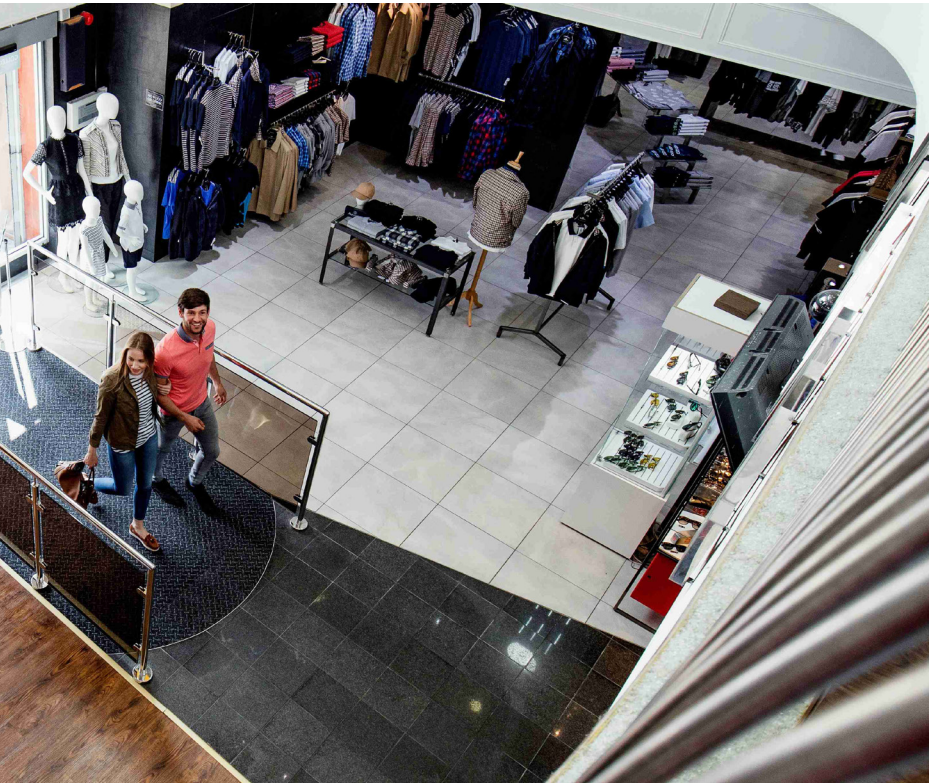




16CH High Performance Network Video Recorder



Key Feature

- H.265+/H.265/H.264+/H.264 video formats
- Up to 16-ch IP camera inputs
- Up to 1-ch@32 MP/2-ch@12 MP/16-ch@1080p decoding capacity
- 8 SATA interfaces for HDD connection
- HDD hot swapping with RAID 0/1/5/6/10

Professional and Reliability

- H.265+ compression effectively reduces the storage space by up to 75%
- Dual-stream recording saves bandwidth
- Adopt stream over TLS encryption technology which provides more secure stream transmission service
- Support double verification for playback and downloading

HD Video Output

- Provide independent HDMI and VGA outputs
- HDMI video output at up to 4K resolution

Storage and Playback

- Hot-swappable HDD with configurable RAID 0, RAID 1, RAID 5, RAID 6 and RAID 10 storage scheme
- 1 eSATA interface for HDD connection
- 16-ch synchronous playback

Smart & POS Function

- Support multiple VCA (Video Content Analytics) events
- Configurable special camera smart functions, such as VCA detection (motion, line crossing, intrusion, etc.), heat map, ANPR, and people counting
- POS information overlay on live view and playback, and POS triggered recording and alarm

Network & Ethernet Access

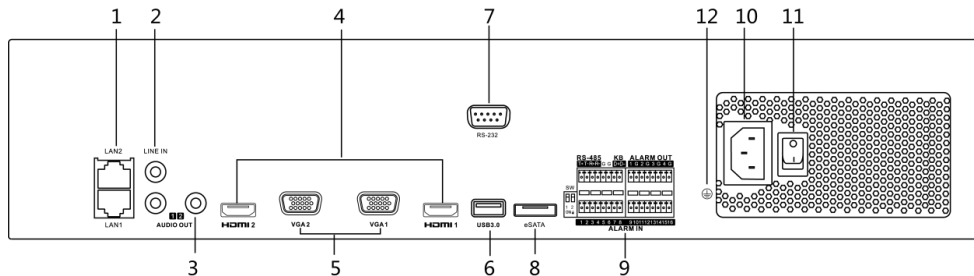
- 2 self-adaptive 10/100/1000 Mbps Ethernet interfaces
- DDNS (Dynamic Domain Name System) for easy network management
- Smooth streaming technology
- Support web access without plug-in

Specifications

Video and Audio	
IP video input	16-ch Up to 32 MP resolution <i>After ultra HD resolution mode is enabled, the NVR supports up to 4-ch 32 MP/24 MP IP video inputs.</i>
Incoming bandwidth	256 Mbps
Outgoing bandwidth	256 Mbps
Incoming bandwidth (RAID mode)	200 Mbps
Outgoing bandwidth (RAID mode)	200 Mbps
HDMI 1 output	4K (3840 × 2160)/60Hz, 4K (3840 × 2160)/30Hz, 1920 × 1080/60Hz, 1600 × 1200/60Hz, 1280 × 1024/60Hz, 1280 × 720/60Hz, 1024 × 768/60Hz
HDMI 2 output	1920 × 1080/60Hz, 1280 × 1024/60Hz, 1280 × 720/60Hz, 1024 × 768/60Hz
VGA 1 output	1920 × 1080/60Hz, 1280 × 1024/60Hz, 1280 × 720/60Hz, 1024 × 768/60Hz
VGA 2 output	1920 × 1080/60Hz, 1280 × 1024/60Hz, 1280 × 720/60Hz, 1024 × 768/60Hz
Video output mode	HDMI 1 and VGA 1 provide simultaneous video output, and work as the main output; HDMI 2 and VGA 2 provide simultaneous video output, and work as the auxiliary output
CVBS output (optional)	1-ch, BNC (1.0 Vp-p, 75 Ω), resolution: PAL: 704 × 576, NTSC: 704 × 480
Audio output	2-ch, RCA (Linear, 1 KΩ)
Two-way audio input	1-ch, RCA (2.0 Vp-p, 1 KΩ, using the audio input)
Decoding	
Decoding format	H.265+/H.265/H.264+/H.264/MPEG4
Recording resolution	32 MP/24 MP/12 MP/8 MP/6 MP/5 MP/4 MP/3 MP/1080p/UXGA/720p/VGA/4CIF/DCIF/2CIF/CIF/QCIF <i>After ultra HD resolution mode is enabled, the NVR supports up to 4-ch 32 MP/24 MP IP video inputs.</i>
Synchronous playback	16-ch
Capability	1-ch@32 MP (30 fps)/2-ch@12 MP (20fps)/4-ch@8 MP (25fps)/8-ch@4 MP (30fps)/16-ch@1080p (30fps)
Dual stream recording	Support
Stream type	Video, Video & Audio
Audio compression	G.711ulaw/G.711alaw/G.722/G.726/AAC/MP2L2/PCM

Network	
Remote connection	128
Network protocol	TCP/IP, DHCP, IPv4, IPv6, DNS, DDNS, NTP, RTSP, SADP, SMTP, SNMP, NFS, iSCSI, ISUP, UPnP™, HTTP, HTTPS
Network interface	2, RJ-45 10/100/1000 Mbps self-adaptive Ethernet interface
Network mode	Net Fault-Tolerance, Multi-address
RAID	
RAID Type	RAID0, RAID1, RAID5, RAID6, and RAID10 (at least 4 TB for each HDD or better)
Auxiliary interface	
Serial port	1 RS-485 (full-duplex), 1 RS-232, 1 keyboard
SATA	8 SATA interfaces supporting hot-plug
eSATA	1 eSATA interface
Capacity	Up to 10 TB capacity for each disk
Alarm in/out	16/4
USB interface	Front panel: 2 × USB 2.0; Rear panel: 1 × USB 3.0
General	
Power supply	100 to 240 VAC, 50 to 60 Hz
Consumption (without HDD)	≤30W
Fan	Speed self-adjustable
Working temperature	-10 °C to 55 °C (14 °F to 131 °F)
Working humidity	10% to 90%
Chassis	3U chassis
Dimension (W × D × H)	445 × 465 × 92 mm (17.5"× 18.3" × 3.6")
Weight (without HDD)	≤ 10 kg (22 lb)
Certification	
CE, FCC, UL	

Physical Interfaces



No.	Description	No.	Description
1	LAN1/LAN2 Interface	7	RS-232 Interface
2	LINE IN	8	eSATA Interface
3	AUDIO OUT	9	Alarm In/Alarm Out
4	HDMI1/HDMI2 Interface	10	100 to 240 VAC Power Supply
5	VGA1/VGA2 Interface	11	Power Switch
6	USB 3.0 Interface	12	GND

Ordering Information

	Model Number	Description
NVR	HRN-16081S-R	HOLIS Pro H.265+/H.265 Embedded NVR, 16-ch, Gig Ethernet, 8 HDD Bays

About Johnson Controls

Johnson Controls is a global diversified technology and multi-industrial leader serving a wide range of customers in more than 150 countries. Our 120,000 employees create intelligent buildings, efficient energy solutions, integrated infrastructure and next generation transportation systems that work seamlessly together to deliver on the promise of smart cities and communities. Our commitment to sustainability dates back to our roots in 1885, with the invention of the first electric room thermostat.

For additional information, please visit www.tycosecurityproducts.in