



# VAST 2

Change the Way  
You Experience VMS



Plug & Play Auto Setup · Thumbnail & Smart Search ·  
Problem Feedback Mechanism · Add-on Solutions

VIVOTEK's VAST 2 is an easy to use IP video management software (VMS). To meet users' real-world needs, it comes with exciting advancements such as easy operation on single or multiple monitors, custom layout to fit both in corridor and panorama format, rapid export of multi-channel video and acquiring VCA analytics with integrated cameras.

VAST 2 supports smart search and thumbnail search for advanced video search applications. Smart search provides users to easily set critical areas with a custom zone setting. Thumbnail search produces the snapshot preview to reduce the chance of selecting the wrong image. Both ways allow for smarter and quicker searches of specific events. To efficiently solve users' problems and system bugs, VAST 2 provides an automatic problem feedback mechanism to directly connect to VIVOTEK's FAE system. Any feedback will be handled instantly.

Utilizing automatic configuration wizards, VAST 2 can significantly reduce the time and cost of installing multiple camera surveillance systems. With more advanced setup features such as logical tree, camera configuration, archive management and recording schedule backup solutions, VAST 2 provides easy and intuitive UI with rich functionality to meet the needs of any customer. For efficient video management, VAST 2 also provides multi-layered, interactive 2.5D maps, and sophisticated alarm management. Furthermore, VAST 2's add-on solutions include failover protection, a transportation solution with GPS coordinates, transaction solutions with POS integration and integration solutions. All of these features combine to make VAST 2 the perfect VMS for use in retail, banking, transportation, and industrial applications.

## Key Features

- Custom Layout to Fit Different Camera Types
- Plug and Play Auto Setup
- Automatic Problem Feedback Mechanism
- Switch All Applications on Tabs
- Easy to Support Multi-Monitor
- 2.5D Visualization eMap
- Smart Search
- Thumbnail Search
- Evidence Lock
- Multi-Video Export with Custom Layouts
- VCA Report
- Schedule Backup
- Add-on Solutions: Failover, Transportation, Transaction, Integration

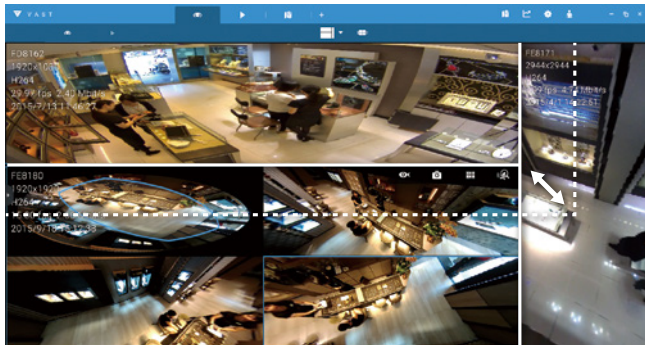
## Support List

- VIVOTEK Network Camera: 8000 & 9000 Series
- VIVOTEK NVR: ND Series (ND8321 excluded)
- VIVOTEK Software: VAST 2

## Highlight Features

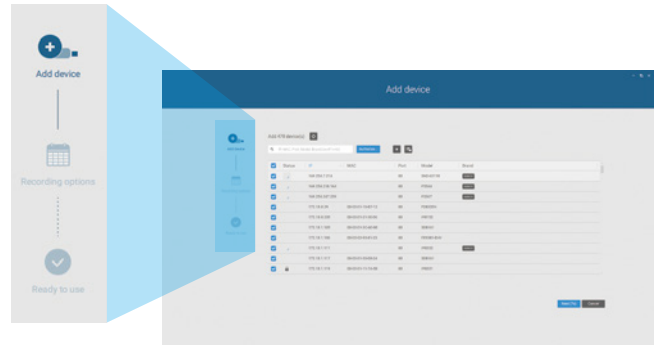
### Intuitive UI Design

Direct intuitive custom layout adjustment and fisheye ROI control for better security management experience.



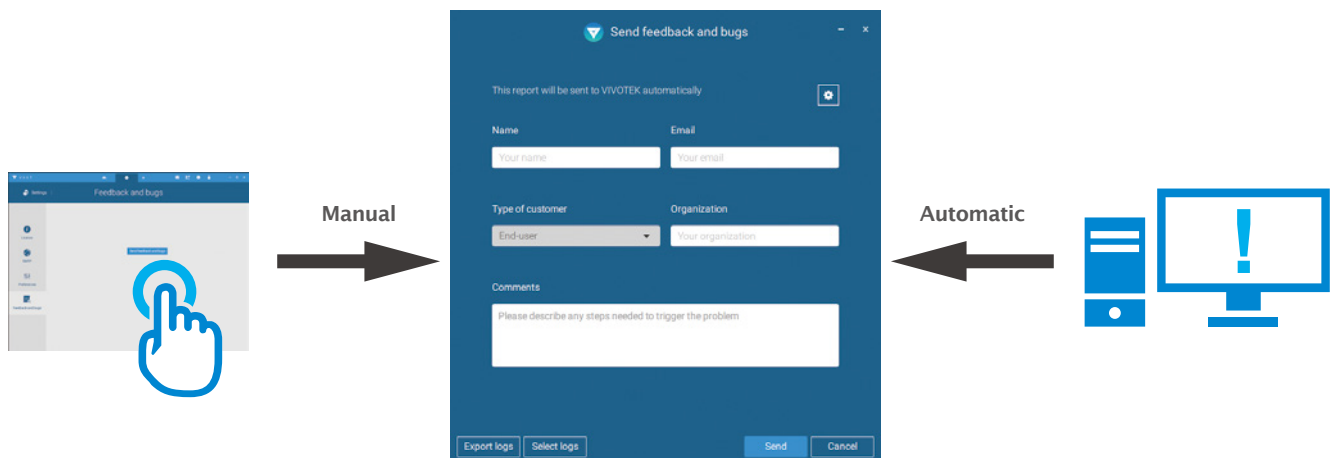
### Auto Setup

Easy configuration through a fully automated process. Saves user's time and cost to install surveillance devices.



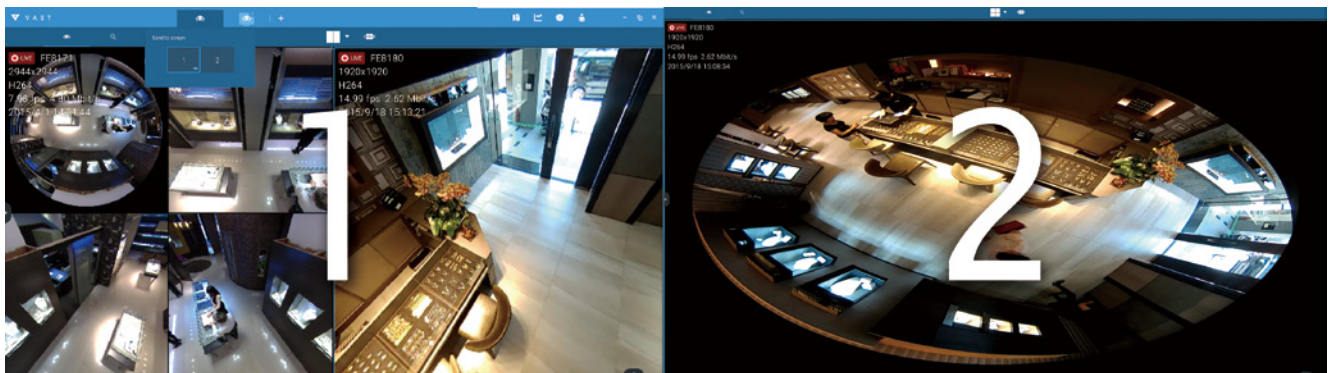
### Problem Feedback Mechanism

Quick detect system problem and feedback to VIVOTEK's FAE system via automatic popup or manual operation.



### Multi-Monitor & Tabs

Manage unlimited tasks with multiple screens for intuitive and easy surveillance.



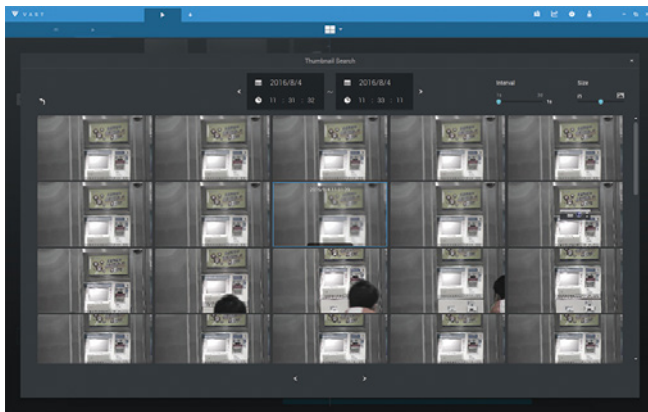
Screen 1

Screen 2

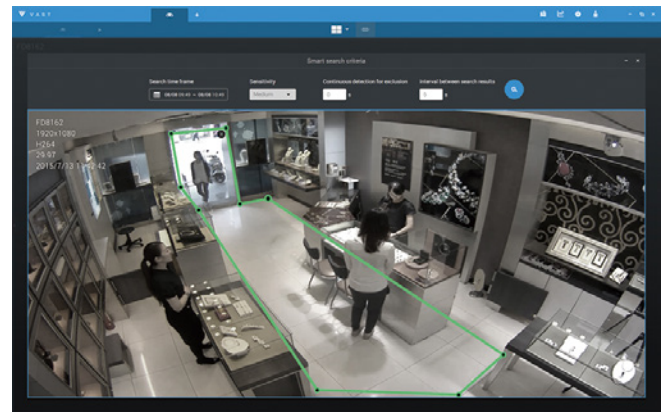
## Highlight Features

### Advanced Search

Efficiently search suspicious video and specific events with thumbnail view and smart search.



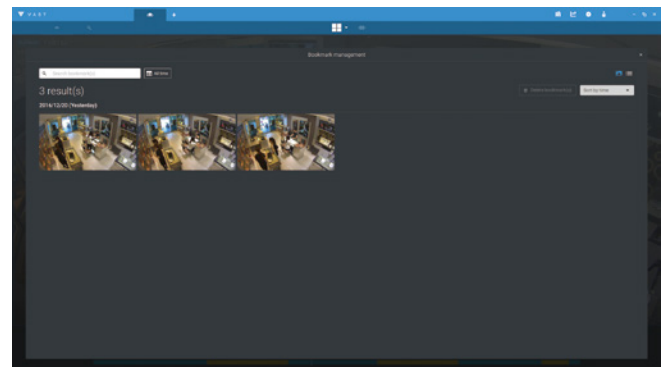
Thumbnail Search



Smart Search

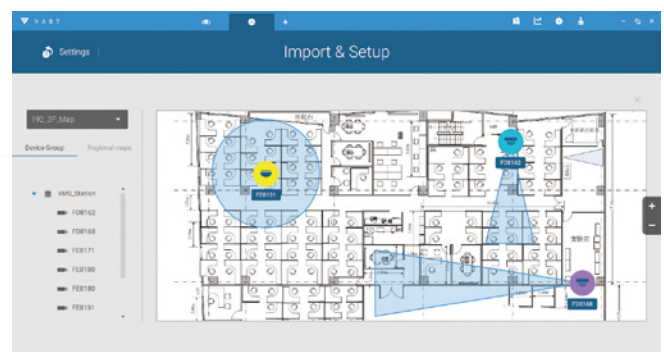
### Evidence Lock

Manually extend the retention time for video recordings and manage a high number of investigation scenarios.



### 2.5D Visualization eMap

Multiple layers and camera's FOV views allow users instantly to pinpoint a selected camera located on the map.

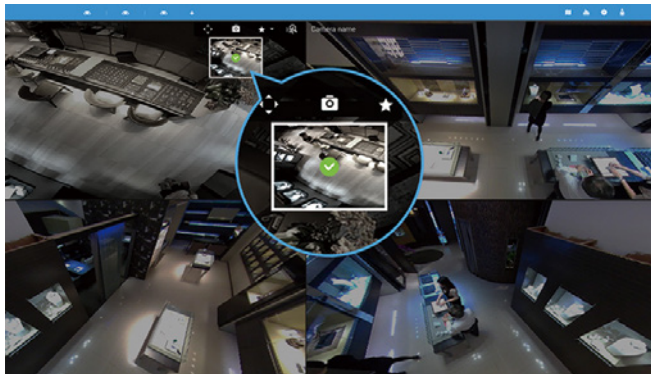




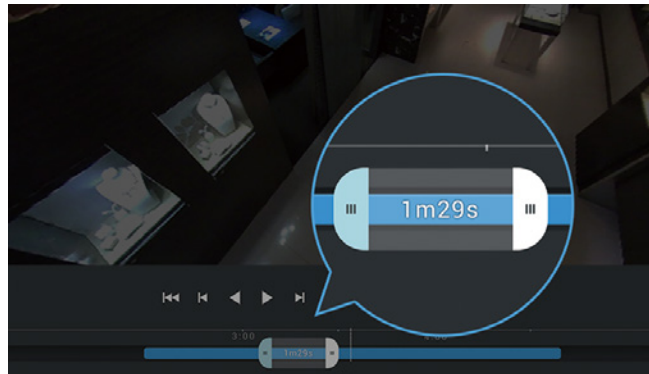
## Highlight Features

### Export Evidence

Easily export multiple video recordings with custom layouts in a specific time period or instant snapshot with a fast click.



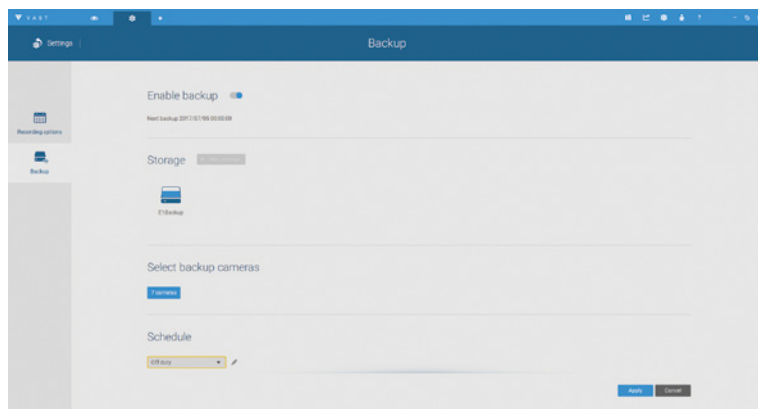
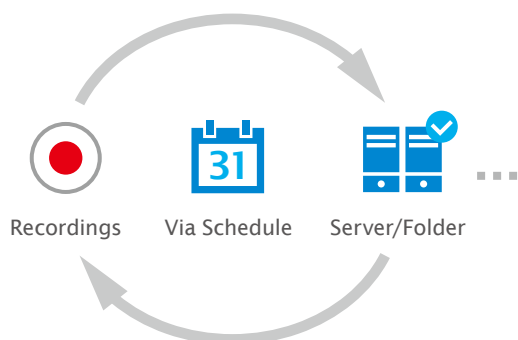
Snapshot



Video

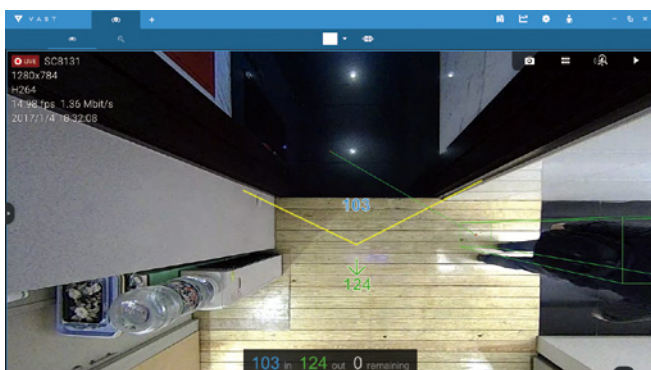
### Schedule Backup

Automatically backs up the recording video clip to another network storage device.

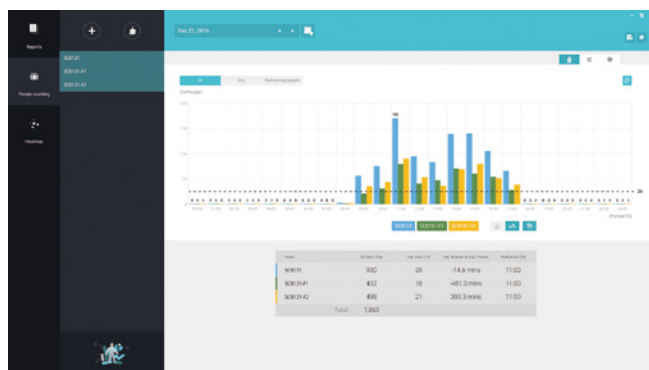


### VCA Report

Integrate VIVOTEK's intelligence cameras to provide visual reports including video feedback, tables and charts.



Counting LiveView



Counting Report

## Add-on Solutions

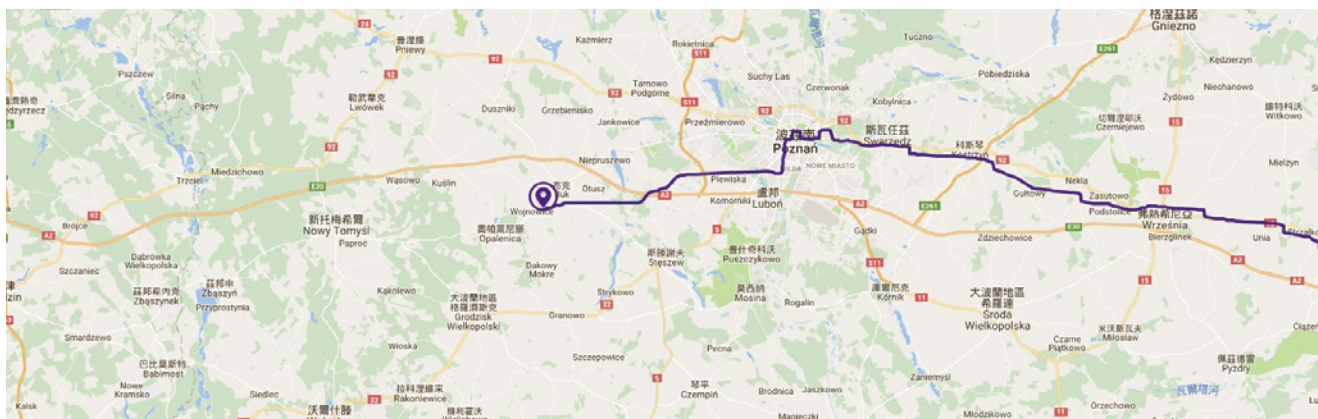
### Failover Solution

Reliable backup system designed to transfer recording tasks from N sites to M sites upon the rare occurrence of disk or other malfunction.



### Transportation Solution

VAST 2 can trace vehicles through information provided from GPS receivers, track vehicles' real-time location, and playback videos with recorded visited paths.



### Transaction Solution

Retains all transaction details including not only POS data but also associated video footage to create deeper POS knowledge. Enter search conditions to filter transactions more easily.



## Technical Specifications

Version	2.0
<b>General</b>	
Auto Wizard	Plug & Play Auto Setup
Max. Number of Cameras*	Unlimited
Max. Number of Servers*	Unlimited
Max. Number of Clients	Unlimited
Support OS	Windows 10, 8, 7
Mobile Support	iViewer (iOS/Android)
Tabs Support*	Supported
Devices Pack	Ver. 5.9.122
<b>LiveView (Local Display)</b>	
Max. Channels*	64-channel per Monitor (Supports up to 8 Monitors)
Layout	Equal: 1x1, 2x2, 3x3, 4x4, 5x5, 6x6, 7x7, 8x8 Panorama: 1P+6, 2P, 2P+3, 3P Focus: 1+12, 1+16, 1+3, 1+5, 1+7, 1+9, 2+8 Vertical: 1V+6, 2V+2, 2V+3, 3V, 3V+4, 4V, 4V+4, 5V Single Layout Display
Custom Layout	Supported
Layout Configuration Saving	Supported
Layout Rotation	Supported
Stream Application	Stream Selection & Auto Stream Size
View Application	Drag & Drop Remote I/O Control PiP (Digital Zoom) Instant Playback Video Display Mode (Aspect Ratio & Camera information) Metadata Display (VCA, POS)
Fisheye Dewarp Mode	10, 1P, 1R, 103R, 4R, 2P, 4R Pro, 108R
<b>Playback</b>	
Max. Channels*	64-channel per monitor (Supported monitor depends on PC decoding efficacy)
Layout	Equal: 1x1, 2x2, 3x3, 4x4, 5x5, 6x6, 7x7, 8x8 Panorama: 1P+6, 2P, 2P+3, 3P Focus: 1+12, 1+16, 1+3, 1+5, 1+7, 1+9, 2+8 Vertical: 1V+6, 2V+2, 2V+3, 3V, 3V+4, 4V, 4V+4, 5V Single Layout Display
Custom Layout	Supported
Playback Mode	Asynchronous & Synchronous
Playback Control	Play, Rewind, Pause, Stop, Next/Previous Frame, 1/64X ~ 64X Speed Control, Bookmark
Playback Timeline	Scale Adjustment Event Timeline Interval Display

Search Mode	Calendar, Alarm, Bookmark, Thumbnail, Smart & Transaction (POS)
Evidence Lock	Supported
<b>Video</b>	
Video Format	MJPEG, MPEG4, H.264 AVC, H.264 SVC, H.265
Video Resolution	Up to 9 Megapixels
<b>Audio</b>	
Audio Format	G.711, G.726, AMR, AAC
Audio Capability	Two-way Audio
Audio Control	Mute
<b>Record</b>	
Recording Time (sec.)	Pre-Record: 3-15, Post-Record: 10-60
Recording Stream Type	Unicast
Recording Stream	Single
Recording Mode	Continuous, Event, Customized Schedule, Activity Adaptive Streaming
Recording Setting	Recycle (Depends on Storage Size)
Recording File Format	3GP
External Storage Recording	NAS (SMB & CIFS)
<b>Alarm Management</b>	
Alarm Period (sec.)	Max. 30
Alarm Filter	Name, Time, Trigger Type (Camera/Substation/System)
Alarm Setting	Realtime System Notification
Schedule Type	Continuous, Schedule
Camera Source	Camera Disconnected, Camera DI, Camera DO, Field Detection (VCA), IR (Infrared), Line crossing (VCA), Loitering (VCA), Motion detection, PIR (Passive infrared), Recording error, Stop recording, Tampering detection, Temperature, Video loss (Video server only)
Substation Source	Network disconnected, Storage failure, Storage full
External Devices Event	DI/O (With I/O Box)
Action	Start to record videos, Set DO status, Go to camera presets, Send HTTP requests, Send live streaming, Send email
<b>eMap</b>	
Source	Import Picture & Folder
Adjustment	Vertical Angle Adjustment
Marked	Add, Remove, Direction Control, PTZ Control, FOV Control, LiveView & Playback
Event Notification	Supported



## Technical Specifications

<b>PTZ</b>			
PTZ Control	Mouse Draw & Drag Control		
PTZ Operation	Direction Control, Home, Zoom, Focus, Preset, Patrol (Group), Tracking, Pan, Stop, Speed		
PTZ Operation Mode	Continuous Move		
<b>Export</b>			
Snapshot	PNG & JPEG		
Export File	3GP & EXE		
<b>Player</b>			
Layout	Single & Mutuple Layout Display		
Custom Layout	According to playback export layout configuration		
Playback Mode	Asynchronous & Synchronous		
Playback Control	Play, Rewind, Pause, Stop, Next/Previous Frame, 1/64X ~ 64X Speed Control		
Playback Timeline	Scale Adjustment Event Timeline Interval Display		
Snapshot	PNG & JPEG		
Export Video	3GP		
<b>Backup</b>			
Schedule	NAS (SMB & CIFS)		
<b>User Management</b>			
Authentication	Basic Account/Windows AD Account		
User Level	Administrator, Customized User		
User Control	Client Permission (LiveView, Playback, Setting) & Camera Permission		
<b>System</b>			
Date & Time	Sync PC		
Network	SMTP & HTTPS		
Language	Czech, English, French, German, Italian, Japanese, Persian, Portuguese, Russian, Spanish, Simplified Chinese, Traditional Chinese		
Diagnostic Service	Supported		
<b>Device Integration</b>			
VIVOTEK Network Camera	8000 & 9000 Series		
VIVOTEK NVR	ND Series (ND8321 excluded)		
VIVOTEK Software	VAST 2		
I/O Box	Advantech ADAM-6000 Series CHIYU CYT-133SC		
POS (Add-ons)	POSNET Lafresh Allsense (Implement in NVR, Searchable in VAST 2)		
<b>Camera Integration</b>			
Camera Insert	Manual & Search		
Basic Setting	User Name, Password & Camera Model Detection		
Connection Setting	Configuration Protocol: HTTP (Default) Streaming Protocol: TCP (Default)		
Video Setting	Video Stream, Codec, Resolution, Maximum frame rate, I-frame period, video quality, FPS, Maximum bit rate		
Image Setting	Time stamp, Video title, Video orientation, Mount type (fisheye only), Color, Power line-frequency		
Motion Detection Setting	VIVOTEK Network Cameras: 9000 Series		
ONVIF Core Spec	Version 2.2 or Above (By Project)		
ONVIF Stream	Video (H.264, MPEG4 & MJPEG) & Audio (G.711, One-way)		
ONVIF Control	PTZ Control (Up, Down, Left, Right & Zoom In/Out)		
ONVIF Discovery	Supported		
<b>VCA Solution</b>			
VCA for Surveillance	Line Crossing Detection, Loitering Detection, Field Detection		
VCA for Business Intelligence	People Counting		
<b>Advanced Features</b>			
VIVOTEK Exclusives	Seamless Recording Standard VCA Integration (Line Crossing & Loitering & Field Detection) VCA Counting		
<b>Add-ons**</b>			
Failover Solution	N x M System Structure		
Transportation Solution	Google Map and User-Defined Maps Support Vehicle GPS Tracking		
Transaction Solution	POS Terminal Integration (Series Port or Network) Transaction Data Live Printing Transaction Corresponding Video Search		
Integration Solution	TCP Trigger Receiver		

\*\* Advanced license is required. (Additional charge might apply.)

## System Requirements

### VAST 2 Server

Server (Recording Channels)	Up to 64-CH	Up to 128-CH	Up to 256-CH
CPU	4th Generation Intel® Core™ i3 Processors or above		4th Generation Intel® Core™ i5 Processors or above
RAM	4 GB or above	8 GB or above	8 GB or above
Hard Drive (Enterprise Model Only) Suggestion	1 Volume Group*	2 Volume Group*	4 Volume Group*
Recording Throughput	1 Volume Group: Max. 200 Mbps**		
Network Interface Card	1000/100/10 Ethernet***		

\* Volume group depends on total recording server throughput.

\*\* Maximum number bitrate of cameras not to go over total recording throughput.

\*\*\* Please consider the throughput of viewing, recording and server's network.

### VAST 2 LiveView & Playback

Client (Display Channels)	H.264, 720P, 2Mbps for Each Channel*	8-CH	16-CH	32-CH
	H.264, 1080P, 4Mbps for Each Channel**	6-CH	10-CH	18-CH
	H.265, 1080P, 4Mbps for Each Channel	3-CH	5-CH	9-CH
CPU		4th Generation Intel® Core™ i3 Processors	4th Generation Intel® Core™ i5 Processors	4th Generation Intel® Core™ i7 Processors
RAM		4 GB or above	4 GB or above	4 GB or above
Graphics Processing Unit (GPU)***		Support Direct3D acceleration with 1GB Video RAM		
Network Interface Card		1000/100/10 Ethernet		

\* Display requirements of a 3MP fisheye camera is equal to a 720P camera.

\*\* Display requirements of a 5MP fisheye camera is equal to a 1080P camera.

\*\*\* Please update to the latest version of GPU driver.

If installing Server & Client in the same PC, overall loading of the PC will be evaluated.

Trial for 60 days