



## XRN-820S

8CH POE+ NVR

### Benefits

- A cost-effective way to take advantage of the licence-free Deep Learning AI video analytics built into Wisenet AI cameras.
- Install wizard accessible through web interface to quickly install without monitor and keyboard directly attached.
- Wisenet AI cameras have Deep Learning analytics to detect and classify objects including people, vehicles, faces and number plates as well as object attributes such as gender, colour of clothing, glasses, bags and vehicle type.
- Single or multiple event trigger rules can include a wide range of event criteria, such as audio, fog, motion, tampering and motion detection, as well as sound classification and Intelligent Video Analytics (IVA).
- AI search filters allow the rapid discovery of footage using check box criteria to filter by object type and attributes.
- WiseStream II complementary compression technology, combined with H.265 compression, improves bandwidth efficiency by up to 75% compared to current H.264 technology.
- New look front grill optimises air flow to keep the hard disk drives cool which increases disk life and efficiency.
- Dynamic event supports future camera features without the need for a firmware upgrade.
- QR code scan on your smartphone for remote monitoring on the move.
- Max 8 Ch (CIF – 32Mbps).
- ONVIF profile S conformant.

### XRN-820S

#### DISPLAY

##### Network camera

Inputs	Max. 8CH
Resolution	32MP ~ CIF
Protocols	SUNAPI, ONVIF

##### Decoding

Local Display	FHD : HDMI & VGA Dual monitor UHD : HDMI Single monitor
Multi Screen Display	[Local Monitor] 1/ 2V/ 2H/ 3V/ 4/ 6/ 8/ 9/ Sequence [Web] 1/ 2H/ 2V/ 3V/ 4/ 6/ 8/ 9
Resolution	[Local Monitor] FHD Clone mode : 32M(15fps, H.265 Only), 12M(30fps, H.265 Only), 8.3M(50fps), 1080p(240fps), D1(480fps) UHD Single mode : 32M(15fps, H.265 Only), 12M(30fps, H.265 Only), 8.3M(50fps), 1080p(240fps), D1(270fps) FHD Expand mode: 32M(12fps, H.265 Only), 12M(25fps, H.265 Only), 8.3M(30fps), 1080p(90fps), D1(200fps) Expand mode : Max 15fps when displaying 8CH

#### PERFORMANCE

##### Operating System

Embedded	Linux
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##### Record

Compression	H.265, H.264, MJPEG
Recording Bandwidth	Max. 100Mbps
Resolution	32MP ~ CIF
Mode	Normal, Dual Stream, Schedule(Continuous/Event), Event (Pre/Post), Bookmark
Event Trigger	Alarm Input, Video Loss, Camera Event(Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event
Event Action	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out

##### Search & Play

Playback Bandwidth	Max. 32Mbps
User	Max. 4 Users (Local 1, Remote 3)
Simultaneous playback	Max. 8CH per user
Fisheye Dewarping	CMS
Mode	Date & Time(Calendar), Event list, Text Search, Smart Search
Resolution	CIF ~ 32MP (Up to H.264 8.3MP, H.265 32MP)
Playback Control	Fast/Slow Forward / Backward, Move one step Up / Down

##### Storage

Supported HDD	Up to 6TB
HDD Slot	SATA 2ea(Max. 12TB)

##### Backup

File backup	BU/Exe(GUI), JPG/AVI(Network)
Function	Multi channel(Up to 8CH) Play, Date-Time/Title display

#### NETWORK

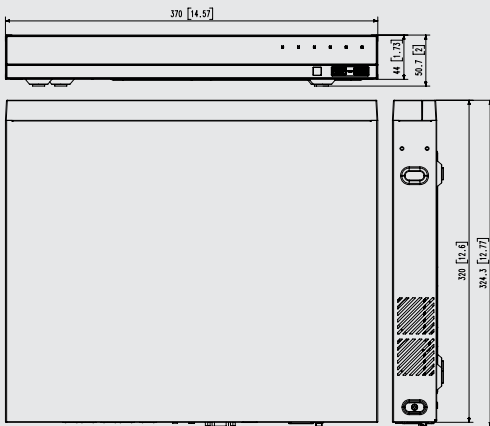
Protocol	IPv4, IPv6, TCP/IP, UDP/IP, RTP (UDP), RTP (TCP), RTSP, NTP, HTTP, DHCP (Server, Client), SMTP, ICMP, IGMP, ARP, DNS, DDNS, uPnP, HTTPS, SNMP, ONVIF (Profile-S), SUNAPI(Server, Client)
DDNS	Hanwha DDNS
Transmission Bandwidth	Max. 100Mbps
Audio	
Input/Output	8 CH(network)
Compression	G.711, G.726, AAC(16/48KHz)
Audio Communication	2-Way
Max Remote Users	Search(3), Live Unicast(10), Multicast(20)
Security	IP address filtering, User access Log, 802.1x, Encryption Device certificate(Hanwha Techwin Root CA), Signed firmware

## Key Features

- Up to 8CH (CIF to 32MP supported)
- Max. 100Mbps network camera recording
- HDMI out
- User friendly UI / UX
- AI search support when working with Wisenet AI camera
- Dynamic Event support - New event function of cameras is available without software update
- H.265, H.264, MJPEG codec supported
- Plug & play by 8 PoE ports
- Bookmark management (Up to 100 set)
- SATA 2ea (Up to 12TB)

## Dimensions

Unit:mm(inch)



- \* The latest product information / specification can be found at [hanwha-security.com](http://hanwha-security.com)
- \* Design and specifications are subject to change without notice.
- \* Wisenet is the proprietary brand of Hanwha Techwin.

## XRN-820S

### Web viewer

Supported OS	Windows 10, macOS 10.13
Supported browser	Google Chrome, Microsoft Edge, Mac Safari, Firefox
Viewer Software	WAVE, SSM, Webviewer, Smart Viewer, Wisenet mobile Support SDK/CGI(SUNAPI) for integration to 3rd party VMS

### FUNCTIONS

#### Camera Setup

Register	Auto, Manual
Item	IP address, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD setup (4, 8 point polygon) Camera video setup (Simple focus, Brightness/Contrast, Flip/Mirror, IRIS, WDR, D&N, SSNR, Shutter, SSSDR, DIS), Fisheye Dewarping Mode, Hallway View Setup, Camera Webpage

#### PTZ

Control	Via GUI, Webviewer, SPC-2000
Preset	300 Presets

#### Smart phone

Support Model	iOS, Android
Protocol Support	RTP, RTSP, HTTP, CGI(SUNAPI)
Control	Live 8CH(Multi-Profile Support), Playback 4CH
Max. Remote Users	Search(3), Live Unicast(10)

#### Redundancy

Failover	N+1
ARB	Support

Easy configuration P2P(QR code)

### INTERFACE

Front	Indicator	HDD, Alarm, Power, Record, Backup, Network
Storage		OK
HDMI		1EA 3840x2160 30Hz
VGA		1EA 1920x1080 60Hz
Audio		Out 1EA
Ethernet		PoE RJ-45 8EA (LAN, 10/100), RJ-45 2ea (LAN/WAN 1Gbps)
Alarm		In 4EA, Out 2EA
USB		3EA(Front 2 x USB 2.0, Rear 1 x USB 3.0)
Power inlet		AC 1EA

### SYSTEM

Log	Log List	Max. 100,000 (System Log, Event Log each)
System Control		Mouse, Web, Controller (SPC-2000)
Language		English, French, German, Italian, Spanish, Russian, Turkish, Polish, Dutch, Swedish, Czech, Portuguese, Danish, Rumanian, Serbian, Croatian, Hungarian, Greek, Norwegian, Finnish, Korean, Chinese, Japanese, Thai, Vietnamese

### ENVIRONMENTAL

Operating Temperature	0°C to +40°C(32°F to 104°F)
Operating Humidity	20% ~ 85% RH

### ELECTRICAL

Power Input	100 ~ 240 VAC ±10%; 50/60 Hz
Power Consumption	Max 160W
PoE Budget	100W

### MECHANICAL

Colour / Material	Black
Dimension (WxHxD)	370 x 50.7 x 324.3 mm
Weight	2.7Kg

### INTELLIGENT ANALYSIS

AI Search	Object Attribute	Compatible for Wisenet AI Camera
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