H.265+ 16-ch 4K Network Video Recorder

High Efficiency Surveillance Solution

PLANET NVR-1600 is a brand-new **16-channel** Linux embedded network video recorder (NVR) for campuses, communities, restaurants and more. Designed for IP surveillance applications with HDMI local display, the NVR-1600 supports IP cameras with up to 4K and H265/H264/H265+/H264+ video codec for high-quality real-time monitoring, recording and playback. It also supports 4K video resolution on any HD monitor.

The NVR-1600 can be used as a control center to control and monitor up to 16 connected network cameras locally or remotely, perfectly designed for intelligent IP surveillance system, with one internal SATA hard disks drawers interface and video files kept in the NVR for a long period of time. Once the NVR-1600, armed with complete surveillance equipment, detects any suspicious events, you will be alerted with buzzing alarm, alarm via email, voice warnings and screen display.

The recorded video files can be saved in the NVR without the need for an additional PC for file storage, thus bringing users a secure surveillance system at a lower total cost. Fully compatible with iOS, Android and Google Chrome on Windows operating system for multi-platform remote access, the NVR-1600 is thus able to further enhance security within the premises to protect your property. Moreover, it is fully compatible with mobile app.

Hardware

- Linux-embedded, highly-reliable standalone NVR
- 1 Gigabit Ethernet RJ45 port
- One 1080P VGA and 4K HDMI video interface for dual local display
- 3.5" SATA III x 1 HDDs, up to 8TB capacity
- Two USB 2.0 interfaces
- One audio in interface and audio out interface

Video and Audio

- Simultaneous recording and live viewing
- 16-channel input of IP cameras
- Supports H.265/H.264/H.265+/H.264+ compression
- Video resolution up to 4K (3840 x 2160)
- Supports bandwidth up to 120Mbps
- Two-way audio support
- Image adjustment options:
  - Image adjustment
  - Exposure
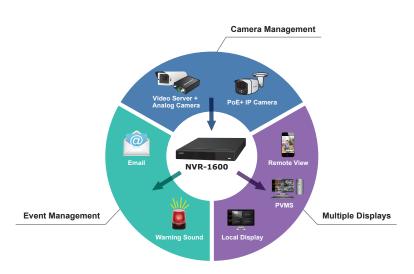 - Day and Night Mode
  - White balance
  - Image enhancement

Video Recording and Backup

- Scheduled recording of 16 IP cameras simultaneously
- Simultaneous main/sub-stream support
- Supports operation simultaneously for Preview, Recording, Playback, Live and Backup
- Exports recorded video file in AVI format to USB device or local network storage
- Multiple event detections like motion detection, video loss and PLANET AI IP camera event management

Network Service

- Easy access with PLANET Dynamic DNS
- SNTP Network Time Protocol/synchronize with computing timer
- Supports PPPoE/DHCP/static network connection
- Supports low bit-rate connection for remote access

Camera Management

- Video Server + Analog Camera
- PoE+ IP Camera
- Email
- NVR-1600
- Remote View
- PVMS
- Warning Sound
- Local Display

Event Management

Multiple Displays

- Supports P2P Cloud (Google)
- TCP/IP, HTTP, HTTPS, UPnP, DNS, NTP, SMTP, DHCP, FTP, DDNS, RTSP, RTCP, P2P, PPPOE   Network functions
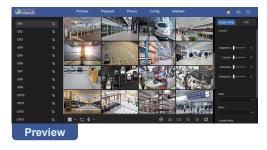
Easy Installation and Management

- Supports discovery and manage ONVIF IP camera.
- Supports multiple languages
- PLANET Search Tools utility and PVMS (Professional Video/Central Management Software) for easy configuration
- Up to 256 channels management through PVMS
- Easy configuration and management via Windows-based software or web interface
- System log
- User management options for various authorities:
  – Admin
  – Operator
  – Guest
- Supports mobile phone remote app application

High-resolution Local Display

The NVR-1600 comes with HDMI and VGA video output interfaces for dual local display. It can be connected to a 4K HDMI monitor and 1080p VGA monitor separately, where live viewing contents or playback contents can be displayed simultaneously. With the dual local display function, users can monitor locally with high flexibility in a different display resolution, thus eliminating the need for a separate PC to view video from the unit. Besides, the NVR can also be operated with the USB mouse to configure and monitor all the systems easily.

Dual Local Displays

VGA/HDMI

Real-time, Remote Monitoring

Up to 16 IP cameras can be connected to the NVR-1600 via a connected IP network. With the NVR-1600, it delivers high-performance video recordings and smooth playbacks of multiple megapixel cameras. Users can view remote surveillance in real time and play back recorded videos via the Web browser or the bundled PVMS (Professional Video/Central Management Software).

You are able to search and install Planet IP cameras via Web interface with more convenience and efficiency. The NVR-1600 also can support discovery and manage ONVIF IP camera. Besides the Web interface, the NVR also supports viewer app software for smart phone so you can connect to the NVR anytime, anywhere.

Real-time, Remote Monitoring

Preview

Playback

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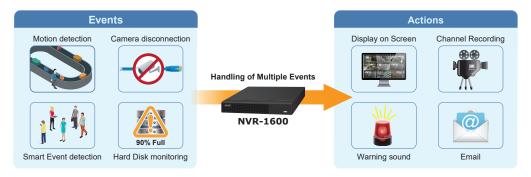*Remote Access via Mobile App, Web Browser or PVMS*

The NVR-1600 provides central surveillance management capability with the adoption of its bundled PLANET Video Management Software. With the PVMS, the NVR-1600 NVR system is expandable for multi-sites management of up to 256-ch IP cameras simultaneously. Besides, users are able to monitor the NVR via mobile app viewer or the Web browser anytime, anywhere.
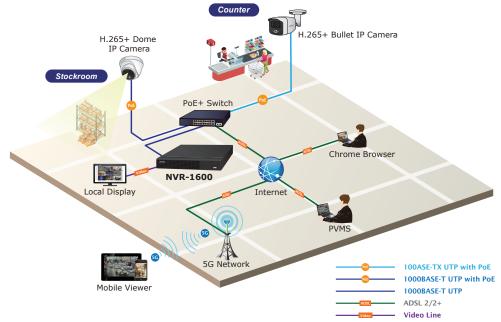

Applications

Advanced Intelligent Event Management

The NVR-1600 is equipped with multiple event detections like motion detection, video loss and PLANET AI IP camera event management. It also can support smart event detection like Line Crossing, Regional Intrusion, Loitering, and People Gathering. All of them are able to send alarm through screen, buzzer, channel recording and email. Those alarm notifications provide you with extra protection when such event occurs so you won't miss any critical information.

Perfect for Indoor Surveillance Applications

PLANET NVR systems can be controlled and monitored both in the local LAN and the remote site via Internet. Users can also log in from their mobile phones to check the monitoring screen anywhere, anytime. It is especially perfect for indoor surveillance in such places as campuses, communities, restaurants and more.

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Specifications

Product	NVR-1600
Hardware	
Ethernet	1 x RJ45 10M/100M/1000M Adaptive Ethernet Interface
USB Interface	2 x USB 2.0
Video Interface	1 x HDMI, 1 x VGA
Audio Interface	1x Input, 1x Output
Storage Device	1 x Hard Disk Interface (3.5" SATA), up to 8TB capacity
Camera	
Max. Channels	16-channel IP cameras
Incoming Bandwidth	120MB
Video	
Compression	H.264/H.265/H.264+/H.265+
Resolutions	4K (3840×2160) 5MP (2592×1944) 4MP (2688×1520/2560×1440) 3MP (2048×1536) 1080P (1920×1080) 960P (1280x960) 720P (1280×720) D1 (720×576/720×480)
Recording Rate (PAL/NTSC)	4K@10×25fp/30fps 5MP@16×25fp/30fps 4MP@16x25fp/30fps 3MP@16×25fp/30fps 1080P@16×25fp/30fps 960P@16×25fp/30fps 720P@16×25fp/30fps D1@16×25fp/30fps
Recording Mode	Manual\Timer\Motion Detection\Smart Event
Audio	
Audio Type	2-way audio
Input	1 Port RCA
Output	1 Port RCA (Linear, 1kΩ)
Audio Bit Rate	64kbps
Audio Compression	G711u, G711a, ADPCM_DVI4
Local Display	
HDMI	4K (3840 × 2160)/30Hz 1920 × 1080/60Hz 1280 × 1024/60Hz 1280 × 720/60Hz 1024 × 768/60Hz
VGA	1920 × 1080/60Hz 1280 × 1024/60Hz 1280 × 720/60Hz 1024 × 768/60Hz
Display Split	16CH/13CH/10CH/9CH/8CH/6CH/4CH/1CH
Digital Zoom	Yes
OSD	Camera Title, Time, Recording, Motion Detection, Event Alarm
Alarm	
Motion Detection	16 Channels, MD Zones: 396 (22 × 18)
Trigger Events	Recording, Email, FTP, Snapshot, Buzzer and Screen Tips
Playback and Backup	
Local Sync Playback	1CH 4K@30fps 1CH 5MP@30fps 2CH 4MP@30fps 2CH 3M@30fps 4CH 1080P@30fps 4CH 960P@30fps 4CH 720P@30fps 16CH D1@30fps
Decode Capability	4CH 1080P(1920x1080)@30fps

Remote Sync Playback	Yes
Search Mode	ALL, Timing Video, Motion Detection, Alarm, Tag search, Smart Event, Picture, Log
Playback Functions	Play, Pause, Fast Forward, Rewind, Previous Frame, Next Frame, Electronic Zoom, Clip, Audio
Network and Configuration	
Network Functions	TCP/IP, HTTP, HTTPS, UPnP, DNS, NTP, SMTP, DHCP, FTP, DDNS, RTSP, RTCP, P2P,PPPOE
Cloud Support(P2P)	Yes
Management	
Web Brower	IE8~11, Google Chrome, Firefox , Edge, Mac Safari (partial)
PVMS	Support Windows 7/ Windows 8/Windows 10
App	Yes (Android, IOS with P2P QR code)
Language	Simplified Chinese, English, Russian, Deutsch, French, Portuguese, Spanish, Italian, Korean, Japanese
Environment	
Power	DC 12V/2A
Operating Temperature	-10~55 degrees C
Humidity	10~90% RH
Weight	2kg (without HDD)
Dimensions (W x D x H)	260 x 230 x 43 mm

Ordering Information

NVR-1600	H.265+ 16-ch 4K Network Video Recorder

Related Products

NVR-2500	H.265 25-ch 4K Network Video Recorder
NVR-2516P	H.265 25-ch 4K Network Video Recorder with 16-Port PoE
ICA-3280	H.265 1080p Smart IR Bullet IP Camera
ICA-4280	H.265 1080p Smart IR Dome IP Camera
ICA-3480F	H.265+ 4MP Full Color Bullet IP Camera
ICA-4480F	H.265+ 4MP Full Color Dome IP Camera
ICA-M3580P	H.265 5 Mega-pixel Smart IR Bullet IP Camera with Remote Focus and Zoom
ICA-M4580P	H.265 5 Mega-pixel Smart IR Dome IP Camera with Remote Focus and Zoom

NVR-1600