HIK-IP96000-F16 (/H) (/I)

Series NVR

Introduction:

The HIK-IP96000-F16 (/H) (/I) series NVR (Network Video Recorder) is a new generation recorder developed by Hikvision independently. Combined with multiple advanced technologies, such as audio and video decoding technology, embedded system technology, storage technology, network technology and intelligent technology, it can both work alone as a recorder and cooperate with other device to build a comprehensive surveillance system.

The HIK-IP96000-F16 (/H)(/I) series NVR can be widely applied in the areas of finance, public security, military, communication, transportation, education,

Available Models:

HIK-IP96128-F16, HIK-IP96256-F16

HIK-IP96128-F16/H, HIK-IP96128-F16/I, HIK-IP96128-F16/H/I HIK-IP96256-F16/H, HIK-IP96256-F16/I, HIK-IP96256-F16/H/I

Main Features:

Professional and Reliable

- Pluggable HDD design provides a convenient HDD installation and maintenance way; Unique chassis based on patented design ensures environmental friendly and low-noise running.
- Adopt professional embedded hardware and software, and pioneering dual-OS design to ensure the reliability of system running. Support redundant power supply to improve the system stability.
- Adopt ANR technology to enhance the storage reliability when the network disconnected.
- Supports HDD hot swap with RAID0, RAID1, RAID5, RAID10 storage scheme configurable.
- Either normal or hot spare working mode is configurable to constitute an N+1 hot spare system.

- Connectable to the third-party network cameras like ACTI, Arecont, AXIS, Bosch, Brickcom, Canon, ONVIF, PANASONIC, Pelco, PSIA, SAMSUNG, SANYO, SONY, Vivotek and ZAVIO. Up to 128/256 IP cameras can be connected.
- Support live view, storage, and playback of the connected camera at up to 8 megapixels resolution.

HD Output

- Simultaneous HDMI1/VGA output as the main output and the HDMI2
- works as the auxiliary output. Video outputs at up to 1920×1080 resolution
- decoding HIK-IP96000-F16/H capacity: HIK-IP96000-F16/H/I support decoding up to 44 channels at 1080P

HD Storage

Up to 16 SATA hard disks can be connected, for both recording and backup

HD Transmission

4 self-adaptive 10M/100M/1000M network interfaces and 4 1000M optical fiber interfaces.

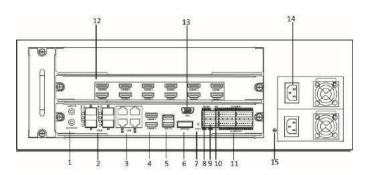
Various Applications

- Centralized management of IP cameras is supported, including configuration, information import/export, real-time information display, two-way audio, upgrade, etc.
- Connectable to smart IP cameras from Hikvision and the recording, playing back, and backing up of VCA alarms can be realized. VCA detection alarm is supported.
- VCA search for face detection, behavior analysis, people counting and heat map
- New GUI and support starting record with one key.
 Realize instant playback for assigned channel during multi-channel display mode.
- Smart search for the selected area in the video; and smart playback to improve the playback efficiency.
- Support HDD quota and group modes; different capacity can be assigned to different channels.



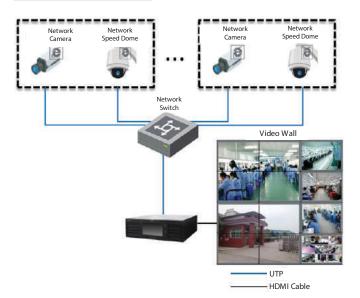


Physical Interfaces:



Index	Name			
1	RCA connector for audio output and output			
2	4 Fiber Optic Interfaces			
3	4 LAN network interfaces			
4	2 HDMI video output connectors			
5	USB 3.0 Interfaces			
6	miniSAS Interface (optional)			
7	Reset the device.			
8	RS-485 Interface			
9	RS-232 Interface			
10	Controller Port			
11	ALARM IN and ALARM OUT			
12	HDMI Output Extension Board (for HIK-IP96000-F16/H and			
	HIK-IP96000-F16/H/I only)			
13	VGA Interface			
14	100~240VAC Power Input			
15	GND			

Typical Application:



Note: The /H and /H/I models provide 12 HDMI outputs for video wall display.



Specifications:

Video/Audio output	Model		HIK-IP96128-F16 (/H)(/I)	HIK-IP96256-F16 (/H)(/I)	
Up to SMP resolution		TD 11 1	128-ch	256-ch	
Two-way audio		IP video input	Up to 8MP resolution		
Network Remote connection 256 Recording resolution 250 Recordi		Two-way audio	1-ch, RCA (2.0 Vp-p, 1kΩ)		
Name	Network	Incoming bandwidth	400Mbps	640Mbps, or 400Mbps (when RAID is enabled)	
Recording resolution SMP/6MP/SMP/3MP/1080P/UXGA/720P/VGA/4C1F/DC1F/2C1F/CPCF IDMI1/VGA1 output 1-ch 1-		Outgoing bandwidth	400Mbps	400Mbps	
HDMI1/VGA1 output		Remote connection	256		
1920 × 1080P /60Hz, 1600 × 1200 /60Hz, 1280 × 1024 /60Hz, 1280 × 720 /60Hz, 1024 × 768 /60Hz 1920 × 1080P /60Hz, 1600 × 1200 /60Hz, 1280 × 1024 /60Hz, 1280 × 720 /60Hz, 1024 × 768 /60Hz 1920 × 1080P /60Hz, 1600 × 1200 /60Hz, 1280 × 1024 /60Hz, 1280 × 720 /60Hz, 1024 × 768 /60Hz 1920 × 1080P /60Hz, 1600 × 1200 /60Hz, 1280 × 1024 /60Hz, 1280 × 720 /60Hz, 1024 × 768 /60Hz 12-ch (for 7H and 7H/I models only), 1620 × 1080P /60Hz, 1600 × 1200 /60Hz, 1280 × 1024 /60Hz, 1280 × 720 /60Hz, 1024 × 768 /60Hz 12-ch (for 7H and 7H/I models only), 1620 × 1080P /60Hz, 1600 × 1200 /60Hz, 1280 × 1024 /60Hz, 1280 × 720 /60Hz, 1024 × 768 /60Hz 12-ch (for 7H and 7H/I models only), 1620 × 1080P /60Hz, 1600 × 1200 /60Hz, 1280 × 1024 /60Hz, 1280 × 720 /60Hz, 1024 × 768 /60Hz 12-ch (for 7H and 7H/I models only), 1620 × 1020 /60Hz, 1280 × 1024 /60Hz, 1280 × 720 /60Hz, 1024 × 768 /60Hz, 1020		Recording resolution	8MP/6MP/5MP/3MP/1080P/UXGA/720P/VGA/4CIF/DCIF/2CIF/CIF/QCIF		
MDMI2 output			$1920\times1080\mathrm{P}$ /60Hz, 1600×1200 /60Hz, 1280×1024 /60Hz, 1280×720 /60Hz, 1024×768 /60Hz		
HDMI outputs (on HDMI Output Extension Board) 12-ch (for /H and /H/I models only), 1920 × 1020 /60Hz, 1600 × 1200 /60Hz, 1280 × 1024 /60Hz, 1280 × 720 /60Hz, 1024 × 768 /60Hz 120		HDMI2 output	$1920^{'}\times1080\mathrm{P}$ /60Hz, 1600×1200 /60Hz, 1280×1024 /60Hz, 1280×720 /60Hz, 1024×768 /60Hz		
Audio output			1920 × 1080P /60Hz, 1600 × 1200 /60Hz, 1280 × 1024 /60Hz, 1280 × 720 /60Hz, 1024 × 768		
Live view / Playback resolution SMP / 6MP / 5MP / 3MP / 1080P / UXGA / 720P / VGA / 4C IF / DC IF / 2C IF / C		LCD Screen	Available for /H and /H/I models only		
Pecoding Synchronous playback 16-ch		Audio output	1-ch, RCA (2.0Vp-p, 1KΩ)		
Capability			8MP/6MP/5MP/3MP/1080P/UXGA/720P/VGA/4CIF/DCIF/2CIF/QCIF		
HIK-IP96000-F16/H and HIK-IP96000-F16/H/i: 44-ch@1080p	Decoding	Synchronous playback	16-ch		
Hard disk miniSAS (Optional) 1 miniSAS interface Capacity Up to 6TB capacity for each HDD Disk array Array type RAID0, RAID1, RAID5, RAID10 External interface Network interface 4, RJ-45 10 /100 /1000 Mbps self-adaptive Ethernet interface Optic fiber interface 4, 1000 Mbps optic fiber interface Serial interface RS-232; RS-485; Keyboard USB interface Front panel: 2 × USB 2.0; Rear panel: 2 × USB 3.0 Alarm in/out 16 / 8 Max. Power 300 W General Max. Power 300 W Consumption (without hard disk) ≤100 W Working temperature -10°C ~ +55°C (14°F ~ 131°F) Working humidity 10 % ~ 90 % Chassis 19-inch rack-mounted 3U chassis Dimensions(W × D × H) 442 × 494 × 146 mm (17.4" × 19.4" × 5.7")		Capability	9 .		
Capacity	Hard disk	SATA	16 SATA interfaces for 16HDDs		
Array type		miniSAS (Optional)	1 miniSAS interface		
Disk array Number of arrays 16 Network interface 4, RJ-45 10 /100 /1000 Mbps self-adaptive Ethernet interface Optic fiber interface 4, 1000 Mbps optic fiber interface Serial interface RS-232; RS-485; Keyboard USB interface Front panel: 2 × USB 2.0; Rear panel: 2 × USB 3.0 Alarm in/out 16 / 8 Power supply 100 ~ 240 VAC, 50 ~ 60 Hz Max. Power 300 W Consumption (without hard disk) ≤ 100 W Working temperature -10°C ~ +55°C (14°F ~ 131°F) Working humidity 10 % ~ 90 % Chassis 19-inch rack-mounted 3U chassis Dimensions(W × D × H) 442 × 494 × 146 mm (17.4" × 19.4"× 5.7")		Capacity	Up to 6TB capacity for each HDD		
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External interface 4, 1000 Mbps optic fiber interface Serial interface RS-232; RS-485; Keyboard USB interface Front panel: 2 × USB 2.0; Rear panel: 2 × USB 3.0 Alarm in/out 16 / 8 Power supply 100 ~ 240 VAC, 50 ~ 60 Hz Max. Power 300 W Consumption (without hard disk) ≤100 W Working temperature -10 °C ~ +55 °C (14 °F ~ 131 °F) Working humidity 10 % ~ 90 % Chassis 19-inch rack-mounted 3U chassis Dimensions(W × D × H) 442 × 494 × 146 mm (17.4" × 19.4" × 5.7")		Number of arrays	16		
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Alarm in/out 16 / 8		Serial interface	RS-232; RS-485; Keyboard		
Power supply		USB interface	Front panel: 2 × USB 2.0; Rear panel: 2 × USB 3.0		
		Alarm in/out	16/8		
	General	Power supply	100 ~ 240 VAC, 50 ~ 60 Hz		
(without hard disk) ≤100 W		Max. Power	300 W		
Working temperature -10°C ~ +55°C (14°F ~ 131°F) Working humidity 10 % ~ 90 % Chassis 19-inch rack-mounted 3U chassis Dimensions(W × D × H) 442 × 494 × 146 mm (17.4" × 19.4" × 5.7")			≤100 W		
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Dimensions(W × D × H) 442 × 494 × 146 mm (17.4" × 19.4"× 5.7")		Working humidity	10 % ~ 90 %		
		Chassis	19-inch rack-mounted 3U chassis		
Weight(without hard disk) ≤ 15.5Kg (34.2 lb)		$\overline{\text{Dimensions}(W \times D \times H)}$	442 × 494 ×146 mm (17.4" ×19.4"× 5.7")		
		Weight(without hard disk)	≤ 15.5Kg (34.2 lb)		

The formula to calculate the incoming bandwidth and the IP camera connected is: A = B/(C+D).

A refers to the number of IP camera you connected.

B refers to the value of the incoming bandwidth.

C refers to the bitrate value of the main stream of the connected IP camera.

And D refers to the bitrate value of the sub-stream of the connected IP camera.

Example: The incoming bandwidth of HIK-IP96128-F16 NVR is 400 Mbps and the IP camera to connect is with resolution of 720P (1280*720) / 25 (30) fps. The bitrate for the main stream and sub-stream of the IP camera is set as 4Mbps and 1Mbps respectively. In this example, B=400Mbps, C=4Mbps, D=1Mbps and A = B/(C+D) = 400 / (4+1) = 80. So the number of IP cameras can be connected with is 80.