

NIGHTWATCH PRO VFX AI Bundle

8 Channel PoE Network Video Recorder & Smart Dual Illumination IPC Bundle



- Built-in 8 Port PoE, Smart H.265+/H.265 Support
- Includes 4MP Smart Dual Illumination Cameras
- Up to 8MP Resolution for Preview and Playback
- Supports Perimeter Protection and iMD by camera
- Bundles include HDD up to 4TB, Supports up to 16TB max

System Overview

IC Realttime's **NIGHTWATCH PRO VFX AI** Bundle features the **NVR-VFX08POE-1U4K1**- supporting 8MP/4K resolution and output and H.265 encoding technology- boasting excellent performance at an affordable price. This NVR has a built in 8 port PoE for easy-install and includes a 2 or 4TB HDD for storage expandable for up to 16TB. The bundle includes **IPEG-E40F-DIW1** cameras equipped with **Smart Dual Illumination** (IR and white light) and supporting IVS + AI such as Perimeter Protection and Intelligent Motion Detect.

Functions

Smart Dual Illumination

The camera's default illumination is set to IR, with the warm LED turning on when a motion or Smart event like IVS is triggered. This technology leverages the IR and Warm Light LED equipped in this camera by providing a discreet appearance at night, while providing a color image in relevant situations.

Protection

The camera's outstanding reliability is unsurpassed due to its rugged design. The camera is protected against water and dust with IP67 rating, making it suitable for indoor or outdoor environments.

iMD (Intelligent Motion Detect) by Camera

This is an upgraded version of motion detection currently known as Intelligent Motion Detection (iMD). The upgraded Plus version greatly improves alarm accuracy by pre-loading a deep learning algorithm that recognizes people and vehicles. Motion detection alerts containing a human and/or vehicle intrusion event are now possible with up to 95% accuracy. Eliminate false alarms, save time and keep stress levels low knowing you're protected.

4K Resolution

4K resolution is a revolutionary breakthrough in image processing technology. 4K delivers four times the resolution of standard HDTV 1080p cameras and offers superior picture quality and image details. 4K resolution improves the clarity of a magnified scene to view or record crisp forensic video from large areas.

Intelligent Video System (by Camera)

Working with IVS-enabled IP cameras, the NVR recognizes and records video that contains IVS data on all IP channels. The NVR records standard intelligence at-the-edge features, as well as premium IVS features that detect abandoned or missing objects, Tripwire violations, and intrusion violations. The NVR is also capable of recording business analysis data – Facial Detection, People Counting, and Heat Map – from IP cameras with built-in Intelligent Business Analytics.

Bundle Information

NIGHTWATCH-PRO-AI-4ED-VFX	NVR-VFX08POE-1U4K1 preinstalled with 2TB HDD + (4x) IPEG-E40F-DIW1 cameras
NIGHTWATCH-PRO-AI-6ED-VFX	NVR-VFX08POE-1U4K1 preinstalled with 2TB HDD + (6x) IPEG-E40F-DIW1 cameras
NIGHTWATCH-PRO-AI-8ED-VFX	NVR-VFX08POE-1U4K1 preinstalled with 4TB HDD + (8x) IPEG-E40F-DIW1 cameras

NVR Technical Specification

System

Model Name	NVR-VFX08POE-1U4K1
Main Processor	Industrial-grade embedded processor
Operating System	Embedded LINUX, ICR 4.0

Video

Max IP Channels	8 Channels
Network Bandwidth	128 Mbps for access, 128 Mbps for storage 64 Mbps for forwarding
Third Party IPC Support	ONVIF, RTSP

Audio

Two-way Talk	1 Channel Input, 1 Channel Output, RCA
Audio Compression	G.711A/G.711U/PCM/G726

Display

Interface	1 HDMI, 1 VGA (simultaneous video output)
Resolution	HDMI: 3840×2160, 1920×1080, 1280×1024, 1280×720 VGA: 1920×1080, 1280×1024, 1280×720
Display Split	1/4/8/9
Decoding Capacity	2ch-4K@30fps, 8ch-1080P@30fps

Intelligence

IVS (by camera)	Heat Map, Tripwire and Intrusion, Missing, and Abandoned object
Advanced IVS (by camera)	Perimeter Protection, Face Detection, People Counting (Line crossing, dual lens support)
Perimeter Protection	Supported (by camera); Tripwire & Intrusion
Intelligent Motion Detect (iMD)	Supported (by camera)
Other	Audio Detection (by camera)

Recording

Video Compression	Smart H.265/H.265/Smart H.264/H.264
Image Resolution	8MP/ 5MP/ 4MP /3MP /1080P /720P /D1 /CIF
Record Mode	Priority of record mode: Manual recording > alarm recording > motion detection recording > timed recording

Alarm

General Alarm	Motion detection, privacy masking, video loss, IPC alarm
Anomaly Alarm	Front-end device going offline, storage error, full storage, IP conflict, MAC conflict, login lock, network security anomaly
Alarm Linkage	Video recording, snapshot, log, preset point, tour
Alarm Input	4 Channel
Alarm Output	2 Channel

Playback & Backup

Sync Playback	1/4/8
Playback Functions	1. Play, pause, stop, fast forward, fast backward, rewind, play by frame 2. Full screen, backup (cut/file), partially enlarge, audio on/off
Backup Mode	USB Device/Network

Network

Ethernet	1x RJ-45 Ports (10/100/1000Mbps)
PoE	8x RJ-45 ports with PoE power supply (10/100 Mbps)
Bridge Mode	Not Supported
Network Functions	HTTP, HTTPS, TCP/IP, IPv4, RTSP, UDP, SMTP, NTP, DHCP, DNS, DDNS, P2P
Web Access	Chrome, IE9 or above, Firefox
Smart Phone	Android, iOS, iPhone

Storage

Internal HDD	2 SATA III Ports, Up to 8TB capacity for each HDD
External HDD	N/A

Auxiliary Interface

USB	2 USB Ports (Front: 1 USB 2.0 , Back: 1 USB 2.0)
RS232	N/A
RS485	N/A

General

Power Supply	AC100-240V, 47-63HZ, 3.5A
Power Consumption	Total output of NVR is ≤ 10W (without HDD) Total output power of PoE is 117W, the maximum output power of a single port is 25.5W
Working Environment	+14°F to +131°F(-10°C to +55°C)
Operating Humidity	10%~90%
Dimensions (W×D×H)	17.32 inch × 15.68 inch × 1.72 inch (440 mm × 398.2 mm × 43.7 mm)
Weight	13.16 lb (5.97kg) (without HDD)
Installation	Rack mountable

Certifications

Certifications	FCC: Part 15 Subpart B
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Camera Technical Specification

Model Name	IPEG-E40F-DIW1
Image Sensor	1/2.9" CMOS
Effective Pixels	2688 (H) × 1520 (V) (4 Megapixels)
RAM/ROM	128MB/ 128MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Minimum Illumination	0.006 lux@F1.6 (Color, 30 IRE) 0.0006 lux@F1.6 (B/W, 30 IRE) 0 lux (Illuminator on)
Illumination Distance	Up to 98.43 ft (30 m) (IR); Up to 98.43 ft (30 m) (Warm light)
LED On/Off Control	Auto / Manual/ Smart Dual Illumination
IR LEDs	1 IR; 1 Full Color,Warm Light LED

Lens

Lens Type	Fixed-focal				
Mount Type	M12				
Focal Length	2.8 mm				
Max. Aperture	F1.6				
Iris Type	Fixed				
Angle of View	Horizontal: 95°; Vertical: 52°				
Close Focus Distance	2.95 ft (0.9 m)				
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8mm	208 ft	83 ft	41 ft	21 ft

Pan/Tilt/Rotation

Pan/Tilt/Rotation Range	Pan: 0°–360° Tilt: 0°–90° Rotation: 0°–360°
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Video

Compression	H.264H; H.265; H.264; H.264B; MJPEG (Only supported by the sub stream)
Smart Codec	Smart H.265+; Smart H.264+
Streaming Capability	2 Streams
Resolution	4M (2688 × 1520/2560 × 1440); 3M (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)
Frame Rate	Main Stream: 2688 × 1520@(1–20 fps)/ 2560 × 1440@(1–25/30 fps) Sub Stream: 704 × 576@(1–25 fps)/ 704 × 480@(1–30 fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 32 kbps–6144 kbps H.265: 12 kbps–6144 kbps
Day/Night	Auto(ICR)/Color/B/W
BLC Mode	BLC / HLC / WDR (120 dB)
White Balance	Auto; natural; street lamp; outdoor; manual; regional custom
Gain Control	Auto / Manual
Noise Reduction	3D DNR
Region of Interest	Off / On (4 Zone)
Flip	0°/90°/180°/270° (Supports 90°/270° with 2688 × 1520 resolution and lower)
Mirror	Off / On
Privacy Masking	8 areas

Intelligence

Basic IVS	Tripwire; Intrusion
Perimeter Protection	Tripwire; Intrusion(These functions support the classification and detection of vehicle and human objects)
Intelligent Motion Detect	Supported
AI Search	Works together with the NVR08-V1 and other AI enabled IC Realtime NVRs to perform refined intelligent search, event extraction and merging to event videos

Audio

Compression	G.711a; G.711Mu; PCM; G.726
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Network

Ethernet	RJ-45 (10/100Base-T)
Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP;SMTP; FTP; SFTP; DHCP; DNS; DDNS; NTP; Multicast; ICMP; IGMP; P2P
Interoperability	ONVIF(Profile S/ Profile G/ Profile T);CGI;P2P
Cyber Security	Configuration encryption; Trusted execution; Digest; Security logs; WSSE; Account lockout; syslog; Video encryption; 802.1x; IP/MAC filtering; HTTPS; Trusted upgrade; Trusted boot; Generation and importing of X.509 certification
Streaming Method	Unicast / Multicast
Max. User Access	6 (Total bandwidth: 36 M)
Edge Storage	FTP; SFTP; Micro SD card (support max. 256 GB)
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	IC Now
Smart Phone	IOS, Android

Certifications

Certifications	FCC Part 15, Subpart B
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Interface

Audio Interface	Built-In Mic
RS485	N/A
Alarm	N/A

Electrical

Power Supply	12 VDC/PoE (802.3af)
Power Consumption	Basic: 2.1 W (12 VDC); 2.5 W (PoE) Max. (H.265 + intelligence on + WDR + warm light): 4.4 W (12 VDC); 5.2 W (PoE)

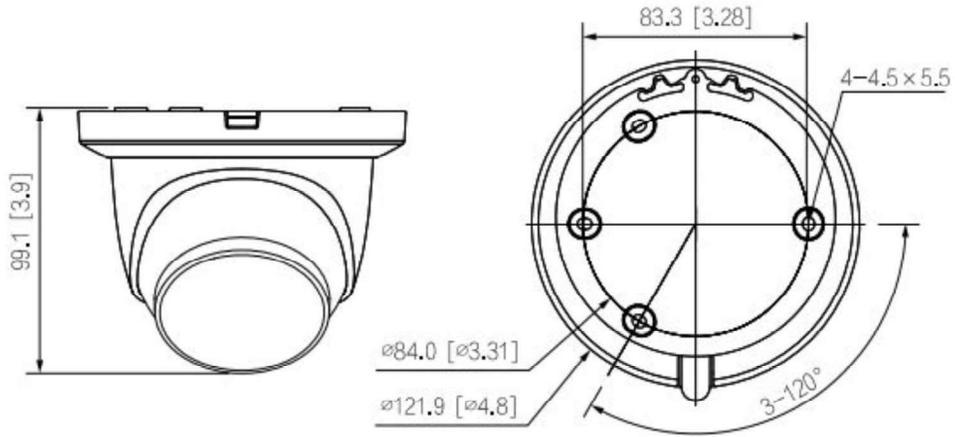
Environmental

Operating Conditions	–40 °F to +140 °F(–40 °C to +60 °C)/less than 95%
Storage Conditions	–40°F to +140°F (–40°C to +60°C)
Ingress Protection	IP67

Construction

Casing	Metal Inner core and Cover, Plastic decoration ring
Dimensions	3,90" × Φ4,80" (99,1 mm × Φ121,9 mm)
Net Weight	1.01 lb (0.46 kg)
Gross Weight	1.43 lb (0.65 kg)

Camera Dimensions (mm/in)



NVR Dimensions

