

## 16-CH Network Video Recorder with HDMI



### Efficient SMB Surveillance Solution

PLANET NVR-1620 is suitable for introducing high-definition IP surveillance solution, and for upgrading your CCTV system to IP system without re-cabling. The NVR-1620 is the **16-channel** Linux embedded NVR with HDMI local display from PLANET, bringing stable and efficient system operation under a wide range of recording, network management, and system settings. The NVR-1620 could be used as a control center to control and monitor up to 16 connected network cameras (ONVIF supported) locally or remotely, perfectly designed for intelligent IP surveillance system. Users can just turn on the cameras and the NVR to easily protect their life and properties under the IP networks. It also supports image storage for evidentiary recording and data backup up to 2 hard disks. The recorded video files can be saved in the NVR without the need for an additional PC for files storage, thus bringing users a secure surveillance system at a lower total cost. It is fully compatible with **iOS**, **Android** and Internet Explorer on Windows operating system for multi-platform remote access.



### Hardware

- Linux-embedded, highly reliable standalone NVR
- Supports Gigabit Ethernet port
- Supports VGA / HDMI dual local display
- Supports 3.5" SATA x 2 HDD

### Video / Audio

- Supports M-JPEG / MPEG-4 / H.264 compressions
- Auto configuration for PLANET IP camera
- Video resolution up to 5 mega-pixel (2560 x 1920)
- Supports up to 120fps @ 1080P (H.264)
- 2-way audio support with enhanced audio quality

### Video Recording / Backup

- Simultaneous recording and live video streams
- Manual or schedule recording of 16 IP cameras simultaneously
- Video recycle function makes the video recording in 24/7
- Exports recorded video file to AVI format to USB device or local storage
- Instant Event Notification and recording

### Network Service

- Easy access with PLANET Dynamic DNS and Built-in NTP Server
- Supports DHCP Server/client (Auto detection)

### Easy Installation & Management

- ONVIF compliant for interoperability
- Supports multiple languages
- Auto discovered by management software
- E-Map interface in web and utility configuration
- Web-based and management utility for easy configuration
- Up to 16 NVRs, max. 256 channels with the central management software
- Supports USB keyboard, mouse, IR remote control and joystick (PTZ)\*
- Supports mobile phone remote view with WinCE 6.1, Android, Symbian S60, iPhone, Blackberry 4.6

\*The remote control and joystick are optional.

### High Resolution Local Display

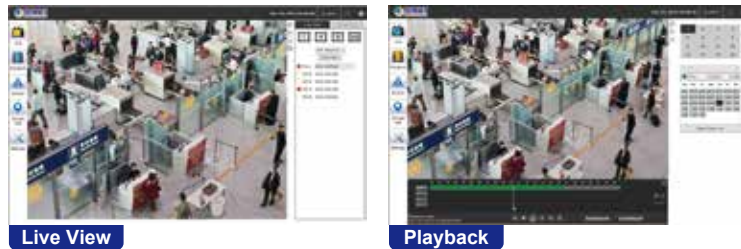
The NVR-1620 provides an **HDMI** and **VGA** video output interface for dual local display, which can be connected to HDMI monitor or TV for doing monitoring in the full HD (1920 x 1080) resolution, and check NVR system status on VGA monitor at the same time, eliminating the need for a separate PC to view video from the unit. It also can be operated with the USB keyboard / mouse and bundled remote control\* to configure and monitor all the system easily.



### Performing Real-time Remote Monitoring

Up to 16 IP cameras can be connected to the NVR-1620 via a connected IP network. With the NVR-1620, 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 CMS software.

### High-performance, Real-time Remote Monitoring



### Managing and Presenting Clear and Concise Video

Not just for small scale applications such as retail stores and SMBs, the NVR system is expandable for multi-sites management with the bundled CMS software. For instance, the CMS software in the NVR-1620 can manage up to 16 units of NVR at the same time meaning 256 channels of IP cameras can be viewed simultaneously. With multi-monitor and E-Map functions, the NVR can help the administrators to monitor the surveillance system more efficiently and effectively.

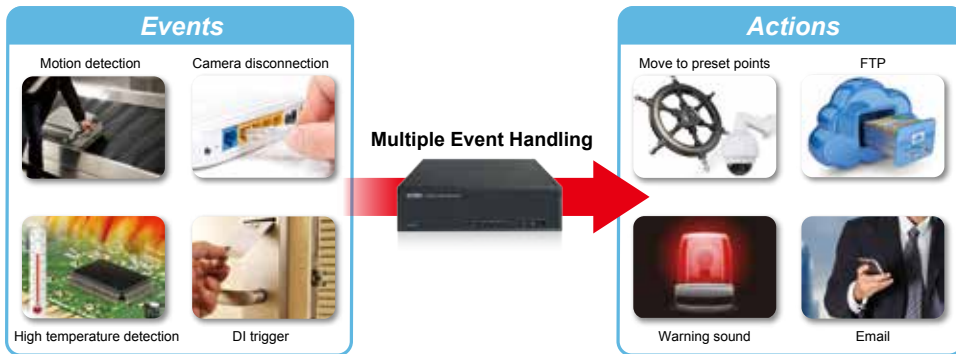


\*The remote control is optional.

## Applications

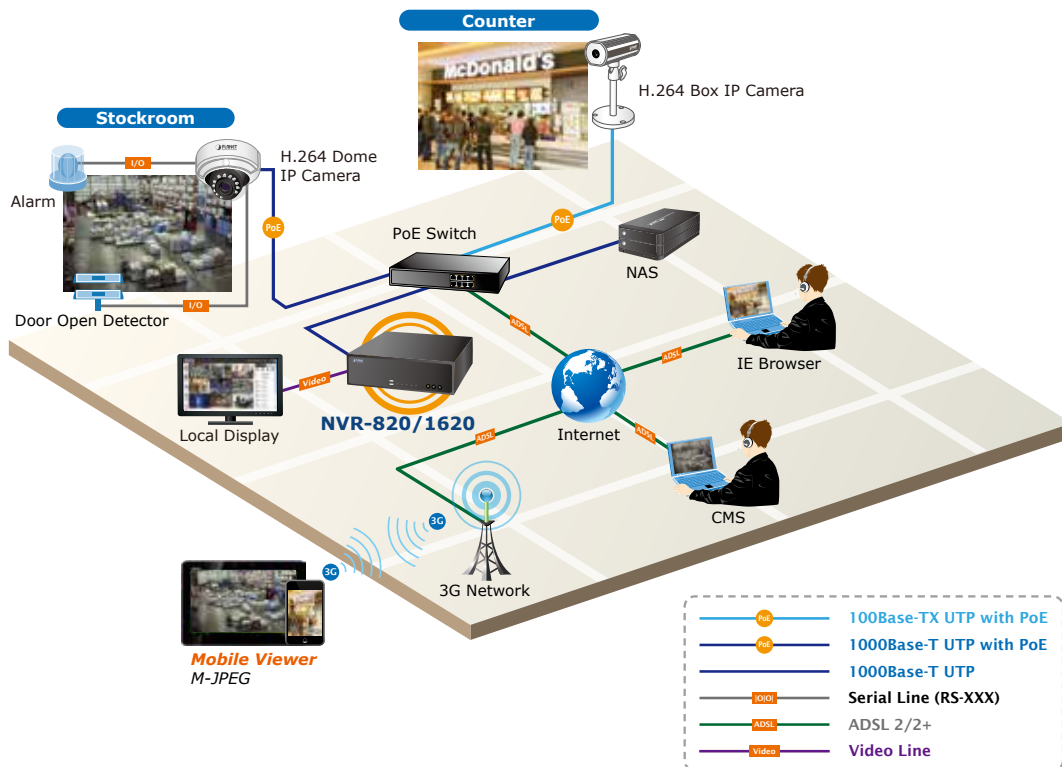
### Advanced Event Management

The NVR-1620 is equipped with a smart alarm-triggering mechanism and supports various alerts and abnormal events. When it comes to a critical event, having a smart and responsive event management in place is essential for video surveillance system. This feature greatly strengthens the security and management efficiency of PLANET NVR systems.



### 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 login from their mobile phones to check the monitoring screen anywhere, anytime. It is especially perfect for indoor surveillance in such places as boutiques, department stores, restaurants, etc.



## Product Specifications

Product	NVR-1620
<b>Hardware</b>	
Ethernet	1 x RJ-45, 10/100/1000Base-T
USB Interface	2 x USB 2.0 for backup device and firmware upgrade
Video Interface	VGA / HDMI video interface
Audio Interface	Mic-in, line-in and line-out
Storage Device	2 x 3.5" SATA II hard disk connectors
LED	Power, Alarm, Status, HDD
Button	Power, Reset, Buzzer stop
IR Receiver	Built-in IR receiver
<b>Camera</b>	
Max. Channels	16-channel IP cameras
Add camera	Manual / Smart Camera Search / Auto setup
<b>Video</b>	
Compression	H.264 / MPEG-4 / M-JPEG
Resolution	5MP / 3MP / 1080P / 2MP / SXGA / 720P / FD1 / VGA / CIF / QCIF
Max. live video frame rate (Local Display)	480fps@D1 30 360fps@720P30 120fps@1080P30 Max. 5MP/channel  *1: Supports Full HD1080P60 *2: NVR-1620 local display limit to 2 channel 1600 x 1200 (2MP) resolution IP camera
Max. recording frame rate (Local Display)	480fps@1080P, 3Mbps/channel, total of 16 channels * Real performance may vary in different environments.
<b>Audio</b>	
Audio Type	2-way
Audio format	G.711, G.726 (Camera dependent)
<b>Live view</b>	
Display Mode	Live View / Playback / Full / Screen / Sequence view / Saved views
Split Screen	1 / 4 / 9 / 16
Full Screen	1 / 4 / 9 / 16
Sequence Mode	Sequence All / Manually Selected cameras in 1/4 split view with configurable timer
Snapshot	Video snapshot in JPEG format
PTZ Support	Digital PTZ / Auto Pan / Preset Point / Preset point Sequence view
<b>Playback</b>	
Split Screen	1 / 4
Play Method	Play / Pause / Stop / Forward / Reverse / Speed Adjust / Frame by Frame Search by time or event only
Bookmark	Intuitive timeline interface with bookmark function for easy file export
<b>Monitor</b>	
Dual Monitor	Main UI + Full screen live view / sequence view
Monitor Resolutions	1920x1080, 1280x1024, 1280x720, 1024x768
<b>Network and Configuration</b>	
Network Service	TCP/UDP/HTTP/DHCP/DNS/ARP/ICMP/NTP/UPnP/FTP
Streaming Protocols	Depending on the supported cameras
<b>Triggers and Event</b>	
Event type	<b>System Events</b> <ul style="list-style-type: none"> <li>▪ System Start / Shutdown</li> <li>▪ System Settings modified</li> <li>▪ Camera Settings Modified</li> <li>▪ Start Recycle</li> <li>▪ Disk Full</li> </ul> <b>Camera Events</b> <ul style="list-style-type: none"> <li>▪ Motion/Sensor Detection</li> </ul>

Event Action	<ul style="list-style-type: none"> <li>▪ Display red window on video of event channel</li> <li>▪ Buzzer alarm</li> <li>▪ Disable / enable event action</li> <li>▪ Duration of event action</li> <li>▪ Recording</li> <li>▪ Mail / FTP notification</li> <li>▪ E-Map notification</li> </ul>
<b>Management</b>	
Number of Groups	7 (Administrator / Guest / User Define * 5)
Privileges	Live View / Playback / System Configurations / Camera Configurations / Recording Configuration / Event Configuration / Maintenance
User Interface	<ul style="list-style-type: none"> <li>▪ Graphic local user interface (Operated by mouse, keyboard, IR remote controller or USB joystick )*</li> <li>▪ Web Browser (Internet Explorer 7 or above)</li> <li>▪ CMS Utility</li> </ul>
Log Type	Alert / Event / User Access
Software Utility	Search utility / media player for recording export
<b>Environment</b>	
Power	100~240V AC, 1.4A / Max. 50/60Hz
Consumption	90W
Operating Temperature	5~40 degrees C
Storage Temperature	-40~70 degrees C
Humidity	10~90% (non-condensing)
Weight	4.6 kg
Dimensions (W x D x H)	220 x 215 x 81 mm

## Ordering Information

NVR-1620	16-Ch Network Video Recorder with HDMI
----------	--

## Compatible IP Camera

ICA-HM101	2 Mega-pixel PoE Cube IP Camera
ICA-HM101W	2 Mega-pixel Wireless Cube IP Camera
ICA-1200	Full HD PoE Cube IP Camera
ICA-W1200	Full HD PoE Cube IP Camera
ICA-HM127	3 Mega-pixel H.264 Box IP Camera
ICA-2200	Full HD PoE Box IP Camera
ICA-2500	5 Mega-pixel PoE Box IP Camera
ICA-HM351	2 Mega-pixel 35M IR Outdoor Box PoE IP Camera
ICA-2250VT	Industrial PoE Plus Outdoor IR IP Camera
ICA-HM131	H.264 Full-HD Fixed Dome IP Camera
ICA-HM132	H.264 2 Mega-pixel 20M IR Vari-focal Dome IP Camera
ICA-4200V	Full HD 20M IR Vari-focal Dome IP Camera
ICA-4500V	5 Mega-pixel 20M IR Vari-focal Dome IP Camera
ICA-HM136	H.264 2 Mega-Pixel 20M IR Vandalproof Dome IP Camera
ICA-5250	Full HD Ultra-mini Vandal Dome
ICA-5250V	Full HD Vandalproof IR IP Camera
ICA-5350V	3 Mega-pixel Vandalproof IR IP Camera
ICA-5550V	5 Mega-pixel Vandalproof IR IP Camera
ICA-3200	Full HD Ultra-mini Bullet IP Camera
ICA-HM312	2 Mega-pixel 25M IR Outdoor Bullet PoE IP Camera
ICA-HM316	2 Mega-pixel Outdoor IR PoE IP Camera
ICA-HM316W	2 Mega-pixel 11n Outdoor IR IP Camera
ICA-3250V	Full HD Outdoor IR PoE IP Camera
ICA-3350V	3 Mega-pixel Vari-focal Bullet IR IP Camera
ICA-3550V	5 Mega-pixel Vari-Focal Bullet IR IP Camera
ICA-HM227W	3 Mega-pixel Wireless IR PT IP Camera
ICA-H652	H.264 36x Outdoor Speed Dome Internet Camera
ICA-HM620	2 Mega-pixel PoE Plus Speed Dome Internet Camera
ICA-W8100	Wireless Cube Fisheye IP Camera

ICA-W8100-CLD	Wireless Fish-Eye Cloud IP Camera
ICA-HM830W	2 Mega-pixel Wireless Fisheye IP Camera
ICA-8350	3 Mega-pixel Vandalproof Fisheye IP Camera
ICA-8500	5 Mega-pixel PoE Fisheye IP Camera
IVS-H125	H.264 Internet Video Server
IVS-H125P	H.264 PoE Internet Video Server
IVS-2120	Industrial Internet Video Server

## Related Products

NVR-820	8-Ch Network Video Recorder with HDMI
CV3P-4	4-Channel Cam Viewer 3 Professional
CV3P-8	8-Channel Cam Viewer 3 Professional
CV3P-16	16-Channel Cam Viewer 3 Professional
CV3P-36	36-Channel Cam Viewer 3 Professional
CV3P-64	64-Channel Cam Viewer 3 Professional
NVR-420	4-Ch Network Video Recorder with HDMI
NVR-810	8-CH Network Video Recorder
NVR-1610	16-CH Network Video Recorder
NVR-3210	32-CH Network Video Recorder
NVR-3250	32-Ch Rack Mount Network Video Recorder
CV3-M1024	1024-Channel Central Management Software