

WebAccess/VCM

Video Core Module



Features

- WebAccess/VCM enables easy centralized management and deployment of video resources
- Selectable video analysis modules generate event and attribute data to help users develop upper-level intelligent security systems
- Powerful SDK integration for expansion to different application scenarios
- Information-gathering and video surveillance integration functionalities provide a complete intelligent monitoring solution for plant environments

Introduction

Advantech WebAccess/VCM is a video core module for intelligent monitoring systems. WebAccess/VCM can replace your existing DVR or NVR systems to provide a comprehensive security system with video analysis capability. This total solution includes an edge intelligence system that can generate event and attribute data via WebAccess/VCM SDK APIs. It can be easily integrated into a central control system such as Advantech's WebAccess/SCADA or other upper-level systems, thus providing a total solution.

WebAccess/VCM Solution Offering

- Supports monitoring of up to 32 channels (1080p)
- Simultaneous monitoring and intelligent video analysis
- Real-time status displays and prompt notifications for system recording, event, alarm, network connection, and backup status
- Powerful remote control function enables remote monitoring using Internet Explorer (IE) without additional software downloads
- Search and playback function supports video playback by time or event in addition to smart searching with visualization capability
- Provides a central management system (CMS) for 128-channel remote monitoring



Intelligent Video Analytics



Motion Detection
Monitors motion and issues alerts when abnormal activity is detected



Unauthorized Access Control
Intrusion detection and alarms for predefined forbidden zones



Anti-Tamper
Emits an alarm if a camera lens is covered, defocused, or repositioned



Optical Self-Diagnosis
Emits an alarm if optical misalignment or occlusion by debris is detected.

Video Management System Specifications

Monitoring	Status Displays	Prompt display and listing of system login/logout events, video loss, web/remote connections, as well as camera, storage space, backup, sensor, and digital output status.
	e-Map	e-Map shows the layout and location of video cameras, sensors, and alarms for complete device control
	Event Log	Real-time display of events and automatic refreshing of video event list with ViewLog
	Split Screen	Full screen, 1-, 4-, 9-, 10-, 13-, and 16-channel sequencer with configurable time intervals
	Camera Layout	Assignable name and adjustable font for each camera
	Quality Adjustment	Configurable color hue, contrast, brightness, and saturation for preview, recording, and playback
Recording	Resolution	Configurable recording resolutions based on the selected capture card and IP camera
	Compression Format	H.264
	Recording Mode	Supports cyclic, non-cyclic, event-triggered, and scheduled recording
	Recording Quality	Adjustable recording quality
	Recording Frame	Configurable frame rate for each camera and event
	Pre/Post Alarm Recording File Length	Configurable pre/post alarm recording time (default pre alarm: 10 s; default post alarm: 100 s) Specifiable recording duration/file length
Search and Playback	Playback Speed	Single frame, 1/16x, 1/8x, 1/4x, 1/2x, 1x, 2x, 4x, 8x, 16x, fast forward, and rewind
	Playback Mode	Supports simultaneous playback for up to four camera inputs
	Search Mode	Supports search by date, time, camera, and event
	Smart Search	Supports archive search for specific incidents
	Image Transfers	Images can be saved in BMP, JPG, and AVI format Can be programmed to save recordings at specific times/days or according to bookmarked record times
	Bookmark	Supports saving of multiple bookmarks to facilitate searching
Data Storage	Recording Time	Variable recording duration based on quality, resolution, mode, and activity Supports automatic continuous recording with overwrite capability
	Backup	Local: HDD Selectable/external: USB, HDD Supports scheduled and manual backup
	Storage Path	Configurable reservation of storage and paths for every camera input All storage paths can be configured for overwrite
Alarm Notification	Event Action Plans	Multiple action plans can be defined for specific events Event sources: motion detection, triggered sensor, video signal interruption, login failure, system abnormality, and backup disk capacity reached Event actions: Digital output, PTZ control, e-mail/SMS notification, video file recording, snapshot, alarm, video group playback, and program execution
	E-mail/Phone Notification	E-mail notification with attached recording or image for all triggered events E-mail/phone notification for multi-source events (with optional voice modem)
	PTZ Activation Sensor and Digital Output	Configurable sensor settings and digital output layout with schedulable recording Supports alarm setup with preset PTZ configurations
Network Control	IE Remote Control	Supports remote video, event list, and PTZ control viewing, as well as remote recording, playback, setting configuration, e-map management, and snapshot retrieval via IE Supports 1-, 4-, 9-, 10-, 13-, and 16-channel split-screen display
Operation	User Authorization	Multi-level password protection and an unlimited number of user accounts
	Authorization settings	Configurable camera user authorization and permissions (local and remote monitoring, playback, PTZ control, digital output and e-map control, number of network users, timed login, print/save function, account control, etc.)
	PTZ Control	Embedded PTZ control panel for enables PTZ function presets Supports most popular PTZ protocols
	Dynamic IP Support	Built-in web server with dynamic IP support
	Miscellaneous	Language Support: English, Traditional Chinese, Simplified Chinese Windows lockup, auto DVR login

WebAccess/VCM Minimum Requirements

OS	Windows 7 (32/64 bit) / Embedded 7 (32/64 bit) / WIN10 (32 bit)
CPU	CPU Intel® i3 (3.4 GHz)
RAM	RAM 4 GB
Hard Disk	250 GB (dependent on file sizes)
VGA	1 GB with DirectX 9 support

- No dual-monitor support for onboard VGA
- For triple-monitor configurations, use two PCIe graphics cards

Hardware Recommendations

Product	Performance	CPU/RAM
AiMC-3200VS	16 channels	Intel® Gen 3 Core i5 (3.0 GHz) / 4 GB SDRAM
ACP-4000VS	32 channels	Intel® Core i7 (Ivy) / 4 GB SDRAM