, timeline adjustment | | |
| Synchronize Playback | • | | |
| Frame by Frame | • | | |

1. Supports third-party devices that are already integrated with the VORTEX platform only.
2. VIVOTEK VSS and NR series NVRs support bridge-to-cloud connectivity.
3. The function for cameras requires xPro camera license, while the function for IP speakers requires network speaker license.

# Specification

| | | | | |
|---|---|---|---|---|
| **Export** | | | | |
| Snapshot Format | | PNG | | |
| Video Format | | 3GP | | |
| Share Device | | Live view, playback | | |
| Share Archive File | | - | • | |
| Time Lapse | | - | - | • |
| **Message Center** | | | | |
| Event Type | | Device event, system event | Device event, system event, access event, sensor event | |
| **Alarm Management** | | | | |
| Alarm Schedule | | All day, weekdays, weekend, custom | | |
| Alarm Trigger Type | Device Event | AI: intrusion, loitering, line crossing, missing object, unattended object<br>General: audio detection, camera DI/DO, tampering detection, PIR | AI: intrusion, loitering, line crossing, missing object, unattended object, PPE detection, fall detection, face detection, crowd detection, running detection, restricted zone detection, parking violation, smart tracking an object, motion detection, license plate recognition, facial recognition<br>General: audio detection, camera DI/DO, tampering detection, PIR | |
| | System Event | Device online/offline, firmware update failed, recording error, SD card error, SD card life expectancy, disk failure, disk full, system DI/DO, PoE error | | |
| | Access Event [4] | - | Access denied, access granted, door held open, door forced open, REX unlock, remote unlock, force open/close, door/ elevator/ place lockdown, scheduled started/ended, scheduled override, reader/controller tempered | |
| | Sensor Event [5] | - | Vaping: vape detection, THC detection, smoking detection, air masking detection<br>Safety and security: help sounds, aggression sounds, gunshot detection, loud sound, motion detection, high occupancy count, light level, panic button, device tamper<br>Health: temperature, humidity, health index, air quality index, CO/CO2, TVOC, PM1/PM2.5/PM10, NO2/NH3, pressure | |
| Alarm Action | | Mobile notification | Mobile notification, send email, digital output, webhook | Mobile notification, send email, digital output, webhook, audio deterrent |
| **AI Analytic** | | | | |
| VCA | | Intrusion, loitering, line crossing, missing object, unattended object, smart tracking an object for PTZ models | Intrusion, loitering, line crossing, missing object, unattended object, parking violation, smart tracking an object for PTZ models | Intrusion, loitering, line crossing, missing object, unattended object, crowd detection, running detection, restricted zone detection, parking violation, smart tracking an object for PTZ models |
| Advanced AI [6] | | - | PPE detection, fall detection, think alert, facial recognition, license plate recognition | |
| **AI Hub** | | | | |
| Deep Search | | - | - | Object search, attribute search, scene search [7] , re-search |
| Event Insight | | - | - | • |
| Think Search | | - | - | • |
| Case Vault | | - | - | • |
| **Profile Search** | | | | |
| Face Profile | | - | • | • |
| **Floor Plan** | | | | |
| File Format | | - | JPEG | JPEG |
| Camera Live view | | - | • | • |
| **User Management** | | | | |
| User Account | | Basic, Windows AD | | |
| User Role | | Owner, administrator | Owner, administrator, supervisor, viewer, customized role | |
| User Permission | | - | Organization level, device level | |

4. Access events are a type of event originating from third-party devices or systems.
5. Sensor events are a type of event originating from third-party devices.
6. Enabling advanced AI features requires compatible camera models and an active Advanced AI license. For more details, please get in touch with technical support.
7. Enabling scene search requires compatible camera models, for more details please contact technical support.

# Specification

| | | | | |
|---|---|---|---|---|
| **Recording** | | | | |
| Cloud Backup [8] | | - | • | |
| Capacity of Cloud Archive | | - | 5GB per camera | 30GB per camera |
| Recording Retention for Camera[9] | | • | | |
| **Security** | | | | |
| Single Sign On | | - | Microsoft Entra ID/Okta | |
| Multiple Factor Authentication | | - | • | |
| Smart Privacy Switch | | • | • | • |
| **Maintenance** | | | | |
| Firmware OTA | Direct to Cloud Camera | Auto | | |
| | Bridge to Cloud Camera | Manual | | |
| | NVR | Auto | | |
| **Peripheral Integration** | | | | |
| Bridge[10] | | - | VIVOTEK RX9502 | |
| Network Speaker | | - | VIVOTEK<br>AU-003, AU-004 | |
| PoE Switch | | - | **VIVOTEK L2 managed**<br>AW-GEV-108A-130, AW-GEV-288A-370<br>**VIVOTEK Lite managed**<br>AW-GEL-065A-060, AW-GEL-105A-110, AW-GEL-205A-260, AW-GEL-285A-380, AW-IHB-1040 | |
| **Third-party Integration** | | | | |
| Access Control | | - | Brivo, Kisi, PDK<br>(Cloud-to-cloud via RESTful API) | |
| Smart Sensor | | - | Halo<br>(Receive events via webhook) | |

8. Enabling cloud backup requires an active cloud backup license.
9. The retention days settings will vary based on the SD card capacity of the camera.
10. Gateway device for connecting network speakers and PoE switches to VORTEX.

# License Overview

Your VORTEX experience is governed by your organization's license plan, our system is designed to provide seamless security with different edition.

## xLite Edition

- Experience the foundational security and basic monitoring capabilities.
- To enable cloud storage or advanced AI, a plan upgrade is required. The system will guide you through the process if usage limits are reached.

## xStd and xPro Edition

- Choose the edition that best fits your requirements. You can mix Std and Pro camera licenses within the same organization to optimize your overall operating costs.
- The organization automatically upgrades to a subscription plan when a xStd or xPro license is activated to any camera or when a camera with a pre-bundled license is added. Note that all the cameras in an organization need to have either xStd or xPro camera license.
- Both cloud storage and advanced AI license for camera require camera license activated in advance.

## License in Subscription Plan

| Type | License information |
|---|---|
| Camera | xStd camera license (1/3/5 years subscription)<br>xPro camera license (1/3/5 years subscription) |
| Peripheral | Network speaker license (1/3/5 years subscription) |
| Cloud storage for camera | 30/60/90/120/180/365 days cloud storage license (1/3/5 years subscription) |
| Advanced AI for camera | Advanced AI license (1/3/5 years subscription) |

## System Requirement

### Minimum Requirement for VORTEX Portal

| Type | Requirements |
|---|---|
| Web browser | Microsoft Edge, Google Chrome |
| CPU | 8th Generation Intel ® Core™ i5 Processors desktop version<br>(i5-8500) or above |
| RAM | 8GB or above |
| HDD | No Limitation |

(NOTE) Based on the user scenario of "viewing only 1 channel of a 5-megapixel camera" these specifications should provide smooth performance.

VIVOTEK

Contact Us

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