Z8516NFR-16P-S | BioSense Series

H.265+ 16 Channels BioSense Network Video Recorder with 16 PoE

- H.265+/H.265/H.264 decoding
- Support 16-channel IP cameras input & preview
- 16 channels realtime playback synchronously
- High definition HDMI output
- 16 PoE ports, up to 250 m transmission (by 10Mbps)
- Embedded intelligent classification algorithm based on computer vision technology
- Multiple intelligent video analytics functions (up to IPC) displaying
- Support multiple web browsers login
- P2P cloud service supported

Target Counting | **Line Crossing** | **Intrusion Detection** | **Motion Detection** | **Object Left/ Remove**

Product Overview

BioSense Series Network Video Recorder (NVR) is the back-end storage station of intelligent video surveillance solution released by ZKTeco based on the Deep-Learning algorithm and Computer Vision technology.

Embedded with advanced and powerful CPU,and ZKTeco's graphical operation system, the BioSense Series Network Video Recorders are the ideal couple for the front-end BioSense Series IP Cameras. The NVR can support 24/7 continuously recording all video and intelligent alarm events generated by the front-end IP Cameras, and store safely into hard drive by human & vehicle classification. After the event, the NVR can allow user to efficiently retrieve and playback the target video evidences especially for the key types of targets: human, vehicles and objects, so to more focus on the effective video clips and alarm events.

The BioSense Network Video Recorders can greatly help to improve the efficiency and safety of the entire video surveillance system, can be widely used in different scenario such as smart school, office, industrial park, community, public security, etc.

Core Features

H.265+ HEVC

H.265+ is an evolutionary optimization of the traditional H.264, it includes a series of encoding strategy such as ROI, smart 2D/3D noise reduction, etc. Delivering high quality video with up to 75% lower bandwidth.

IVA (Intelligent Video Analytics)

BioSense Network Video Recorders support multiple intelligent video analytic functions couple with the BioSense IP Cameras, such as: Target Counting, Object Lost/Left, and the Line Crossing, Area detection, Smart Motion Detection base on human and vehicle targets classification.

Smart Retrieval

BioSense Network Video Recorders support smart retrieval for video and alarm events by human & vehicle classification, enable user to efficiently search out the targeting video clips and alarm events.

ANR (Only for SD card IPC models)

While the connection lost between IPC and NVR, the video will be saved in SD card. The saved video will be auto replenished to NVR when network recovers to avoid any video lost.

Alarm Push Notification

Alarm events received to NVR can linkage actions such as email, audio, buzzer, and alarm message can be pushed to Mobile App and Management Platform Software on real-time.

Technical Parameters

Model	Z8516NFR-16P-S
System	
Main Processor	Multi-core embedded processor
Operating System	Embedded LINUX
Operation Interface	Web browser & Local GUI
Video and Audio	
Max IPC Video Input	16CH
Two-way Talk	Support
Audio Compression	G.711u
Max Audio Input	16CH by IPC
Third Party Camera Access	ONVIF & RTSP
Live View	
Display Split	1/4/6/9/16 CH
Resolution	8MP(3840*2160) / 5MP(2592*1944) / 2MP(1920*1080) / 1.3MP(1280*1024) / 1Mp(1280*720) / D1(1024*768)
Live View Capability	16CH@5MP(25/30fps)
Recording	
Video Compression	H.265+ /H.265 / H.264
Recording Resolution	8MP/5MP/4MP/3MP/1080P/960P/720P/D1
Max. Decoding Capability	4CH@5MP(25/30fps)/16CH@D1(25/30fps)
Incoming Bandwidth	80 Mbps
Outgoing Bandwidth	80 Mbps
Stream Type	Video, Video & Audio
Bit Rate	Main Stream: 256Kbps ~ 8192Kbps Sub Stream: 50Kbps ~ 700Kbps
Storage Method	Local hard drive and network
Record Mode	Schedule, Manual, Motion Detection, IVA Events Alarm
Record Interval	1 ~ 120 min (default: 60 min), Pre-record: 1 ~ 30 sec, Post-record: 10 ~ 300 sec
Playback and Backup	
Playback Channel	16CH synchronously playback
Search Mode	Time/ Date, Alarm Types, IVA Search
Playback Function	Play, Stop, Play Forward, Play Backward, 30 Seconds Forward, 30 Seconds Backward, Fast Play, Slow Play, Single Frame Play, Hide/Show Time Bar, Backup, Snapshot, Full Screen
Backup Mode	USB Device / Network Remote
Intelligent Video Analytics	
IVA by Camera	Line Crossing, Area Detection, Smart Motion Detection (base on human and vehicle classification), Target Counting, Object Lost/Left
Local IVA Functions displaying	Line Crossing, Area Detection, Smart Motion Detection (base on human and vehicle classification), Target Counting, Counting Statistics, Object Lost/Left
IVA by Device(Number of Channels)	Up to IPC
IVA by Camera (Number of Channels)	16

IVA Alarm

Smart IVA Alarm	Line Crossing, Area Detection, Smart Motion Detection (base on human and vehicle classification), Target Counting, Counting Statistics, Object Lost/Left
Regular Detection	Motion Detection / Video Shelter / Video Loss
Anomaly Alarm	HDD Full, No HDD, S.M.A.R.T error, Network disconnected, IP conflict
Alarm Linkage	Preview, Recording, Snapshot,Buzzer, Preset, Email, Tour, Upload center
Smart Search	Support smart search out target video by human and vehicle classification filtering

Network

Network Protocol	TCP/IP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTSP, NTP, UPnP, SMTP, IPv4, UDP, SSL/TLS, PPPoE, SNMP, WebSocket, P2P
Max. Online User	5
Web Browser	Google Chrome/Microsoft Edge/Firefox/Safari/Opera
Operation System	Windows
Management Platform	ZKBio CVSecurity / CVAccess / AntarVis 2.0
Mobile Application	AntarView Pro+ (iOS & Android)
P2P Cloud Service	Support
Interoperability	ONVIF Profile S/G, SDK, CGI, API

Storage & Auxiliary Interface

SATA Ports	2 SATA Port, up to 8 TB capacity each
eSATA	N/A
Raid 0/1/5/6/10	N/A
HDMI	1*HDMI
VGA	1*VGA(1920*1080/60Hz, 1280*1024/60Hz)
Network Interface	1 RJ-45 Port (10/100/1000Mbps)
PoE Ports	16 PoE, 10/100 Mbps self adaptive
Standard	IEEE802.3af/at sefl adaptive
USB	2*USB 2.0
Audio Input/Output	1/0
Alarm Input/Output	N/A
RS-485	Support
RS-232	N/A

Power

Power Supply	DC 52V/4.6A
Power Consumption	NVR: 20W (without HDD)
	PoE ports: 15W for each output up to 250m transmission

General

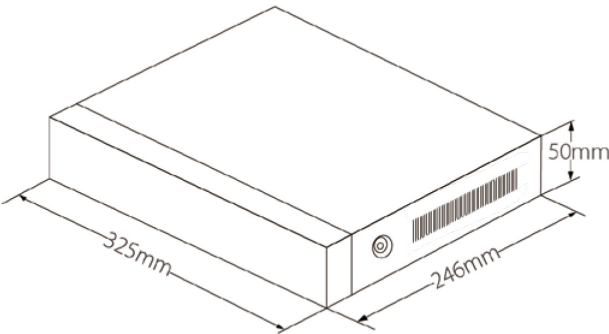|	
Casing	1.5U
Working Temperature	-10°C ~ 55°C / 14°F ~ 131°F
Working Humidity	0% ~ 90%
Storage Humidity	30%–80%
Operating Altitude	3,000 m (9,842.52 ft)
Installation	Desktop / Cabinet mount
Dimensions(L*W*H)	325 * 246 * 50 (mm)
Net Weight	3kg (without HDD)
Gross Weight	3.5kg (without HDD)
Certifications	CE-LVD; CE-EMC; FCC certification
Environment	CE-RoHS, WEEE, Reach self-declaration

Order Information

Name	Model				Description
BioSense Smart NVR	Z8516NFR-16P-S				16CH H.265+ PoE NVR, 2SATA

Dimension (mm)

Rear Panel