Intelligent Video Software Platform

Intelligent Video Analytics (IVA)

- **Motion Detection**: Monitoring the amount of motion and alert when something changes.
- **Forbidden Zone**: Alarms when intrusions occur in one or more predefined forbidden zones.
- **Object Counting**: Counting of individuals and/or vehicles. For separated moving objects.
- **Dwell Time & Loitering**: Ensure environment safety for tracking anyone suspicious.
- **People Counting**: Calculates people passing through certain area. Counting by faces.
- **Face Detection**: Applied to retail, finance, and hospitality usage. Identify by age and gender.
- **Camera Tamper**: Trigger alarms when the camera lens are covered, sprayed, defocused, or the camera is repositioned.
- **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.
- **Crowd Detection**: Crowd density status of people in specific region can be detected as over capacity indicator.
- **Facial Recognition**: Scan crowds and automatically identify people by their faces that help match faces in a crowd with names on a watch list.

**WebAccess/IVS**

- **Flexible Event Action Plan**: Flexible event action plans including alarm signal, snapshot, email/SMS notification, FTP control, video record, file execution and more.
- **Quick Search for Event Logs**: Quick search for event logs including login status, remote connection status, system events, camera status, motion/sensor detection, and more.
- **Multiple Backup Mode**: Backup recorded data to hard disk, Disk Array and USB without stopping video recording. Flexible selection of backup time, camera and storage location. 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.
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.

**Electronic Toll Collection**

**ARK-RI2150L**
- Intel Core i7 (Ivy)
- 64GB mSATA
- RFID Receiver Module (Option)
- 4CH 1080p/120FPS
- WebAccess+iVS with LPR IVA*
- RFID Receiver SDK

* LPR IVA currently supports China, Malaysia, Taiwan only

**Traffic Information System**

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 Flow Information

Pedestrian Detection

Wrong-way Drivers

Parking Vacancy Detection

Traffic Management Surveillance System

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

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

TrafficAccess IDS (Incident Detection System)

As the world’s population grows, traffic congestion and accidents 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.

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.

Available Models

TrafficAccess VDS

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARK-1123HVD</td>
<td>1CH IP CAM / 4 Lands</td>
</tr>
<tr>
<td>ITA-3630VD</td>
<td>4CH IP CAM / 16 Lands</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Input Resolution</th>
<th>D1, 1280x 720, 1920x1080</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Detection Lane per Camera</td>
<td>4 (Height of camera position &gt; 6 Meters)</td>
</tr>
</tbody>
</table>
| 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

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARK-2121SID</td>
<td>4CH IVA</td>
</tr>
<tr>
<td>ARK-5420ID</td>
<td>8CH IVA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Input Resolution</th>
<th>D1, 1280x 720, 1920x1080</th>
</tr>
</thead>
</table>
| IVA Functions SPEC | Pedestrian Detection  
                          Fallen objects  
                          Wrong-way drivers  
                          Traffic congestion  
                          Fire and smoke  
                          Over speed/under speed  
                          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 |
# Regional Service & Customization Centers

<table>
<thead>
<tr>
<th>China</th>
<th>Taiwan</th>
<th>Netherlands</th>
<th>Poland</th>
<th>USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kunshan</td>
<td>Taipei</td>
<td>Eindhoven</td>
<td>Warsaw</td>
<td>Milpitas, CA</td>
</tr>
</tbody>
</table>

## Worldwide Offices

### Greater China
- **China**
  - Toll Free: 800-810-0345
  - Beijing: 86-10-6298-4346
  - Shanghai: 86-21-3632-1616
  - Shenzhen: 86-755-8212-4222
  - Chengdu: 86-28-8545-0198
  - Hong Kong: 852-2720-5118
- **Taiwan**
  - Toll Free: 0800-777-111
  - Neihu: 886-2-2792-7819
  - Xindian: 886-2-2218-4567
  - Taichung: 886-4-2329-0371
  - Kaohsiung: 886-7-229-3600

### Asia Pacific
- **Japan**
  - Toll Free: 0800-500-1055
  - Tokyo: 81-3-6802-1021
  - Osaka: 81-3-6802-1021
- **Korea**
  - Toll Free: 080-383-9494
  - Seoul: 82-2-3663-9494
- **Singapore**
  - Singapore: 65-6442-1000
- **Malaysia**
  - Kuala Lumpur: 60-3-7725-4188
  - Penang: 60-4-537-9188
- **Thailand**
  - Bangkok: 66-2-248-3140
- **India**
  - Bangalore: 91-80-2545-0206
  - Pune: 91-20-3948-2075
- **Indonesia**
  - Jakarta: 62-21-751-1039
- **Australia**
  - Toll Free: 1300-306-531
  - Melbourne: 61-3-9797-0100
  - Sydney: 61-2-9476-9300

### Europe
- **Germany**
  - Toll Free: 00800-2426-8080
  - Munich: 49-89-12599-0
  - Düsseldorf: 49-2103-97-855-0
- **France**
  - Paris: 33-1-4119-4666
- **Italy**
  - Milano: 39-02-9544-961

### Benelux & Nordics
- **Breda**: 31-76-523-3100

### Americas
- **North America**
  - Toll Free: 1-888-576-9668
  - Cincinnati: 1-513-742-8895
  - Milpitas: 1-408-519-3898
  - Irvine: 1-949-420-2500
- **Brazil**
  - Toll Free: 0800-770-5355
  - São Paulo: 55-11-5952-5355
- **Mexico**
  - Toll Free: 1-800-467-2415
  - Mexico City: 52-55-6275-2727

### Other Regions
- **Japan**
  - Toll Free: 0800-500-1055
  - Tokyo: 81-3-6802-1021
  - Osaka: 81-3-6802-1021
- **Singapore**
  - Toll Free: 65-6442-1000
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  - Melbourne: 61-3-9797-0100
  - Sydney: 61-2-9476-9300
- **UK**
  - Reading: 44-0-118-929-4540
  - Newcastle: 44-0-191-262-4844
  - London: 44-0-870-493-1433
- **Poland**
  - Warsaw: 48-22-31-51-100
- **Russia**
  - Moscow: 8-800-555-01-50
  - St. Petersburg: 8-800-555-81-20