

5G/4G PoE Network Video Recorder

F-NVR110

5G
4G
Micro SD Card
PoE
RS485
RS232
Cloud Platform
H.265

Introduction

F-NVR110 is a 5G/4G PoE network video recorder specially designed for intelligent IoT surveillance system. The NVR can provide long distances and low latency HD video wirelessly by using the industrial 4G/5G module. In addition, F-NVR110 can be combined with the Four-Faith Intelligent IoT surveillance platform and the intelligent IoT IP camera to provide an intelligent IoT monitoring solution, enabling users to build a private monitoring cloud platform to further improve security. At the same time, it can integrate a variety of IoT acquisition protocols to achieve comprehensive monitoring of data + images.

Industrial-grade Design

- High-performance industrial-grade wireless module
- Metal casing, protection grade IP30. Metal housing and system safety isolation
- Industrial-grade components

Stability & Reliability

- WDT Watchdog design to ensure system stability
- Support plug & play, automatically set up and start to record
- Built-in 1.5KV electromagnetic isolation protection for Ethernet interface
- SIM/UIM card interface built-in 15KV ESD protection
- Built-in reverse phase protection and over voltage protection for power interface

Standard & Convenience

- Built-in 8 POE network interfaces, supporting 802.3AF and AT protocols
- Front-end edge integration and equipment intercommunication linkage
- Easy to use, flexible, multiple working mode options
- Plug and play, automatically completes the configuration of all IP cameras

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High Performance

- Support various IoT protocol
- HDMI video output up to 4K (3840X2160) resolution
- Support third party ONVIF Profile S/T camera
- Support IPC event trigger & image capture
- H.265, optimized in bit rate, bandwidth, and storage usage, 50% off than H.264.
- Support MQTT, Modbus RTU and other protocols
- Support remote management & upgrade

Product Specification

Hardware	
Model	**F-NVR110**
Items	**Contents**
CPU	ARM Cortex A7 Dual-core 1.3GHz
FLASH	512MB
DDR3	1GB
Video	
Items	**Contents**
Input	8 channels HD IP Video Input
Output	1 x HDMI, Resolution(@30fps): 3840x2160, 1920x1080, 1280x720, 1024x768
Decoding Format	H.265 / H.264
Video Input Protocol	ONVIF (3.0), PELCO, RTSP, etc.
Capability	4x1080p@30fps
Recording Resolution	4MP/3MP/1080p/UXGA/720p/VGA/4CIF
Audio	
Items	**Contents**
Input	8 channels from IPC
Audio Compression	G711-Alaw, G711-Ulaw, AAC-LC
Sample Rate	8KHz, 16KHz
Voice Talkback	1 x RCA Input, 1 x RCA Output G726 compression standard
Storage	
Items	**Contents**
Hard Disk	2 x 2.5-Inch, SATA Interface HDD/SSD, with heating pad
Capability	Up to 4TB each HDD (Optional)
MicroSD Card	1 x MicroSD Slot Storage up to 512GB

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Interface	
Model	**F-NVR110**
Items	**Contents**
WAN	1 x 10M/100M/1000M RJ45 Ethernet Port
LAN	8 x 10M/100M/1000M RJ45 Ethernet Port Support PoE 802.3af/at
Serial Port	2 x RS232, 3 x RS485/RS232 Multiplex
Analog Input	8 12, 16, 24 bits ADC （3 choose 1）
Relay	2 Electric load 5A 250V AC/30V DC
USB	2 x standard USB2.0
Digital Input	6
Digital Output	4 Support 5V or 12V output voltage, current 500mA
GPS/Beidou	Dual positioning module, supporting GPS and Beidou (Optional)
WIFI	AP, Client mode
Cellular (Optional)	
Items	**Contents**
Standard & Band	5G NR, 4G LTE FDD, LTE TDD, EVDO, WCDMA, TD-SCDMA, CDMA1X, GPRS/EDGE
Bandwidth	5G NR: Downstream rate 350Mbps, uplink rate 350Mbps LTE Cat20: Downstream rate 350Mbps, uplink rate 150Mbps FDD-LTE: Downstream rate 150Mbps, uplink rate 50Mbps TD-LTE: Downstream rate 130Mbps, uplink rate 35Mbps
Transmit Power	< 23dBm
Sensitivity	< -97dBm
Power	
Items	**Contents**
Power Supply	Terminal Block
Power Range	Non-PoE: DC 12V PoE: DC 48V
Power Consumption	Non-PoE< 24W PoE < 60W Standby Current <10mA (12V)

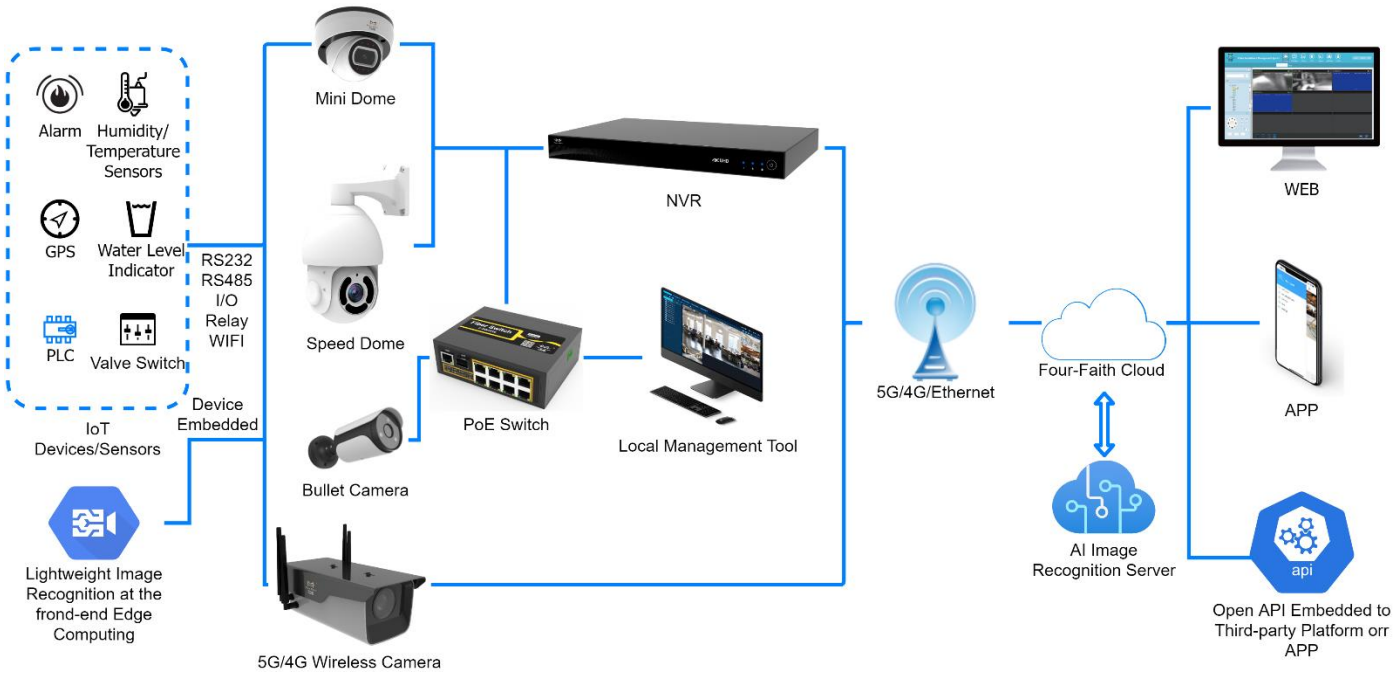
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WIFI	
Items	**Contents**
Standard & Band	Support IEEE802.11b/g/n, 2.4G, support AP & Client mode
Bandwidth	IEEE802.11b/g: Maximum speed rate 54Mbps IEEE802.11n: Maximum speed rate 150Mbps
Transmit Power	26dBm (11b), 21.5dBm (11g), 20dBm (11n)
Sensitivity	<-72dBm @ 54Mbps

General	
Items	**Contents**
Casing	Metal, IP30
Dimensions	182 x 152 x 80mm (Not include antenna)
Weight (without HDD)	2.9 KG (Not include HDD and other accesories)
Working Temperature	-35°C ~ + 75°C (+31°F ~ +167°F)
Working Humidity	90% (non-condensing)

Topology



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Dimension (mm)



Note: There may be differences between models of accessories and interfaces, actual products shall prevail

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Order Information

Models	Description
F-NVR110-8C-5G	1 X 10/100/1000M WAN RJ45 port, 8 x 10/100M LAN RJ45 ports, High-speed 5G cellular module & 2.4GHz WIFI module
F-NVR110-8C8P-5G	1 X 10/100/1000M WAN RJ45 port, 8 x 10/100M LAN RJ45 ports with PoE, High-speed 5G cellular module & 2.4GHz WIFI module
F-NVR110-8C-4G	1 X 10/100/1000M WAN RJ45 port, 8 x 10/100M LAN RJ45 ports, 4G cellular module & 2.4GHz WIFI module
F-NVR110-8C8P-4G	1 X 10/100/1000M WAN RJ45 port, 8 x 10/100M LAN RJ45 ports with PoE, 4G cellular module & 2.4GHz WIFI module