

# VORTEX

## AI-Powered Cloud Surveillance Platform

---

### 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.

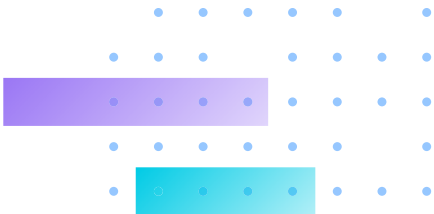
**One platform** to manage cameras, access control, smart sensors, and AI-powered intelligence—delivering centralized visibility across every site and system.

#### 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.



# 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
<b>Organization</b>			
Maximum Number of Devices Per Organization	128		Unlimited
Maximum Number of User Account Per Organization	10		Unlimited
<b>Hybrid Deployment</b>			
Direct to Cloud Device	VORTEX cameras	VORTEX camera, third party device including IoT sensor and access control <sup>1</sup>	
Bridge to Cloud Device	VIVOTEK NVR NR/ND series <sup>2</sup> & cameras, network speakers, Onvif cameras	VIVOTEK NVR ND series & cameras, network speakers, Onvif cameras	
<b>Site Management</b>			
Maximum Number of Site Per Organization	10		Unlimited
<b>Live View</b>			
View Mode		View by site, customized view	
View Layout		Equal: 1x1, 2x2, 3x3, 4x4 Focus: 1M+5, 1M+7, 1M+12 Panorama: 1P+3, 1P+6, 2P+3 Vertical: 1V+6, 2V+3, 3V	
Carousel View		•	
Fisheye Display Mode		1O, 1R, 1P	
PTZ Control		Preset, Patrol	
Talk Down	-		• <sup>3</sup>
VCA Display	-		•
<b>Playback</b>			
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

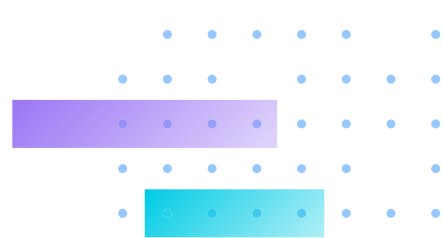
Export			
Snapshot Format		PNG	
Video Format		3GP	
Share Device		Live view, playback	
Share Archive File	-	•	
Message Center			
Event Type	Device event, system event	Device event, system event, access event, sensor event	
Alarm Management			
Alarm Schedule		All day, weekdays, weekend, custom	
Alarm Trigger Type	Device Event	AI: intrusion, loitering, line crossing, missing object, unattended object 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 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 <sup>4</sup>	-	Access denied, access granted, door held open, door forced open, REX unlock, remote unlock, force open/close, door/ elevator/ place lockdown, schedule started/ended, scheduled override, reader/controller tempered
	Sensor Event <sup>5</sup>	-	Vaping: vape detection, THC detection, smoking detection, air masking detection Safety and security: help sounds, aggression sounds, gunshot detection, loud sound, motion detection, high occupancy count, light level, panic button, device tamper 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 <sup>6</sup>	-	PPE detection, fall detection, think alert, facial recognition, license plate recognition	
AI Hub			
Deep Search	-	-	Object search, attribute search, scene search <sup>7</sup> , re-search
Event Insight	-	-	•
Think Search	-	-	•
Case Vault	-	-	•
Profile Search			
Face Profile	-	•	•
Floor Plan			
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 <sup>8</sup>	-		•
Capacity of Cloud Archive	-	5GB per camera	30GB per camera
Recording Retention for Camera <sup>9</sup>			•
Security			
Single Sign On	-		Microsoft Entra ID/Okta
Multiple Factor Authentication	-		•
Smart Privacy Switch	•	•	•
Maintenance			
Firmware OTA	Direct to Cloud Camera	Manual	Auto
	Bridge to Cloud Camera		Manual
	NVR	Manual	Auto
Peripheral Integration			
Bridge <sup>10</sup>	-		VIVOTEK RX9502
Network Speaker	-		VIVOTEK AU-003, AU-004
PoE Switch	-		<b>VIVOTEK L2 managed</b> AW-GEV-108A-130, AW-GEV-288A-370 <b>VIVOTEK Lite managed</b> AW-GEL-065A-060, AW-GEL-105A-110, AW-GEL-205A-260, AW-GEL-285A-380, AW-IHB-1040
Third-party Integration			
Access Control	-		Kisi, PDK, Brivo (Cloud-to-cloud via RESTful API)
Smart Sensor	-		Halo (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

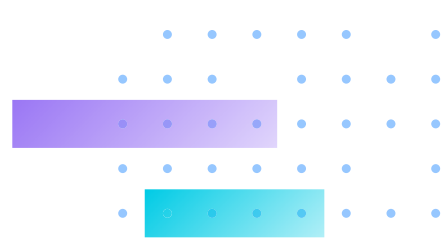
Your VORTEX experience is governed by your organization's license plan, our system is designed to provide seamless security with different edition.

### 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) 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 bundle 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 (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.

