Panther HD-AVS Technology DVRs

Our Panther series recorders and cameras enable true 1080P/720P HD video, audio and control signal via standard coaxial cable, allowing reliable long-distance HD transmission at lower cost, using an advanced video transmission technology from IC Realtime known as AVS - what ClearView calls Panther Technology.

Panther is the ideal upgrade from standard video to HD video “crossover” technology because it hits the same price points as standard res video but offers significant advantages:

EASY UPGRADE FOR PREVIOUS INSTALLED CCTV
Panther makes possible direct replacement of existing conventional analog security cameras and recorders with Panther series TRUE 720/1080 HD equipment without changing existing coaxial and low voltage power runs. As long as 12VDC is available at the camera end, you can just swap the cameras and the recorder and have a new HD security system.

SAME WIRES AS STANDARD CCTV
Cable connection and installation is exactly the same as that of conventional analog devices, with no special requirements either for indoor or outdoor scenarios;

GRADUAL HD UPGRADE / REPLACEMENT
The Panther series cameras can be used as replacements/upgrades in a conventional analog CCTV system because the cameras can be set to act as a regular 720 line analog camera, and later switched back to full HD when the recorder is upgraded;

COST EFFECTIVE ALTERNATIVE TO IP
Panther is true HD quality at the same price point area as analog, and offers the same audio signal and dual-way data communication features as IP but uses standard coax cables, so no network resources are required for camera connection;

BETTER THAN 960H
Panther video surveillance is available in the two major industry HD video standards - 1080p (or 1920H (1920x1080) and 720p (1280H (1280x720), both with higher horizontal (H) resolution than “960H” systems;

EXCLUSIVE TECHNOLOGY
Panther technology features a patented auto signal compensation (ASC) technology, which enables extremely low signal distortion, much better video resolution, longer transmission distances and better anti-interference capability, and avoids the cross talk of CVBS and separates the brightness and hue signal, further enhancing video quality.

SELL POINTS TO INSTALLERS

Lower Cost
HD-SDI and IP put high demands on cabling and installation; Panther uses the same coaxial cables & installation methods of analog solutions, increasing installation convenience and also decreasing costs.

Smart Control over Coax
Panther technology transmits multiple-signal (video/audio and dual-way data) over one cable, using video/audio synchronized transmission at the same time, such as PTZ and zoom control, further simplifying the installation.
Panther Advantages vs. HD-SDI

**Lower Installation & Roll-Out Costs**
Panther technology is the most flexible video surveillance system available today because it allows immediate upgrade or gradual implementation by setting cameras for use with analog DVRs until implementation is complete. HD-SDI is all or nothing, and at a much higher price point.

**Longer Transmission Distance**
Both Panther technology and HD-SDI can transfer HD video signals at 720p/1080p, but Panther has a transmission distance advantage. HD-SDI reaches 100 meters (at most) while Panther series transmits 500 meters by using conventional coaxial cables with low signal distortion rate.

**Better Anti-Interference Capability**
The anti-interference capability of HD-SDI solution is relatively poor when been placed against high-frequency radiation environment, which causes a higher bit error ratio while the Panther series uses a low-frequency modulation technology, making it free from the high-frequency wireless electric radiation to ensure stable video transmission at high image quality.

**PANTHER ADVANTAGES vs. IP**

**Reliability**
Panther technology uses a Point 2 Point transmission technology over a dedicated coaxial cable to ensure a smooth and reliable transmission; while the transmission of network camera is based on Ethernet and may lead to network jitter and packet loss. HD-AVS does not have network lag, jitter or packet loss so images stream live even at 2 Mega-Pixel. This is extremely important when real-time assessment of a situation is paramount.

**Real-time**
The network HD features video buffer technology and the delay is controlled within 300 milliseconds in common networking environment; However, AVS-HD Technology features no latency capability for an outstanding real-time performance.

**No Compression**
Panther series video uses no video compression, so pictures are processed to maintain its original effect and thus present in vivid, realistic image quality.

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**SPECIFICATIONS**

**System**
- Main Processor: Embedded processor
- Operating System: Embedded LINUX

**Video**
- Input: 8 channel, BNC
- Standard: NTSC(525Line, 60f/s), PAL(625Line, 50f/s)

**Audio**
- Input: 4 channel, BNC
- Output: 1 channel, BNC
- Two-way Talk: Reuse audio input/output channel 1

**Display**
- Interface: 1 HDMI, 1 VGA, 1 BNC
- Resolution: 1920x1080, 1280x1024, 1280x720, 1024x768, 800x600
- Display Split: 1/4/8
- Privacy Masking: 4 rectangular zones (each camera)
- OSD: Camera title, Time, Video loss, Camera lock, Motion detection, Recording

**Recording**
- AV Compression: H.264 / G.711
- Resolution: 720P(1280x720) / 960H(960x576) / D1/4CIF(704x576) / CIF(352x288) / QCIF(176x144/176x120)
- Main Stream: 720P/960H/D1/2CIF/CIF(1~25~30fps)
- Extra Stream: CIF/QCIF(1~25/30fps)
- Bit Rate: 48~6144Kb/s
- Record Mode: Manual, Schedule(Regular(Continuous), MD), Stop
- Record Interval: 1~120 min (default: 60 min), Pre-record: 1~30 sec, Post-record: 10~300 sec

**Video Detection & Alarm**
- Trigger Events: Recording, PTZ, Tour, Video Push, Email, FTP, Spot, Buzzer & Screen tips
- Video Detection: Motion Detection, MD Zones: 396(22x18), Video Loss & Camera Blank
- Alarm Input: 16 channel
- Alarm Output: 3 channel

**Playback & Backup**
- Sync Playback: 1/4/8
- Search Mode: Time/Date, MD & Exact search (accurate to second)
- Playback Functions: Play, Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous file, Next camera, Previous camera, Full screen, Repeat, Shuffle, Backup selection, Digital zoom

**Network**
- USB Device / Network
- Ethernet: RJ-45 port (10/100M/1000M) (Max. User Access 128 users)
- Network: HTTP, PwV/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP, IP Filter
- Smart Phone: iPhone, iPad, Android, Windows Phone

**Storage**
- Internal HDD: 2 SATA port, up to 8TB
- Auxiliary Interface:
  - USB Interface: 2 ports (1 Rear), USB2.0
  - RS232: 1 port, For PC communication & Keyboard
  - RS485: 1 port, For PTZ control

**General**
- Power Supply: DC12V/5A
- Power Consumption: 15W(without HDD)
- Environment: -10~+55℃ / 10~90%RH / 86~106kpa
- Dimension(WxDxH): 1U, 375mmx285mmx45mm
- Weight: 2.35KG(without HDD)