



# Intelligent Video Search

# Next generation artificial intelligence search solution

Aicuda's Vaidio<sup>™</sup> productline utilizes deep learning algorithms to allow customers to identify animals, objects, persons and vehicles via an intelligent video search engine. Aicuda brings speed and adaptability to security while helping customers quickly analyze video data using artificial intelligence and deep learning technology. Search tasks through terabytes of video that took hours before can now be completed in seconds.

#### Vaidio 100 Series SMB

Intelligent appliance for small-and-medium sized video surveillance deployments. Reliable and easy to set up. It is the ideal solution for customers requiring a cost- effective solution. The Vaidio search engine is intuitive and based on easy-to-use natural language interface.



Vaidio VSB 110 / 130

# **O** Highlights

- Excellent value for an intelligent surveillance appliance
- Vaidio solutions are trained, not programmed
- Significant time and cost savings
- Out of the box solution
- 2 year warranty on hardware / 1 year software maintenance
- Supports all ONVIF devices

#### Ideal for:

• Small-sized installations: retail stores, clinics, classrooms, gas stations

### Simple configuration and management

The open architecture technology of the Vaidio Series makes it easy to integrate with 3rd party hard- and software products. Connect to surveillance cameras for live streaming or to NVR or DVR for playback. Meta data is extracted from video files and stored on the Vaidio appliance for fast video search and review.







## Vaidio 500 Series Enterprise

Intelligent appliance ideal for mid-sized as well as large-sized video surveillance installations. Reliable, cost-effective and easy to deploy and maintain. Powerful solution for the most demanding artificial intelligence tasks.

There are 4 enterprise models available. Vaidio VSB 510 is offered with a single NVIDIA 8GB High Performance GPU. Vaidio VSB 530 and 550 are equipped with a dual NVIDIA 8GB High Performance GPU. Vaidio VSB 570 is offered with a dual NVIDIA 16GB High Performance GPU.



# **Highlights**

- High-performance intelligent appliance
- Up to 128 channels
- Vaidio solutions are trained, not programmed
- Out of the box solution
- 2 year warranty on hardware / 1 year software maintenance
- Supports all ONVIF devices

#### Ideal for:

- Mid-sized installations: apartment complex, construction site, hotel, supermarket
- Large-sized installations: airports, banks, casinos, city surveillance, government, prisons, public facilities, schools, shopping centers, transportation, warehouses

Features						
Video Search	Support multi-camera video search (central search), 35+ object types, detect direction person / vehicle, object quantity search, crowd detection, (multi-) color search, supports multiple AI models, real-time alerts for any combination of object types + attributes, gun detection, fire and smoke detection, configurable minimum / maximum size of object for AI video search, Google like keyword search.					
Intrusion Detection	Real-time intrusion detection analytics, supports multiple Region Of Interest (ROI) configurations and alerts.					
Face Recognition	Face search. real-time and pre-configured face database recognition, real-time alert for blacklist / whitelist / unidentified (not in any list), estimate and display face similarities.					
License Plate Recognition	License plate recognition for 100+ countries, search and alert for vehicles of interest based on partial license plate, vehicle type and color, real-time alert for blacklist / whitelist /unidentified (not in any list, real time and preconfigured LPR and ANPR analytics.					
People Vehicle Counting	Supports people / vehicle counting, trigger alerts for abnormal activity like reverse movement, person falling / crouching, loitering, illegal parking, statistics on people / vehicle type, inbound versus outbound, occupancy.					
Analytics Configuration	Multi-camera search (central search), filter control (adjust sensitivity level + object type + motion detection) for live stream and video files, motion extra tag and track from a video, AI functions for edge device deployment, pre-trained AI models (no further training required after deployment.					
VMS Features	Case management, live view (video wall monitoring), research report and statistics, customized alert and action, VMS integration, real-time and on demand forensic use, hybrid / public cloud support.					
Video Analytics	Dwell heat map, map tracking through multiple cameras, map positioning for real time alerts, video synopsis (for rapid video search and review).					

# **Key Functions**







# **Deep Learning Technology**

Surveillance is a repetitive and mundane task. This may cause performance dips for human beings. Aicuda Technology is developing Al solutions based on deep learning to let the technology do the surveillance for us.

# **Customer pain points**

- Inability to perform object and person search in recorded video files from multiple sources like surveillance camera, internet or smartphone.
- Option for fast, real-time search for hundreds of object types is not available.
- Accidental elimination or overlooking of key video events due to human errors.
- High false alarm rates due to the inability to distinguish different object types in legacy sensor-based systems.
- Unavailability of an all-in-one solution that is able to support video search, face recognition, intrusion detection, license plate recognition and real time alerts with a high accuracy rate.

# Aicuda Vaidio benefits for the customer

Aicuda Vaidio video search is the industry's first artificial intelligence solution with a simple and easy user interface. The intelligent software eliminates the need to manually inspect hours of video for objects or persons of interest. The Vaidio series seamlessly transforms video into actionable intelligence.

#### • All-in-One Solution

Supports multiple functions like video search, face search and face recognition, fire detection, intrusion detection, license plate recognition and weapon detection.

#### • Ability to learn

Platform is able to learn from experience using a multi-layer neural network. It is trained to recognize items and patterns, not programmed.

#### • Intuitive, easy-to-use interface

Google-like search engine and intuitive result display based on easy-to-use natural language interface.

#### • Plug-and-play

Out of the box ready to use artificial intelligence solution with pretrained self learning artificial intelligence models.

#### Partner Proven

Fully compatible with ONVIF IP cameras like Axis, Bosch, Hanwha, Mobotix, Sony and others. Compatible with leading VMS, including Axxonsoft, Digifort, Genetec, ISS, Milestone, Qognify and others.

#### • Significant increase in productivity

Rapidly pinpoint persons and objects of interest. Review hours of video in minutes.







# **Product Specifications**

**Product Image** 

Model











VAIDIO VSB-570

Model Series						
	VAIDIO 100 series	VAIDIO 100 series	VAIDIO 500 series	VAIDIO 500 series	VAIDIO 500 series	VAIDIO 500 series
Video Search	Max. 13 channels	Max. 26 channels	Max. 26 channels	Max. 52 channels	Max. 52 channels	Max. 96 channels
Intrusion Detection	Max. 8 channels	Max. 16 channels	Max. 16 channels	Max. 32 channels	Max. 52 channels	Max. 64 channels
FR / FS	Max. 4 channels	Max. 8 channels	Max. 8 channels	Max. 16 channels	Max. 32 channels	Max. 32 channels
FR Database	1000 persons (5 faces per person)	1000 persons (5 faces per person)	10,000 persons (5 faces per person)	10,000 persons (5 faces per person)	10,000 persons (5 faces per person)	10,000 persons (5 faces per person)
Object Left Behind	Max. 4 channels	Max. 8 channels	Max. 8 channels	Max. 16 channels	Max. 32 channels	Max. 32 channels
AI PPE	Max. 8 channels	Max. 16 channels	Max. 16 channels	Max. 32 channels	Max. 52 channels	Max. 64 channels
Al People Count	Max. 2 channels	Max. 4 channels	Max. 4 channels	Max. 8 channels	Max. 16 channels	Max. 16 channels
Al Vehicle Count	Max. 2 channels	Max. 4 channels	Max. 4 channels	Max. 8 channels	Max. 16 channels	Max. 16 channels
Clustering	Yes	Yes	Yes	Yes	Yes	Yes
Form Factor	Tower-PC	Tower-PC	1U-Server	2U-Server	2U-Server	2U-Server
CPU	Intel Core i5	Intel Core i7	Intel Xeon	Dual Intel Xeon	Dual Intel Xeon	Dual Intel Xeon
AI GPU	NVIDA Performance GPU 4GB	NVIDA Performance GPU 8GB	NVIDA Performance GPU 8GB	NVIDA Performance Dual GPU 8GB	NVIDA Performance Dual GPU 8GB	NVIDA Performance Dual GPU 16GB
Al Storage	Include one 1TB HDD 1x 3.5" SATA III internal disk bay	Include one 2TB HDD 1x 3.5" SATA III internal disk bay	Include one 2TB HDD 2x 3.5" SATA III hot swap disk bay	HDD not included 6x 3.5" SATA III hot swap disk bay	HDD not included 6x 3.5" SATA III hot swap disk bay	HDD not included 6x 3.5" SATA III hot swap disk bay
Network	One Gigabit Ethernet	One Gigabit Ethernet	Dual Gigabit Ethernet	Dual Gigabit Ethernet	Dual Gigabit Ethernet	Dual Gigabit Ethernet
System HDD	240GB SSD	240GB SSD	480GB SSD	Dual 480GB SSD	Dual 480GB SSD	Dual 480GB SSD
Memory	8GB	16GB	16GB	32GB	64GB	64GB
RAID Support	No RAID Support	No RAID Support	RAID 0,1 Support	RAID 0,1,5,6 Support	RAID 0,1,5,6 Support	RAID 0,1,5,6 Support
HDD Support	1, 2, 4, 6, 8, 10, 12TB					
Stackable	Yes	Yes	Yes	Yes	Yes	Yes
Rack Mount	No	No	Yes	Yes	Yes	Yes
Video File Format	MP4,WMV,AVI, MOV,MPG	MP4,WMV,AVI, MOV,MPG	MP4,WMV,AVI, MOV,MPG	MP4,WMV,AVI, MOV,MPG	MP4,WMV,AVI, MOV,MPG	MP4,WMV,AVI, MOV,MPG
Supported codecs	H.264, H.265, MJPEG, MPEG1, MPEG2, MPEG4, VC1, VP8, VP9					
File-Based Ingestion	Multi File Videos or Single File Videos					
Warranty	2 years warranty HW 1 year SW maintenance					

For every camera channel with Aicuda Technology Video Analytics, Video Search is automatically included.
People Counting includes people counting, person reverse direction movement, person fall / crouch and loitering detection.
Vehicle Counting includes vehicle counting, vehicle reverse direction movement and illegal parking detection.

\* Design and specifications are subject to change without notice.



