



M.S.I.K
مبین صنعت ایمن کاران

AVer

P series NVRs and hybrid NVRs

Release department: iRetail PMK | AVer Information Inc. | www.aver.com | 2014-10



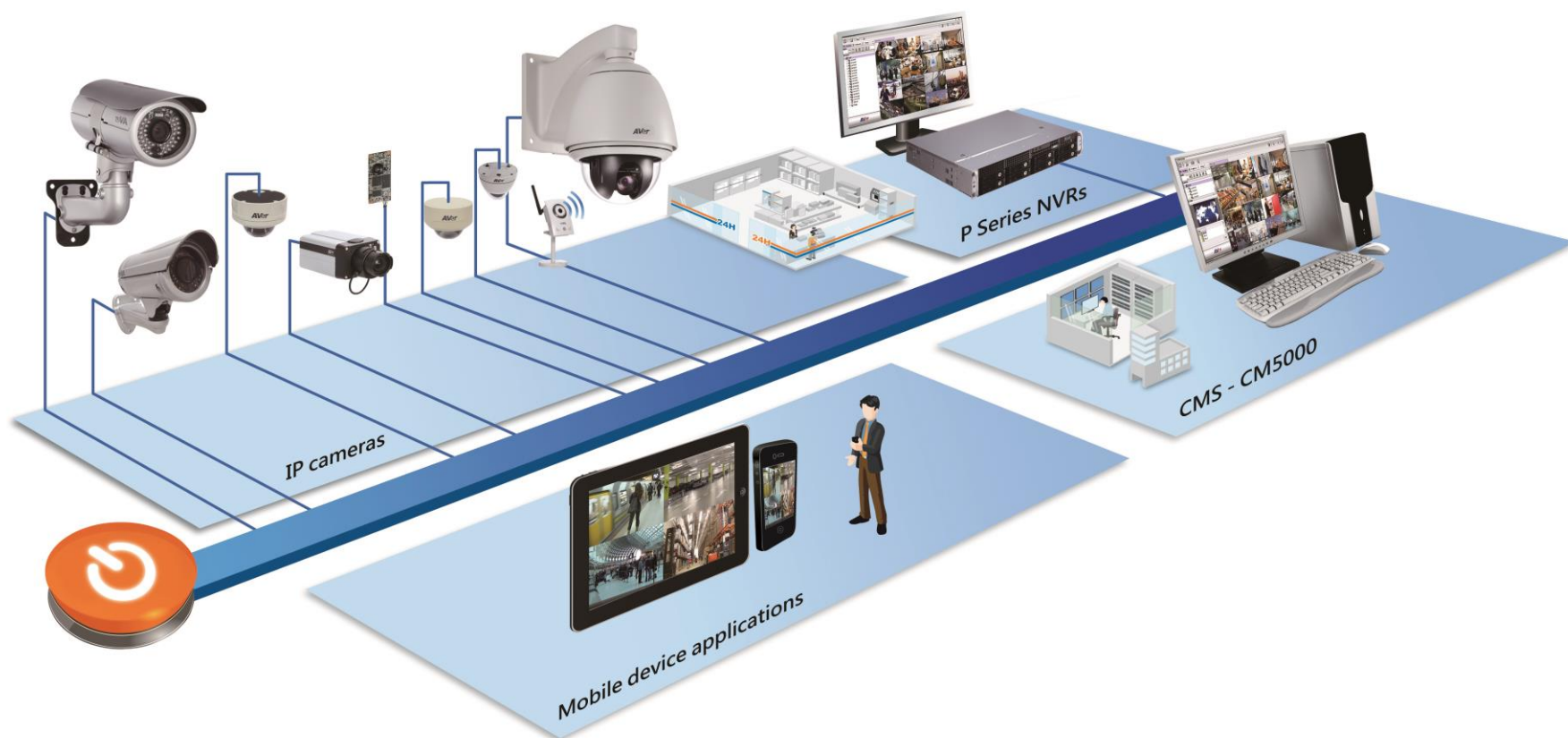
External - all



Reliable performance

Optimized bandwidth & storage

Easy setup



New-generation HD IP surveillance



Why P series?



**POS/ATM
integration**

**Seamless
integration**
with AVer IP cameras



High Performance
Real-time preview
Excellent throughput

**Easy to install
and operate**



AVer P5036-R



NVR

- Supports up to **36CH IP cameras**
- 10 HDD trays with internal RAID support (levels 0, 1, 5 & 10) (8 removable)
- **iSCSI support** for extended hard disk or RAID support
- **Embedded Linux operating system** using a CPU Intel® Processor offering excellent reliability
- Excellent recording performance with up to 256 Mbps (input & output) throughput rate
- Our visual search function allows the data to be found within 45 seconds



Full range of NVRs



iPOS
integration



Optimized
Recording
Mode



Visual
Search



AVer P5036-16-R



Hybrid NVR

- Supports up to 36 CH with a **maximum of 16 analog**
- 10 HDD trays with internal RAID support (levels 0,1, 5 & 10) (8 removable)
- **iSCSI support** for extended hard disk
- **Embedded Linux operating system** using a CPU Intel® Processor offering excellent reliability
- Excellent recording performance with up to 256 Mbps (input & output) throughput rate
- Our visual search function allows the data to be found within 45 seconds

ONVIF

Full HD
1080

HDMI



Hybrid

Full range of Hybrid NVRs



iPOS
integration



Optimized
Recording
Mode



Visual
Search

AVer

Decoding capability - preview



- **Unlimited megapixels** with AVer IP cameras
- **72 megapixels** for 3rd party ONVIF-compliant IP cameras
up to **5** megapixels per channel
- **Real-time** preview guaranteed for AVer IP cameras^{*}



^{*}≤2 megapixels display per channel



Recording capability



High throughput performance guarantees reliable recording



Recording capability of
36 cameras = up to
256 Mbps

- Multiple streams from each IP camera
- Total 36 cameras at the same time



Storage capacity



internal

supports **10 SATA** HDDs (6TB)

- 8 removable HDD trays+2 internal HDDs
- RAID level 0,1, 5, 10 support



external

iSCSI support (1 target, 4 LUN each supporting 16TB)

total

124TB* for the system

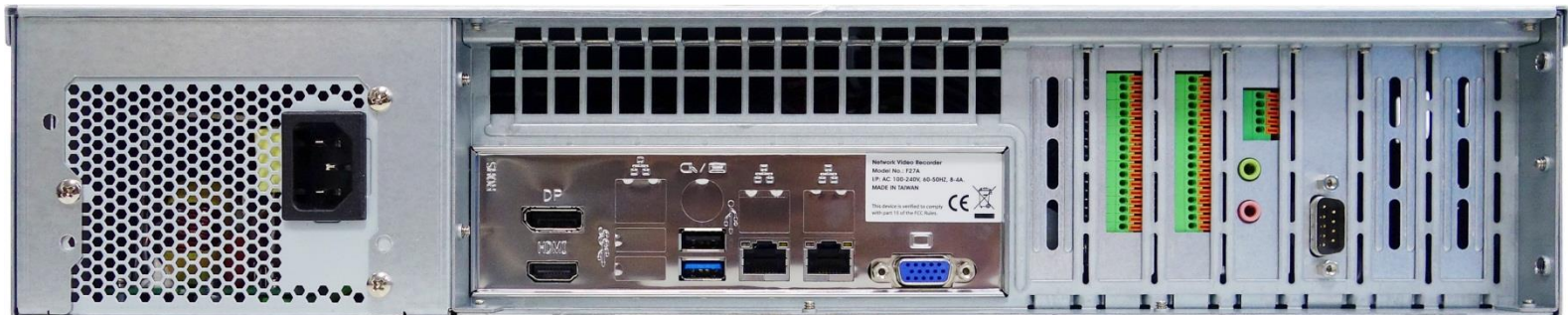
$$*(10 \times 6) + (16 \times 4) = 124$$

Multiple outputs



2 different output interface suitable for different applications

- HDMI & VGA



- HDMI and VGA can be used for dual-monitor mode

Intuitive user interface

Easy to install & operate



Add IP cameras with ease

2 steps to add IP cameras and use copy function to create more

enter IP Address and model name related information

apply the settings

easily copy IP camera settings to another channel

No.	Type	IP Address	Protocol	Model	Status	fps	Bitrate	Details
1	IP	192.168.0.11	AVer	FB3028-RTM	Connected	0	138 Kb	Settings
2	IP	192.168.0.12	AVer	FB2027-3	Connected	5	443 Kb	Settings
3	IP	192.168.0.13	AVer	SF2121H-R	Connected	4	409 Kb	Settings
4	IP	192.168.0.14	AVer	SF2121H-R	Connected	13	933 Kb	Settings
5	IP	192.168.0.15	AVer	SF2121H-R	Connected	19	1417 Kb	Settings
6	IP	192.168.0.16	AVer	SF2121H-R	Connected	21	1493 Kb	Settings
7	IP	192.168.0.17	AVer	SF2121H-R	Connected	4	416 Kb	Settings
8	IP	192.168.0.18	AVer	SF2121H-R	Connected	16	1074 Kb	Settings
9	IP	192.168.0.19	AVer	SF2121H-R	Connected	0	211 Kb	Settings
10	IP	192.168.0.20	AVer	SF2121H-R	Connected	1	484 Kb	Settings
11	IP	192.168.0.21	AVer	SF2121H-R	Connected	4	427 Kb	Settings
12	IP	192.168.0.22	AVer	SF2121H-R	Connected	4	434 Kb	Settings
13	IP	192.168.0.23	AVer	SF2121H-R	Connected	8	715 Kb	Settings
14	IP	192.168.0.24	AVer	SF2121H-R	Connected	1	171 Kb	Settings
15	IP	192.168.0.25	AVer	SF2121H-R	Connected	4	370 Kb	Settings

No.	IP Address	Port	Protocol	Model
58	192.168.0.11	80	AVer	FB3028-RTM
77	192.168.0.12	80	AVer	FB2027-3
83	192.168.0.13	80	AVer	SF2121H-R
56	192.168.0.14	80	AVer	SF2121H-R
80	192.168.0.15	80	AVer	SF2121H-R
57	192.168.0.16	80	AVer	SF2121H-R
84	192.168.0.17	80	AVer	SF2121H-R
73	192.168.0.18	80	AVer	SF2121H-R

Active IP support

- The Active IP function allows users to directly configure the AVer IP camera series.
- No need to use any additional software.

click Search button
to find IP cameras
on LAN network

No.	Type	IP Address	Protocol	Model	Status	FPS	Bitrate	Detail
1	IP	192.168.201.75	AVer	SF2121H-R	Connected	28	375269	Setting
2	IP	192.168.201.76	AVer	SF2121H-R	Connected	24	692674	Setting
3	IP	192.168.201.77	AVer	SF2121H-R	Connected	26	695768	Setting
4	IP	192.168.201.78	AVer	SF2121H-R	Connected	27	757925	Setting
5	IP	192.168.201.79	AVer	SF2121H-R	Connected	27	652433	Setting
6	IP	192.168.201.80	AVer	SF2121H-R	Connected	27	714705	Setting
7	IP	192.168.201.81	AVer	SF2121H-R	Connected	26	713307	Setting
8	IP	192.168.201.82	AVer	SF2121H-R	Connected	21	505969	Setting
9	IP	192.168.201.83	AVer	SF2121H-R	Connected	28	722127	Setting
10	IP	192.168.201.84	AVer	SF2121H-R	Connected	28	728386	Setting
11	IP	192.168.201.85	AVer	SF2121H-R	Connected	22	518984	Setting
12	IP	192.168.201.86	AVer	SF2121H-R	Connected	28	749014	Setting
13	IP	192.168.201.87	AVer	SF2121H-R	Connected	28	749344	Setting
14	IP	192.168.201.88	AVer	SF2121H-R	Connected	28	711236	Setting
15	IP	192.168.201.89	AVer	SF2121H-DVR	Connected	27	346219	Setting
16	IP	192.168.1.123	AVer	SF1311H-DV	Connected	16	51794	Setting

Capacity: Used(MP) 4.92 / Available(MP) 28.28

Camera Information:
Name: 84
IP Address: 192.168.201.84
Port: 80
Protocol: AVer
Model: SF2121H-R
Video Channel: 1
User Name: admin
Password: ***
Add to Camera: 10
Apply Cancel

Active IP

AVer IP Setting
☐ Use the following IP address
☐ Obtain an IP automatically (DHCP)

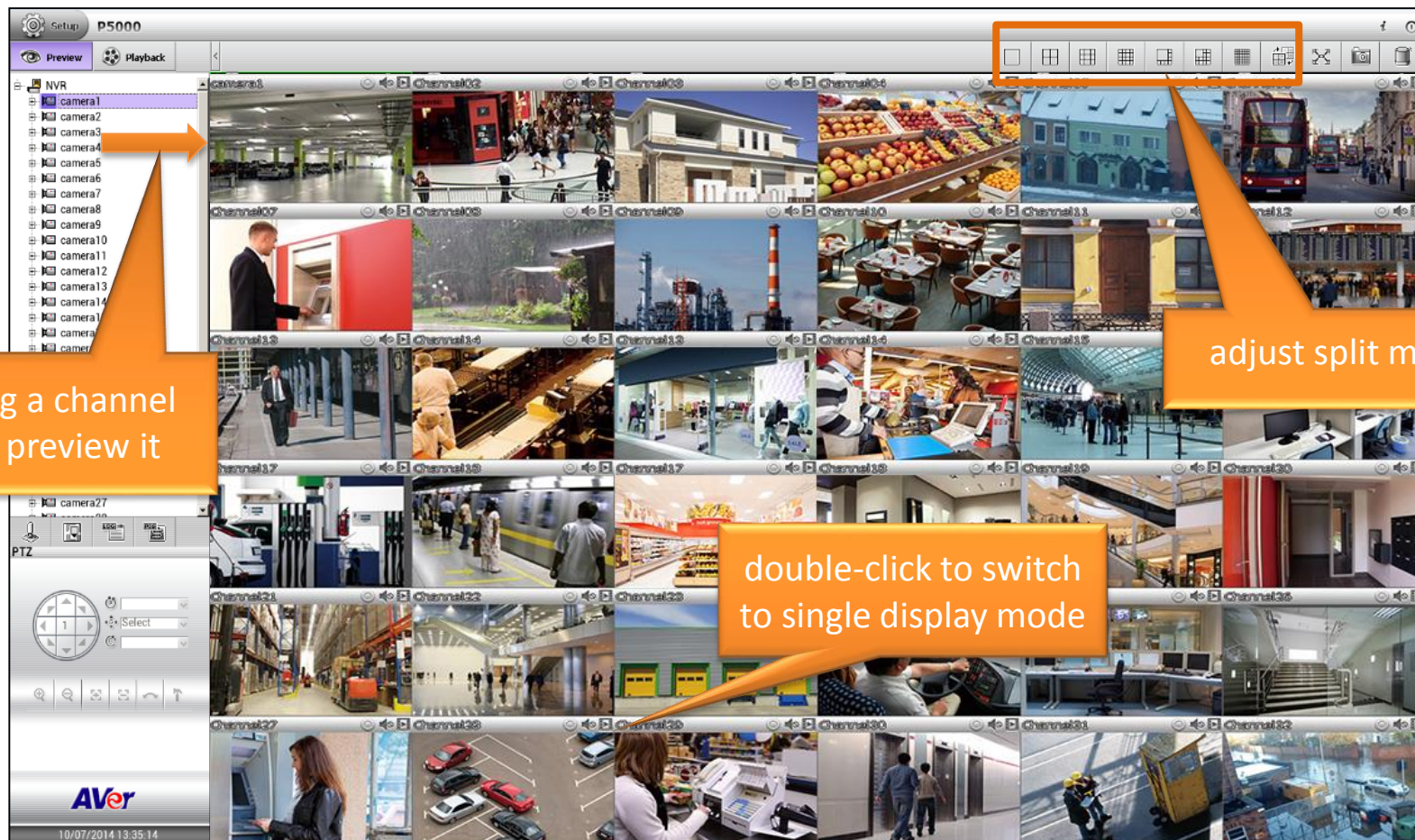
IP Information
IP: 10.100.102.48
Mask: 255.255.255.0
Gateway: 10.100.102.254
Port: 80
User ID:
Password:

Local IP Information
IP: 192.168.111.111
Mask: 255.255.255.0
Gateway: 192.168.111.254

OK Cancel

Flexible preview modes

Available splits: Single, Quad, 8-split, 9-split, Full Screen, AutoScan
Additional splits (16CH models): 13-split, 16-split



Multiple operation modes

Operate PTZ, E-Map, Event Log Viewer, POS Log Viewer and Alarm Log Viewer functions without closing preview mode

Alarm Log Viewer

The screenshot displays the AVer P5000 software interface. On the left, a sidebar lists 27 cameras. The main area shows a grid of 27 camera preview windows. Overlaid on this are two windows: the 'Event Log Viewer' and the 'POS Log Viewer'. The 'Event Log Viewer' window shows search criteria and a table of events. The 'POS Log Viewer' window shows search conditions and a search button. An orange arrow points from the 'POS Log Viewer' window to the 'Event Log Viewer' window. An orange callout box with an arrow points to the 'Event Log Viewer' window, stating 'event logs are popped up on preview screen'.

Search Condition

Type: All

Start Date/Time: 2013/07/15 16:31:36

End Date/Time: 2013/07/21 16:31:36

Keyword:

Search

Search Result

No. /	Camera	Type	Time	Event
11 / 12	12	Event	2013/07/17 17:43:29	Video Loss
12 / 13	13	Event	2013/07/17 17:43:45	Video Loss
13 / 01	01	Event	2013/07/17 17:43:56	Video Loss
14		Operation	2013/07/17 17:45:35	Enter playback
15		Operation	2013/07/17 17:57:53	Enter playback
16		Operation	2013/07/17 18:04:32	Enter playback
17		Operation	2013/07/17 18:06:40	Enter playback
18		Operation	2013/07/18 10:13:21	Enter playback
19		Operation	2013/07/18 10:20:47	Enter playback
20		Operation	2013/07/18 10:23:50	Enter playback

Search Conditions

Camera:

Select:

Start Date/Time: 2014/10/05 11:45:27

End Date/Time: 2014/10/06 11:45:27

Keyword:

☐ Match All Words

Search

AVer

10/07/2014 13:49:46

PTZ/E-Map/Even Log Viewer/POS Log Viewer

AVer

Quick search

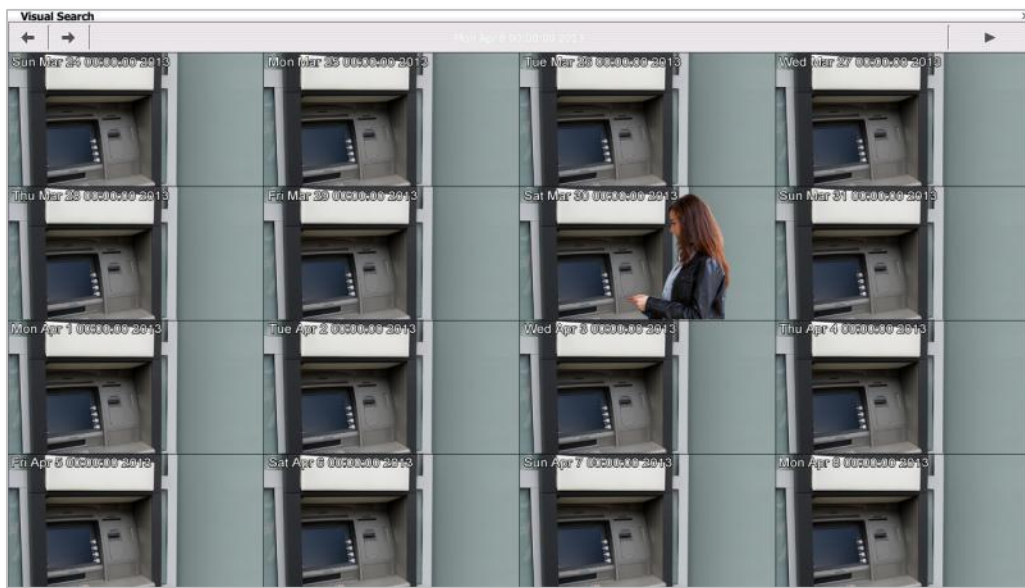
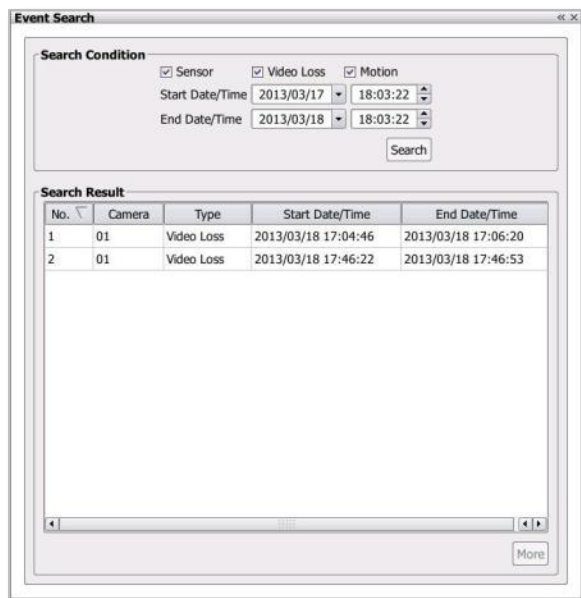


- **Event search**

Smart search of recorded footage by date, time and different conditions, e.g. sensors, motion, video loss and POS.

- **Visual search**

Show **video snapshots** by days, hours, minutes, and seconds



Schedule recording smartly



5 recording modes

- **Always recording**
- **Optimized Recording Mode**
- **Event recording:** records from selected cameras, when the system detects movement (with AVer IP cameras only)
- **Smart recording:** records when motion is detected; if no motion, it records at key frame only (with AVer IP cameras only)
- **No recording**

Easy schedule management

- Apply the record schedule to other or all camera channels

A screenshot of the 'Alarm 1' configuration window in a software interface. The window has two tabs: 'Conditions' (selected) and 'Actions'. Under 'Conditions', there is a table with columns 'No.', 'Name', and 'Description'. The first row shows '0', 'alarm 1', and an empty description. Below this is a 'Trigger Type' section with two radio buttons: 'Trigger if Any' (selected) and 'Trigger if All'. The 'Camera' section contains three sub-sections: 'Motion', 'Video Loss', and 'IVA', each with a 2x18 grid of checkboxes and a 'Settings' button. The 'Sensor' section has 'High' and 'Low' sections, each with an 8-column grid of checkboxes, and an 'IP Camera Sensor' button. The 'System' section has three checkboxes: 'Restart', 'Abnormal Restart', and 'Hard disk failed.'. At the bottom, there is a 'Continuous Trigger Duration' field set to '0' seconds, and 'Apply' and 'Cancel' buttons.

Alarm 1

Conditions Actions

No.	Name	Description
0	alarm 1	

Trigger Type ☒ Trigger if Any ☐ Trigger if All

Camera

Motion Settings

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36

Video Loss Settings

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36

IVA Settings

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36

Sensor

High

01	02	03	04	05	06	07	08
----	----	----	----	----	----	----	----

Low

01	02	03	04	05	06	07	08
----	----	----	----	----	----	----	----

IP Camera Sensor

Continuous Trigger Duration 0 Seconds

System

☐ Restart

☐ Abnormal Restart

☐ Hard disk failed.

Apply Cancel

Smart backup for multiple files



User can backup up to **3** recorded files at the same time by selecting different channels and different time period.

The screenshot shows a 'Backup' window with three distinct backup configuration sections. Each section includes a grid of checkboxes for selecting channels (01-36) and a time range selector.

- Section 1:**
 - ☐ All
 - Channels: 04, 25, 27 are selected.
 - Start Date/Time: 2014/10/02 14:08:18
 - End Date/Time: 2014/10/13 14:08:18
- Section 2:**
 - ☐ All
 - Channels: 04, 05, 07, 08 are selected.
 - Start Date/Time: 2014/10/06 14:08:18
 - End Date/Time: 2014/10/13 14:08:18
- Section 3:**
 - ☐ All
 - Channels: 10, 26, 32 are selected.
 - Start Date/Time: 2014/10/13 14:08:18
 - End Date/Time: 2014/10/13 14:08:18

At the bottom of the window, there are additional options:

- ☐ Include Player when doing Backup
- Backup Files Size: [text field] [Calculate Size]
- Backup Path: [dropdown menu] [Rescan Device]
- Folder Name: [text field]

Buttons for [Print] and [OK] are located at the bottom right.

Complete alarm actions

Offers **different types of alarms to perform**: Launch E-Map, Spot Monitor, Enlarge Camera View, Relay Output, IP Camera Relay, Play Warning Sound, Send E-Mail, File Transmission via FTP, PTZ Preset Point . In addition, users can also set and receive triggers from IP cameras.

The 'Alarm 1' configuration window, 'Conditions' tab, shows settings for triggering an alarm. It includes fields for 'No.' (0), 'Name' (alarm 1), and 'Description'. The 'Trigger Type' is set to 'Trigger if Any'. Under the 'Camera' section, 'Motion' is selected with a 36-hour grid. 'Video Loss' and 'IVA' also have 36-hour grids. The 'Sensor' section has 'High' and 'Low' triggers with 8-hour grids, and 'IP Camera Sensor' is selected. The 'System' section has checkboxes for 'Restart', 'Abnormal Restart', and 'Hard disk failed.'. 'Continuous Trigger Duration' is set to 0 seconds. 'Apply' and 'Cancel' buttons are at the bottom.

Motion																																			
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36

Video Loss																																			
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36

IVA																																			
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36

High							
01	02	03	04	05	06	07	08

Low							
01	02	03	04	05	06	07	08

IP Camera Sensor

Continuous Trigger Duration: 0 Seconds

Restart
Abnormal Restart
Hard disk failed.

Apply Cancel

The 'Alarm 1' configuration window, 'Actions' tab, shows settings for actions triggered by the alarm. It includes fields for 'No.' (0), 'Name' (alarm 1), and 'Description'. The 'Trigger Type' is set to 'Trigger if Any'. Under the 'Alarm Reset' section, 'Sensor' is selected with 'High' and 'Low' triggers (8-hour grids). 'IP Camera Sensor' is selected. 'Alarm Reset Time' is set to 0 seconds. The 'Actions' section has checkboxes for 'Launch E-Map', 'Spot Monitor', 'Enlarge Camera View', 'Relay Output', 'IP Camera Relay', 'Play Warning Sound', 'Send E-mail', 'Upload File', and 'PTZ Preset Point', each with a 'Details' button. 'Apply' and 'Cancel' buttons are at the bottom.

High							
01	02	03	04	05	06	07	08

Low							
01	02	03	04	05	06	07	08

IP Camera Sensor

Alarm Reset Time: 0 Seconds

Launch E-Map
Spot Monitor
Enlarge Camera View
Relay Output
IP Camera Relay
Play Warning Sound
Send E-mail
Upload File
PTZ Preset Point

Details
Details
Details
Details
Details
Details
Details
Details

Apply Cancel

E-maps to locate IP cameras



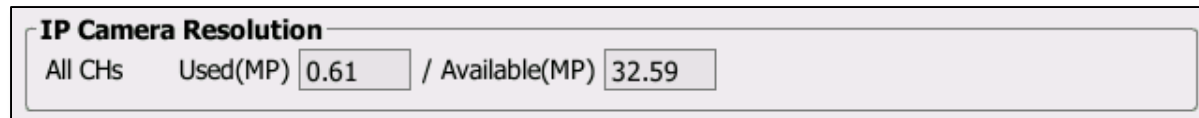
- Supports up to 8 E-maps in BMP or JPG image format
- Able to locate cameras, sensors, and relays to desired positions



Smart Tools for project management

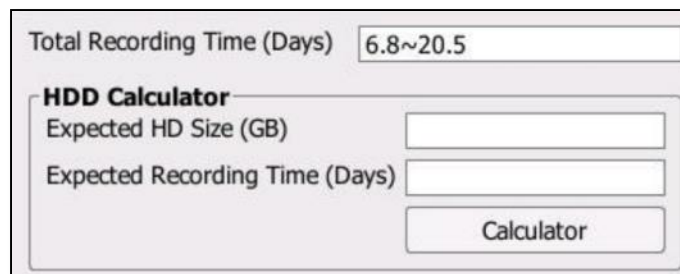


- **Resolution management:** displays the all connected IP cameras' resolution in **Used** (MP) column and the total resolution system allowed in **Available** (MP) column

A screenshot of a software window titled "IP Camera Resolution". It contains a label "All CHs" followed by "Used(MP)" and a text box containing "0.61", then a slash "/" followed by "Available(MP)" and a text box containing "32.59".

IP Camera Resolution	
All CHs	Used(MP) 0.61 / Available(MP) 32.59

- **Built-in HDD calculator:** key in either Expected HD Size (GB) or Expected Record Time (Days) to get the Total Recording time (Days)

A screenshot of a software window titled "HDD Calculator". It has a text box at the top labeled "Total Recording Time (Days)" containing "6.8~20.5". Below this are two input fields: "Expected HD Size (GB)" and "Expected Recording Time (Days)". At the bottom right is a button labeled "Calculator".

Total Recording Time (Days) 6.8~20.5	
HDD Calculator	
Expected HD Size (GB)	<input type="text"/>
Expected Recording Time (Days)	<input type="text"/>
<input type="button" value="Calculator"/>	

Smart Tools for project management



- **Camera Bitrate status:** displays the all connected IP cameras' bitrate status. It can help planner easily adjust IP Cam to show better performance.

Camera List									
No.	Type	IP Address	Protocol	Model	Status	fps	Bitrate	Details	
20	IP	192.168.0.30	AVer	SF2121H-R	Connected	7	673 Kb	Settings	
21	IP	192.168.0.31	AVer	SF2121H-R	Connected	21	1503 Kb	Settings	
22	IP	192.168.0.32	AVer	SF2121H-R	Connected	0	0 Kb	Settings	
23	IP	192.168.0.33	AVer	SF2121H-R	Connected	7	548 Kb	Settings	
24	IP	192.168.0.34	AVer	SF2121H-R	Connected	0	42 Kb	Settings	
25	IP	192.168.0.35	AVer	SF2121H-R	Connected	5	1355 Kb	Settings	
26	IP	192.168.0.36	AVer	SF2121H-R	Connected	0	0 Kb	Settings	
27	IP	192.168.0.37	AVer	SF2121H-R	Connected	4	387 Kb	Settings	
28	IP	192.168.0.38	AVer	SF2121H-R	Connected	7	631 Kb	Settings	
29	IP	192.168.0.39	AVer	SF2121H-R	Connected	6	1693 Kb	Settings	
30	IP	192.168.0.40	AVer	SF2121H-R	Connected	0	227 Kb	Settings	
31	IP	192.168.0.41	AVer	SF2121H-R	Connected	3	434 Kb	Settings	
32	IP	192.168.0.42	AVer	SF2121H-R	Connected	0	38 Kb	Settings	
33	IP	192.168.0.43	AVer	FB3028-RTM	Connected	6	599 Kb	Settings	
34	IP	192.168.0.44	AVer	FV3028-RT	Connected	11	1318 Kb	Settings	

- **Bandwidth status:** displays whole system current bandwidth usage status. It can help planner understand how much cable bandwidth should apply.

Server Name	F25A
Current Firmware Version	1.2.100.2
IPCam Module	11.1.1010.16
Received Bandwidth	8812944 Bps
Transmitting Bandwidth	239058 Bps
Temperature	42 ° / 107 °

POS/ATM integration





- Advanced POSViewer enables users to cross check live and recorded **transaction texts** with images
- Confidential **keyword filter** for easy and protective POS management
- Intelligent video playback search by transaction time, keyword, channel, et al.
- Open user interface for POS protocol customization
- Remote POS and NVR management from the comfort of your office and home



Search Stored Video

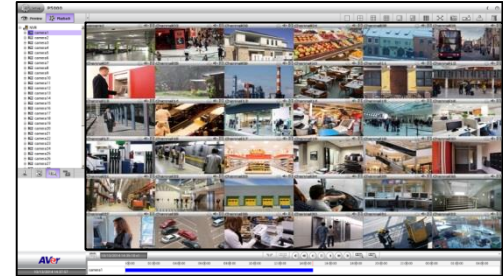


Search Options

- **Event search**
 - by date, time, motion in
 - selected area, vision and log file
- **Visual search** (shows video snapshots)
 - by days, hours, minutes, and seconds

Playback Options

- Playback at selected speeds (up to **32x**)
- Noise reduction filter during playback
- **Video watermark** technology to prevent tampered video and image
- Easily save links to particular locations of recorded data and play them directly from the saved links



Open platform for POS integration



Perfect for retail industries

- POSViewer enables users to cross check live and recorded transaction texts with images
- Confidential keyword filtering for easy and protective POS management
- Open user interface for POS protocol customization

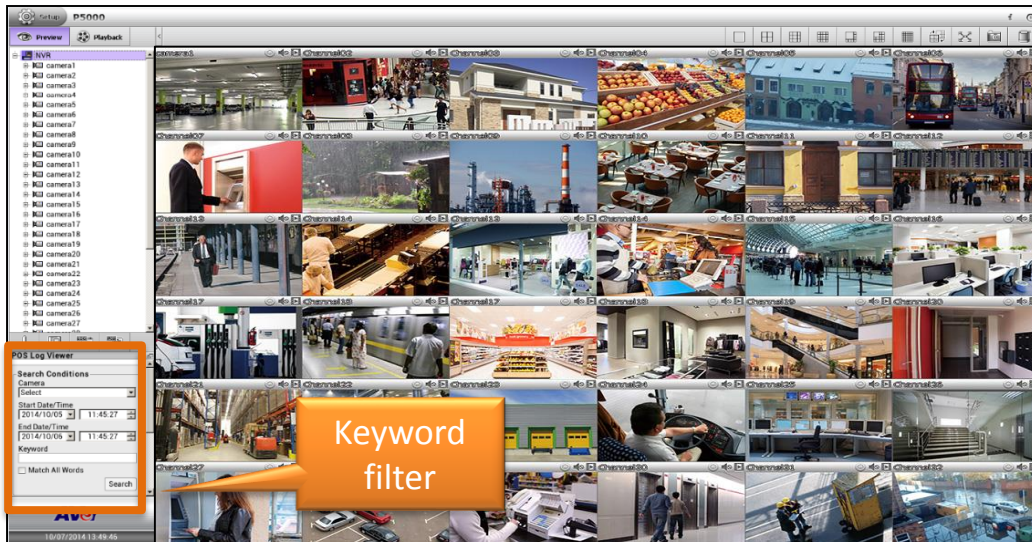
Text overlay & display

Font color setting

Playback

Text filter

POS
Log
Viewer



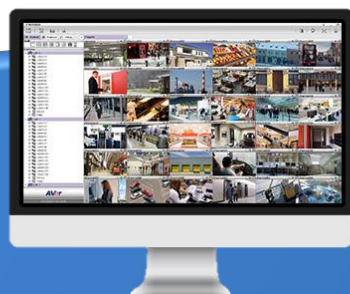
AVER

Seamless integration

AVer IP cameras



Hard-to-beat solution



- **Optimized Recording Mode** for better recording efficiency
- **Plug and play** for faster installation
- **Unlimited** megapixels connection
- **Intelligent streaming** guarantees real-time preview performance
- **CM5000 can connect over 1000 NVRs**



Integrated setup with standardized UI



Aver camera settings*, including not only the basic ones like IP address, but also camera-embedded advanced options like ROI, Smart Stream, or motion detection, can now be set directly via P series NVRs and CM5000 CMS.

*Aver Rugged series, FX2000, FX3000-R, FB2027-1/2/3, FB3027, FV2028, FV3028, FD2020/-M, FD3020/-M



Remote management

CM5000 CMS Mobile apps



CM5000 (Central Management System)



CMS

- Connect over **1000 NVRs**
- Preview up to **33 channels** on a single page, connect up to 132 live channels
- Full remote control over the recorder including preview, playback, settings
- Fully standardized GUI, the same for local and remote site
- Quad monitor support
- Advanced search functions: event search and visual search
- Up to **128** user accounts
- Up to **4096** E-maps

**Designed for
E/P-series NVRs**



1000+

**Over 1000
NVRs**



**Up 132CH
Live-view**



**Full Control
Remotely**



x 4096

**Up to 4096
E-maps**

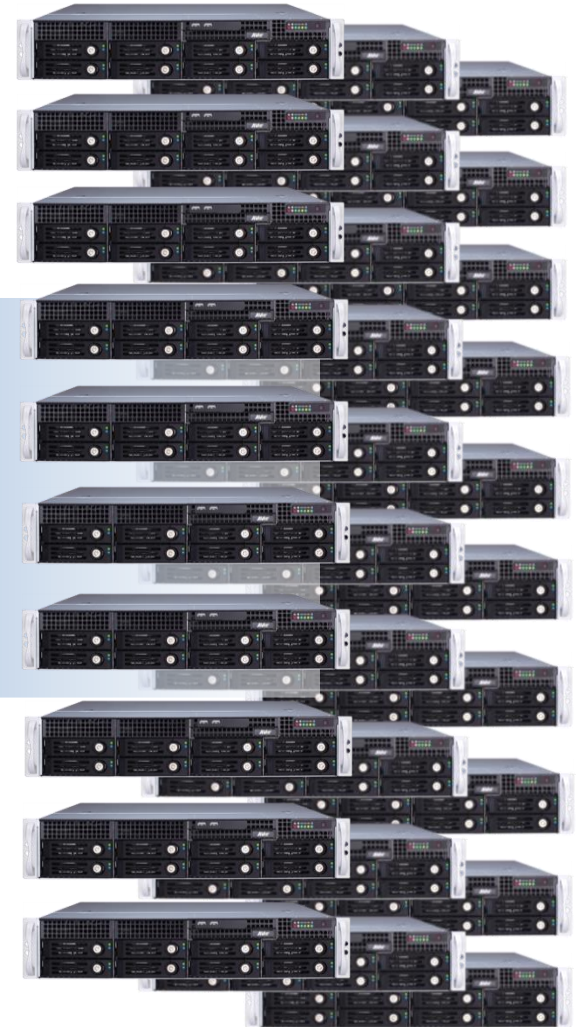
AVer

Connect over 1000 NVRs



CM5000 CMS

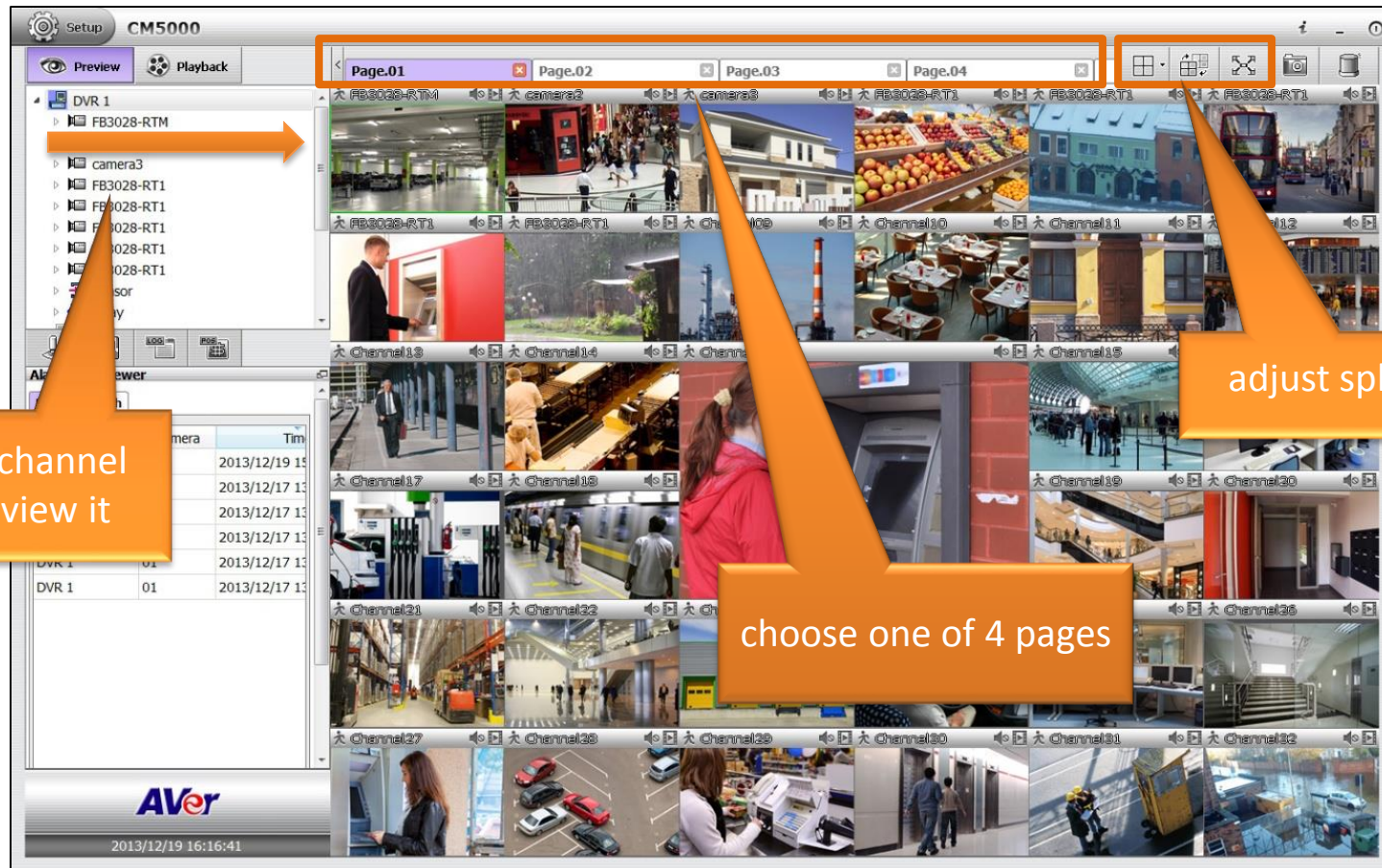
Over 1000
P-series
NVRs



Preview up to 33CH at once



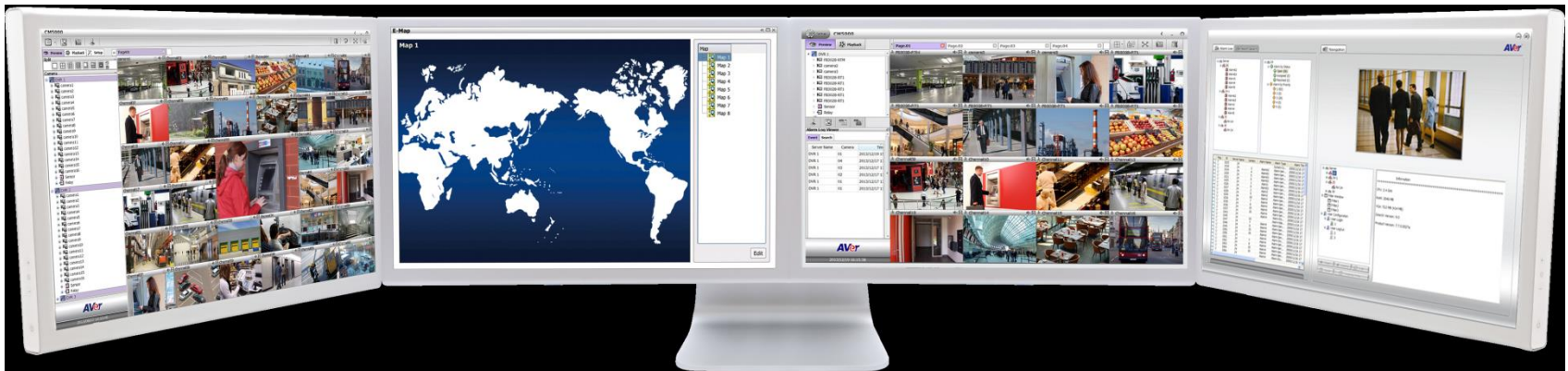
Connect up to **132 live channels** grouped in **4 pages**,
preview up to **33 channels at once**



Dual monitor support



Use **four monitors** to preview video and observe E-map at the same time



Fully standardized GUI



Low learning curve for AVer solution,
the same GUI at local and remote site

P series GUI



CM5000 GUI



Mobile apps – iViewer & AndroidViewer



Mobile app

- NVR & IP cam connection
- Remote preview and playback
- connection up to 32 channels
- 4CH live preview split modes
- Landscape/ portrait layouts
- Authorization mechanism
- Address book
- Remote PTZ control
- A database of 1024 cameras which can be linked



iViewer
for iPhones
and iPads



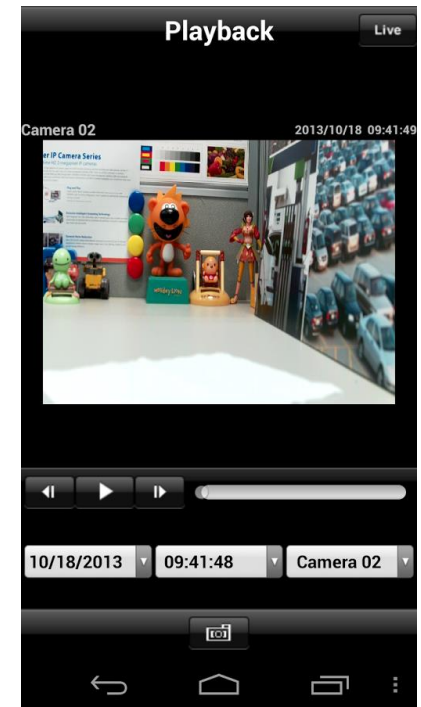
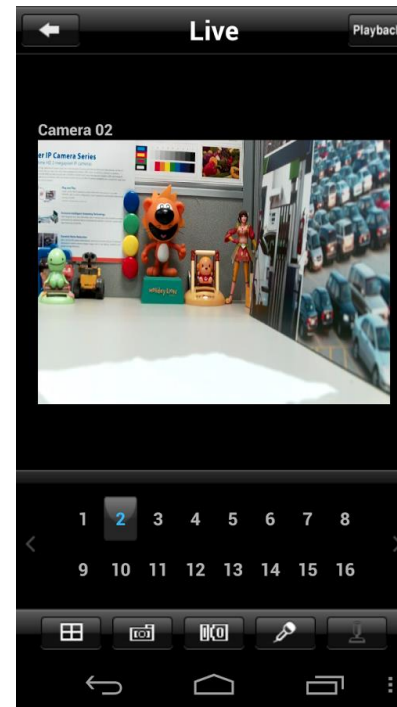
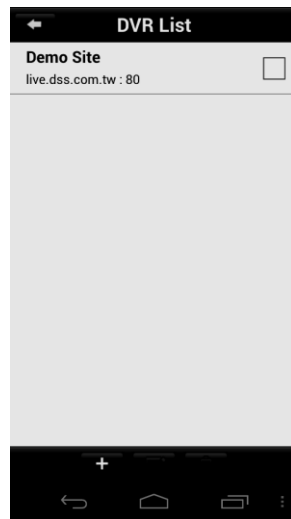
AndroidViewer
for Android
phones and
tablets



Mobile apps – iViewer & AndroidViewer



Connect to **NVRs** and **IP cameras** via smartphone or tablet



Device selection

Preview

Playback



Appendix A

Preview, throughput, RAID introduction

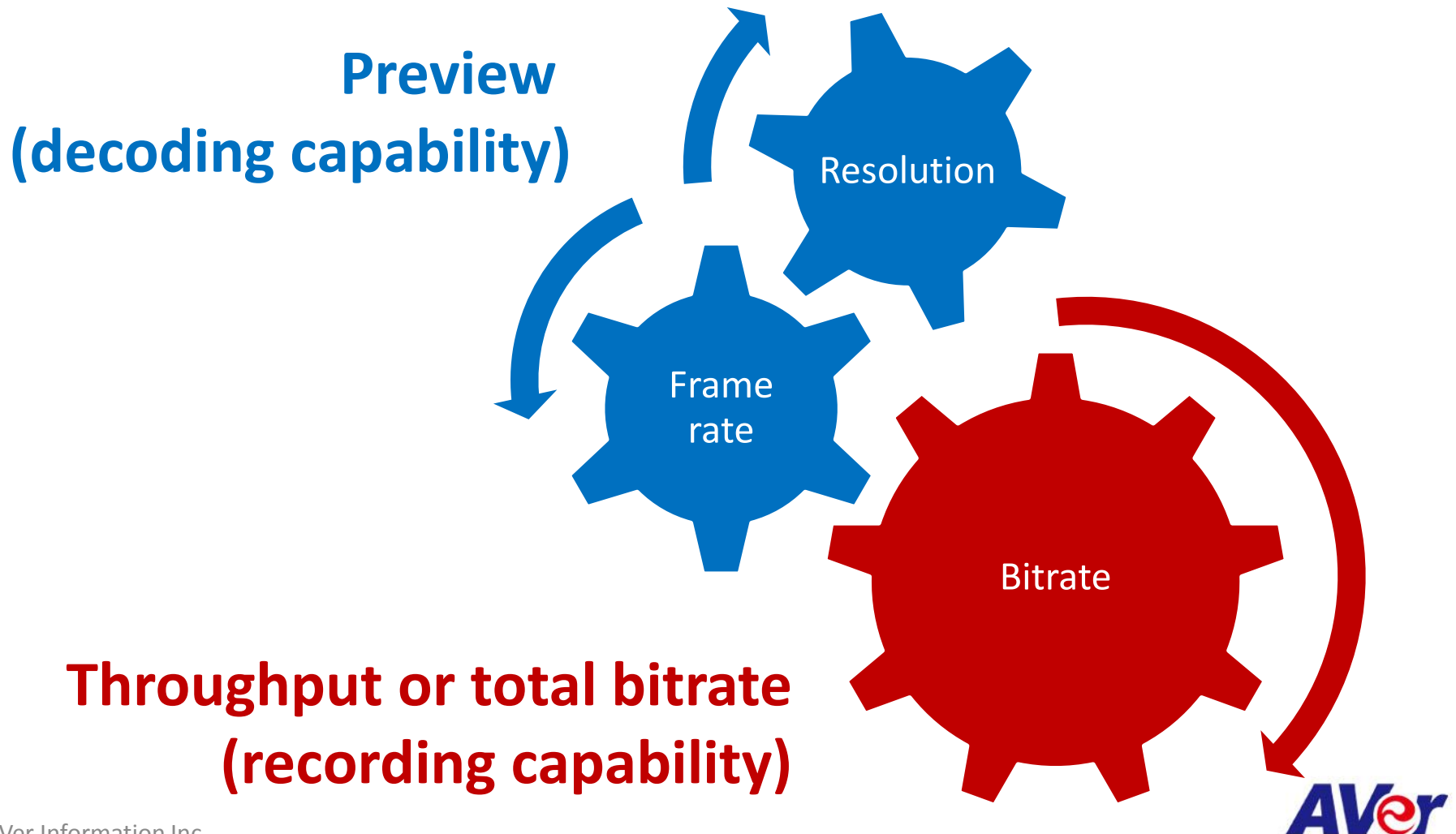


External - all

Performance



Recorder performance are mainly decided by 3 factors



Preview

- Preview = decoding capability
- Specification described: [megapixels @ fps](#)
- Example, P5036 preview is **2M @ 600fps**
 - **Intelligent streaming** function is automatically enabled at 9-split display mode to ensure **VGA** resolution at 150fps preview quality (with AVer IP cameras)



P5036 decoding capability = 1920×1080 (2M) \times 600 (fps) = **1,244,160,000**

If all 2M IP cameras are displayed at Quad mode:

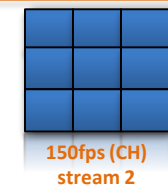
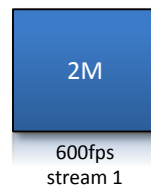
$1,244,160,000 \div (1920 \times 1080) \text{ (2M)} \div 4 \text{ (Quad)} = 150\text{fps}$

If all 2M IP cameras are displayed at 9-split mode (**Intelligent streaming enabled**):

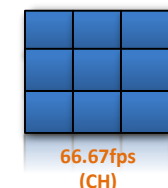
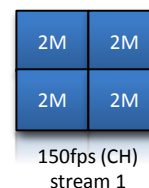
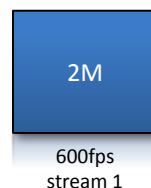
$1,244,160,000 \div (640 \times 480) \text{ (VGA)} \div 9 \text{ (split screen)} = 450\text{fps} \rightarrow 150\text{fps}$

2M @ 600fps

Preview performance		
Single	Quad	9-split



VGA



2M



x36

Unlimited megapixels

stream 1 (2M)
stream 2 (VGA)

P5036



x36

3rd party IP cameras

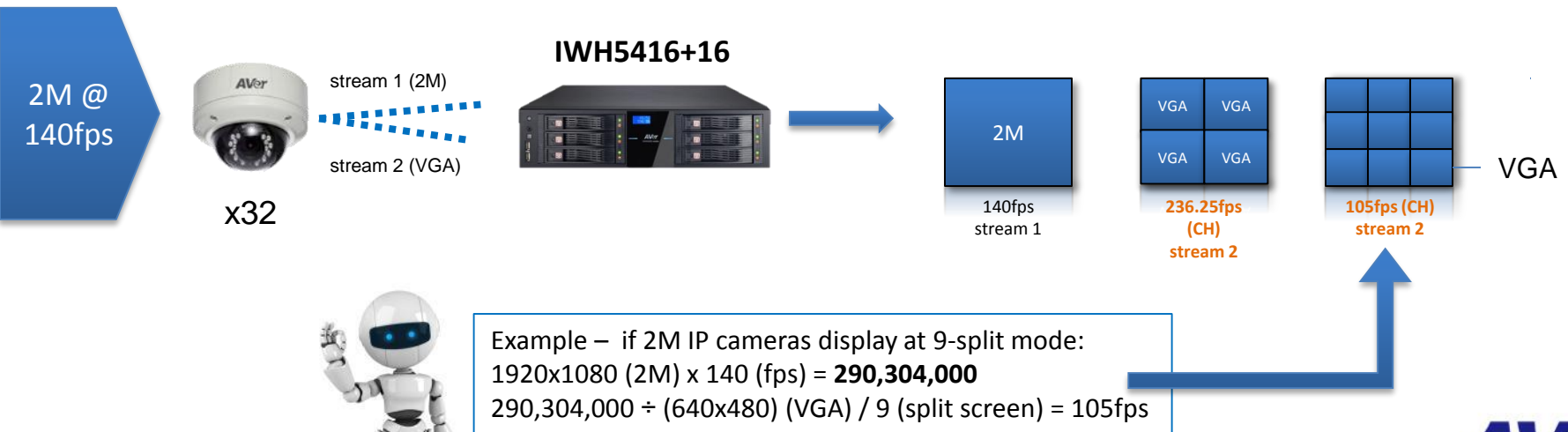
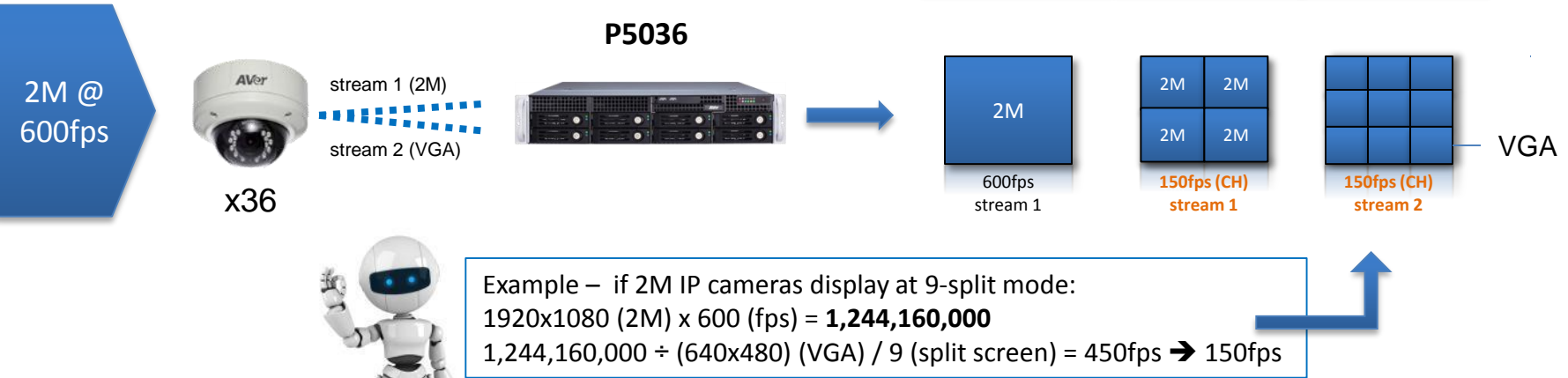
72 Up to megapixels

stream (2M)

P5036

AVer

Preview comparison



Throughput



- Throughput (total bitrates or max. bandwidth) = recording capability
- Example – P5036 with **throughput 256 Mbps**

CBS settings	Total streams recorded	Total bitrates	P5036 recording result
2 Mbps	36	72 Mbps	OK
4 Mbps	36	144 Mbps	OK
6 Mbps	36	216 Mbps	OK
8Mbps	36	288 Mbps	≤ 256 Mbps saved

- P5036 can receive 2 streams from each IP camera, so the throughput quota (total bitrates) will be consumed per stream.

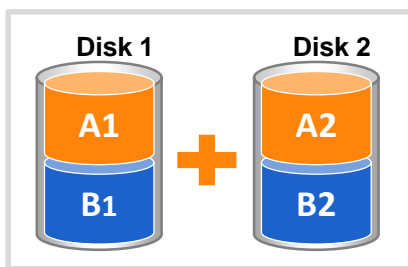


RAID support



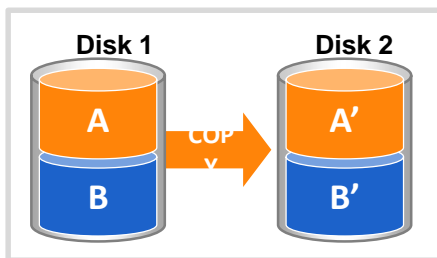
RAID (Redundant Array of Independent Disks)

is a storage technology used to combine multiple disks into one entity



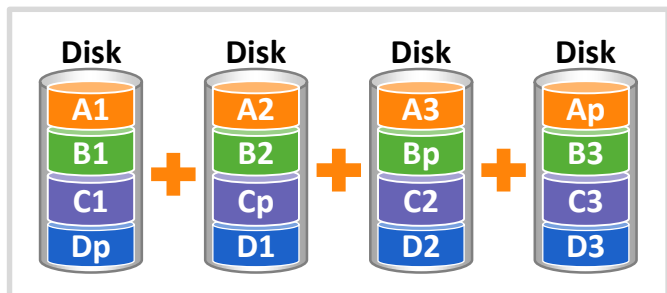
RAID 0 (striping) – combines disks into one large storage space (min. 2 disks)

- Improved performance
- Standard reliability (no fault tolerance)
- Cost-effective



RAID 1 (mirroring) – creates an exact copy ('mirror') of one disk array using the other one (min. 2 disks)

- Improved reliability – one disk can fail (for 2-disk array)
- Standard performance
- Moderately expensive



RAID 5 (striping with distributed parity) – distributes data among disks and creates parity – information for data recovery (min. 3 disks)

- Good performance and reliability (one disk can fail)
- Cost-effective, commonly used for business data storage (1-1/n space used, 75% for 4 disks)