# Intelligent Video Transportation

**Optimizing On-Road Traffic Management** 

WebAccess/IVS
Intelligent City Traffic Management
TrafficAccess VDS
TrafficAccess IDS

# andillitum







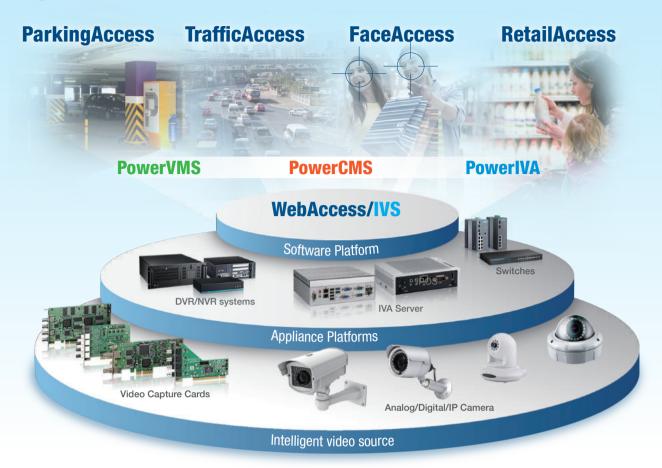
**Enabling an Intelligent Planet** 



IoT Solutions Alliance Premier

www.advantech.com

# **Intelligent Video Software Platform**



# **Intelligent Video Analytics (IVA)**



Motion Detection Monitoring the amount of motion and alert when



**Object Counting** Counting of individuals and / or vehicles. For separated moving objects

something changes



**Face Detection** Applied to retail, finance, and hospitality usage. Identify by age and gender





**Dwell Time & Loitering** 

Calculates people passing through

certain area. Counting by faces

People Counting







Camera Tamper

Crowd density status of people

Trigger alarms when the camera





Facial Recognition Scan crowds and automatically identify people by their faces that help match faces in a crowd with names on a watch list



**Optical Self Diagnostic** Trigger alarm when optical misalignment, debris collects on the lens



**Parking Vacancy** Detect the defined parking space is occupied or not by scene analysis



License Plate Recognition Detects and recognizes vehicle license plates upon motion or I/O trigger. Automatically locate and match vehicle plates against wanted lists

## **AD\ANTECH** WebAccess/IVS



Flexible Event Action Plan

 Flexible event action plans including alarm signal, snapshot, email/SMS notification, PTZ control, video record,





**Quick Search for Event Logs** 

 Quick search for event loas including loain status, remote connection status, system events, camera status, motion/sensor

detection, and more, Users can print out or save the event logs into excel or HTML files.



#### Multiple Backup Mode

- Rackup recorded data to hard disk Disk Array and USB without stopping video recording.
- Flexible selection of backup time, camera
- Automatically calculate storage space required for backing up recorded data.



#### Flexible and Diverse **Recording Modes**

 Supports diverse recording modes and schedules for each individual camera



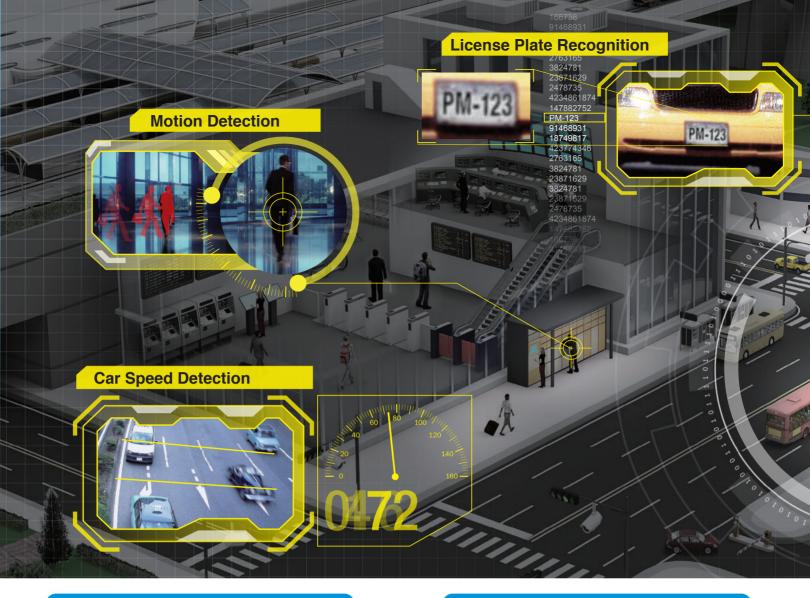
#### Powerful IE Browser Monitoring

 Monitor historical recorded video data and remote control for live view video, set up, and client system status monitoring through IE browser









#### **Electronic Toll Collection**



In the evolution from manual to electronic toll collection (ETC), IVA technology plays a key role to automatically analyze the video, decreasing workforce requirements as well as assuring traffic flow on highway.



### ARK-RI2150L

- Intel Core i7 (Ivy)
- 64GB mSATA
- RFID Receiver Module (Option)
- 4CH 1080p/120FPS
- WebAccess+IVS with LPR IVA\*
- RFID Receiver SDK



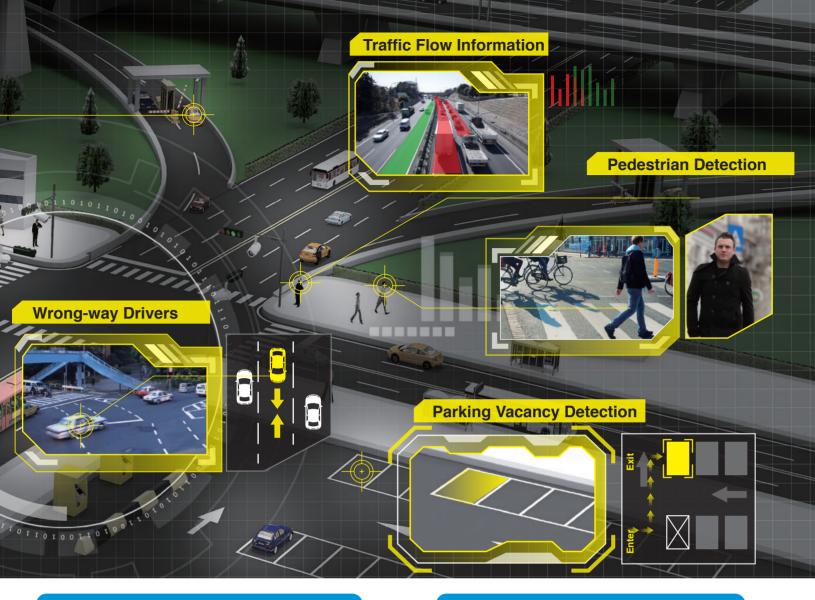


In Real-time Traffic Information Display System, Advantech's new video platform with Intelligent Video Analytic Technology enables real-time response and brings the system from purely data collection and delivery to a whole new level.



### ITA-3630VD

- Intel Core i5 (Ivy)
- 32GB mSATA
- 4CH 1080p/120FPS
- 1CH with 4 Lands Detection
- Traffic Flow
- Vehicle Classification
- Car Speed Detection
- Occupancy



## **Traffic Management Surveillance System**



Traffic management surveillance System with intelligent video solutions improves the traffic monitoring system by automating video analysis and security alerts.

## **Intelligent Parking**



An intelligent parking management solution can automatically recognize vehicle license plates, detect parking vacancy, assign available parking slot, and can also enable Intelligent vehicle search function to assist users efficiently.



### ARK-5420ID

- Intel Core i5 (Ivy)
- 32 GB mSATA
- BNC/SDI Capture Card
- 8 CH 720P/240FPS
- Pedestrian Detection
- Fallen Objects
- Wrong-way Drivers
- Traffic Congestion



#### **ACP-4000VS**

- Intel Core i7 (Ivy)
- 32GB SSD 3TB 3.5" HDD
- 16 CH 1080P/160FPS
- WebAccess+IVS
- LPR IVA\*
- Parking Vacancy Detection IVA

# **TrafficAccess VDS (Vehicle Detection System)**

Contemporary management of urban traffic is becoming increasingly complex as traffic congestion continues to rise worldwide. In order to measure traffic in real time and provide useful road statistics, obtaining reliable data is essential. TrafficAccess VDS is an intelligent video analysis system for collecting traffic information, such as vehicle counts, classifications, occupancy, and average speed, by using specific vehicle detection technology.

#### Typical applications include:

- Real time traffic data collection
- Loop emulation applications
- Traffic studies and monitoring
- Level of traffic assessment



#### **Available Models**

#### ARK-1123HVD 1CH IP CAM / 4 Lands







Input Resolution	D1, 1280x 720, 1920x1080		
Maximum Detection Lane per Camera	4 (Height of camera position > 6 Meters)		
IVA Function SPEC	Traffic flow ≈ 95% Vehicle classifications≈ 85%±10% Average speed ≈ 85%±10% Occupancy ≈ 90%±5%		
Connection Protocol	RS-232/RS-485/GPIO/TCPIP		

# **TrafficAccess IDS (Incident Detection System)**



# continue to rise. TrafficAccess IDS is a video-based incident detection system that uses existing cameras to identify incidents and accidents on roadways and rapidly notify traffic control centers.

As the world's population grows, traffic congestion and accidents

The TrafficAccess IDS system emits a notification alarm (audio and visual) immediately after an incident has occurred (within seconds), even before the consequences of an incident can be observed using traditional monitoring methods.

Input Resolution	D1, 1280x 720, 1920x1080	
IVA Functions SPEC	Pedestrian Detection Fallen objects Wrong-way drivers Fire and smoke Vehicles changing lane Stopped vehicles	
Event Trigger I/O	Level 0 – 10 Trigger out: GPIO, TCP/IP	
Connection Protocol	RS-232/RS-485/GPIO/TCPIP	

**Available Models** 



ARK-5420ID 8CH IVA



### **Regional Service & Customization Centers**

China	Taiwan	Netherlands	Poland	USA	
Kunshan	Taipei	Eindhoven	Warsaw	Milpitas, CA	
86-512-5777-5666	886-2-2792-7818	31-40-267-7000	00800-2426-8080	1-408-519-3898	

### Worldwide Offices

<b>Greater Ch</b>	nina	Asia Pacifi	C	Europe		Americas	
China		Japan		Germany		North America	
Toll Free	800-810-0345	Toll Free	0800-500-1055	Toll Free	00800-2426-8080	Toll Free	1-888-576-9668
Beijing	86-10-6298-4346	Tokyo	81-3-6802-1021	Munich	49-89-12599-0	Cincinnati	1-513-742-8895
Shanghai	86-21-3632-1616	Osaka	81-3-6802-1021	Düsseldorf	49-2103-97-855-0	Milpitas	1-408-519-3898
Shenzhen	86-755-8212-4222	16				Irvine	1-949-420-2500
Chengdu	86-28-8545-0198	Korea		France			
Hong Kong	852-2720-5118	Toll Free	080-363-9494	Paris	33-1-4119-4666	Brazil	
Taiwan		Seoul	82-2-3663-9494			Toll Free	0800-770-5355
Toll Free	0800-777-111	Singapore		Italy		São Paulo	55-11-5592-5355
Neihu	886-2-2792-7818	- ·	05 0440 4000	Milano	39-02-9544-961		
Xindian	886-2-2218-4567	Singapore	65-6442-1000			Mexico	
Taichung	886-4-2329-0371			Benelux & Nordics		Toll Free	1-800-467-2415
Kaohsiung	886-7-229-3600	Malaysia		Breda	31-76-523-3100	Mexico City	52-55-6275-2727
rtaoriorarig		Kuala Lumpur	60-3-7725-4188				
		Penang	60-4-537-9188	UK			
		Thailand		Reading	44-0-118-929-4540		
				Newcastle	44-0-191-262-4844		
		Bangkok	66-2-248-3140	London	44-0-870-493-1433		
		India		Poland			
		Bangalore	91-80-2545-0206	Warsaw	48-22-31-51-100		
		Pune	91-20-3948-2075				
				Russia			
		Indonesia		Moscow	8-800-555-01-50		
		Jakarta	62-21-751-1939	St. Petersburg	8-800-555-81-20		
		Australia					
		Toll Free	1300-308-531				
		Melbourne	61-3-9797-0100				
		Sydney	61-2-9476-9300				



**Enabling an Intelligent Planet** 

#### www.advantech.com

Please verify specifications before quoting. This guide is intended for reference purposes only. All product specifications are subject to change without notice. No part of this publication may be reproduced in any form or by any means, electronic, photocopying, recording or otherwise, without prior written permission of the publisher. All brand and product names are trademarks or registered trademarks of their respective companies. © Advantech Co., Ltd. 2015