



Omada Network Video Recorder | Datasheet

Omada NVR16-8P-2T

Omada 8-Port PoE+ Network Video Recorder with 2TB HDD, Up to 16 Channel



Highlights

- 16-Channel Live View and 4K HDMI Video Output
- 16-Channel Synchronous Playback*
- Preinstalled 2TB HDD (Expandable up to 1 × 16 TB)
- 8 × PoE+ Ports
- Remote Monitoring

Feature Descriptions



16-Channel* Live View

Display each surveilled zone in real time on a single interface for comprehensive control.



Industrial-Grade Housing

Industrial-grade housing ensures durable and reliable performance during operation.



24/7 Free Smart Recording

The built-in 2TB HDD (expandable up to 16TB) supports continuous recording. Enable Smart Storage to record in SD and save HD clips for events to optimize storage space without missing critical details.



ONVIF Compatibility

Easily integrates with Omada and ONVIF-compliant third-party cameras for seamless system expansion.



4K 8MP HDMI Video Output

The NVR delivers up to 4K 8MP video from connected cameras, capturing every detail with stunning clarity.



Smart Perimeter Protection

Leverages Omada cameras' latest smart detection and deterrence features. Get instant alerts for suspicious activity to safeguard your property.



Secure Remote Control via App

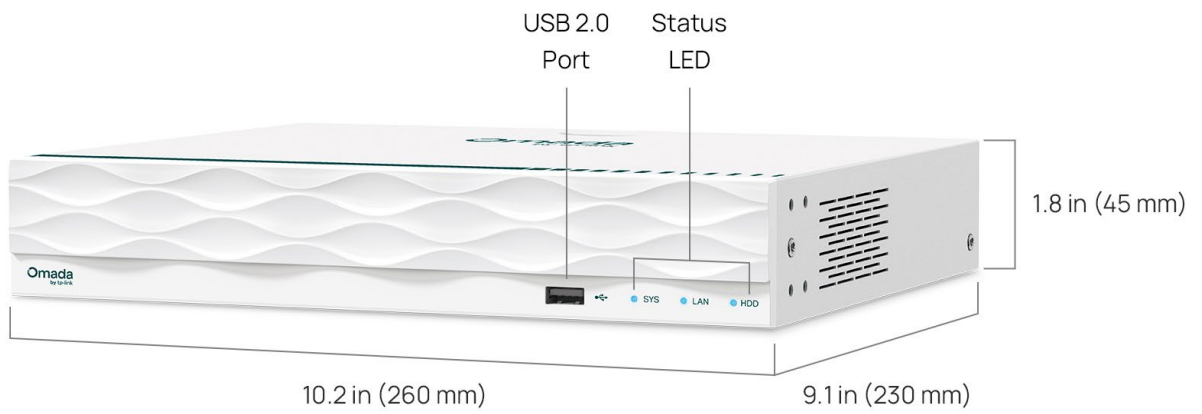
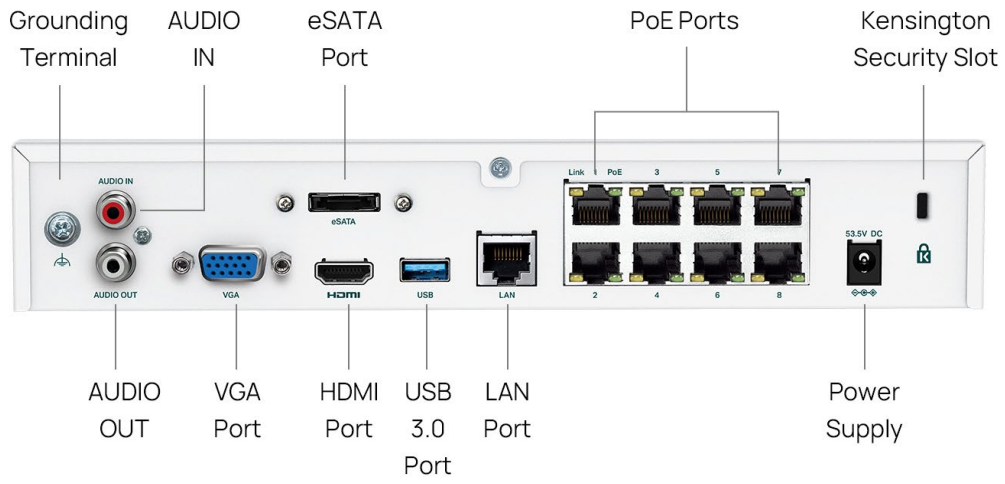
Access your cameras from anywhere without monthly fees, while your data stays safe at all times.



Simple Deployment with PoE+

The NVR uses one Ethernet cable (up to 886 ft/270 m**) to transmit power and data to PoE cameras.

Build Features



Specifications

Model		Omada NVR16-8P-2T
Video and Audio	IP Video Input	16-Channel
	Managed Cameras	<ul style="list-style-type: none"> • 16 (HD) • 16 (2K/5MP) • 12 (4K/8MP) • 8 (12MP) • 6 (16MP)
	HDMI Output Resolution	1 Channel, Resolution: 3840x2160/30Hz, 2560x1440/60Hz, 1920x1080/60Hz, 1680x1050/60Hz, 1440x900/60Hz, 1280x1024/60Hz, 1280x720/60Hz
	VGA Output Resolution	1 Channel, Resolution: 1920x1080/60Hz, 1680x1050/60Hz, 1440x900/60Hz, 1280x1024/60Hz, 1280x720/60Hz
	Video Output Mode	HDMI and VGA Simultaneous Output
	Multi-View Display	1/4/6/8/9/16, Custom Layout
Decoding	Audio Compression	G.711A/G.711U/G.726
	Video Compression	H.265+/H.265/ H.264+/H.264
	Record Resolution	16MP/8MP/5MP/4MP/3MP/1080p/UXGA/720p/VGA/4CIF/DCIF/2CIF/ CIF/QCIF
	Synchronous Playback	16-Channel*
	Capability	<ul style="list-style-type: none"> • 25fps: 10-ch @ 2MP • 30fps: 1-ch @ 16MP, 2-ch @ 8MP, 4-ch @ 5MP, 5-ch @ 4MP, 6-ch @ 3MP
Record Management	Record Mode	<ul style="list-style-type: none"> • Manual Recording • Scheduling Recording • Event Recording
	Playback Mode	<ul style="list-style-type: none"> • Instant Playback • Regular Playback • Event Playback
	Backup Mode	<ul style="list-style-type: none"> • Regular Backup • Video Clip Backup
	Playback Function	<ul style="list-style-type: none"> • Play • Pause • Stop • Fast Forward • Play By Frame • Video Clip • Export Clip • Audio On/Off

Model		Omada NVR16-8P-2T
Network	Protocol	<ul style="list-style-type: none"> • UPnP (Plug and Play) • NTP (Network Timing) • SMTP • DNS • TCP/IP • UDP • ICMP • HTTP • HTTPS • DHCP • RTSP • SSL/TLS • RTP • IPv4 • ARP • LLDP • FTP • IPv6 • SNMP
	Mobile Phone Access	Android, iOS
	Web Browser	Chrome (57+), Firefox (52+), Edge (91+)
	Interoperability	ONVIF Profile G/S/T
External Interface	Network Interface	1, RJ-45 10/100/1000 Mbps Self-Adaptive Ethernet Interface
	USB Interface	1 Front USB 2.0 Port, 1 Rear USB 3.0 Port
	Audio Interface	<ul style="list-style-type: none"> • 1-ch RCA Input (1.4 Vp-p, 10KΩ) • 1-ch RCA Output (2.8 Vp-p, 1KΩ)
	Power	1× DC Jack
	Reset Button	1
	eSATA	1
	HDMI	1
Hard Disk	VGA	1
	SATA	1 SATA Interfaces
PoE	Capacity	<ul style="list-style-type: none"> • 1× SATA Interface, Up to 16 TB Capacity • 1× 2TB HDD Preinstalled
	Standard	802.3at/af Compliant
	Interface	1-8, RJ-45 10/100 Mbps Self-Adaptive Ethernet Interface
	PoE Budget	115 W [^] Available for All PoE+ Ports, 30 W Max per Port

Model		Omada NVR16-8P-2T
Alarm	General Alarm	<ul style="list-style-type: none"> • Motion Detection (Vehicle Detection, Human Detection, Pet Detection) • Video Tampering • Line-Crossing Detection • Intrusion Detection <p>Note: The alarm function requires the use of a camera.</p>
	Anomaly Alarm	<ul style="list-style-type: none"> • IPC IP Conflict • Video signal loss <p>Note: The alarm function requires the use of a camera.</p> <ul style="list-style-type: none"> • No disk • Hard drive exception • Hard drive reallocated section count error • No enough space of hard drive • Hard drive password error • NVR offline • NVR IP Conflict • Single Port Short Circuit • Single port power exceeded • Pse chip temperature is too high • Total power exceeded • FTP Directory Storage Space Insufficient • The IP address obtained from DHCP conflicts with the internal IP • Login Exception
	Alarm Linkage	<p>Event:</p> <ul style="list-style-type: none"> • Buzzer • Pop-up Alarm Screen • Push Notification • Send Email • Highlight Window • Recording Linkage • Light Alarm • Audible Alarm • Channel Alarm Output <p>Note: The alarm function requires the use of a camera.</p> <p>Anomaly Alarm:</p> <ul style="list-style-type: none"> • Buzzer • Send Email • Pop-up Alarm Screen • Record Linkage

Model		Omada NVR16-8P-2T
General	Storage Temperature	-40 °C to 70 °C (-40 °F to 158 °F)
	Storage Humidity	95% or Less (Non-Condensing)
	Package Content	<ul style="list-style-type: none"> • Omada Network Video Recorder • Power Adapter • AC Power Cord • HDMI Cable • Network Cable (3 ft/1 m) • USB Mouse • HDD Screws • Installation Guide • Surveillance Sticker
	Working Temperature	<ul style="list-style-type: none"> • NVR: -10 °C to 55 °C (14 °F to 131 °F) • Power Adapter: 0°C to 40°C (32 °F to 104 °F)
	Working Humidity	10%~90% RH Non-Condensing
	Dimensions(W X D X H)	10 × 9.1 × 1.8 in (260 × 230 × 45 mm)
	Net Weight	2.19 Kg (4.83 lbs)
	Gross Weight	3.58 Kg (7.89 lbs)
	Power Supply	53.5V DC/2.43A
	Max. Power Consumption	<ul style="list-style-type: none"> • 4.17 W (Without Disk) • 7.81 W (With Disk)
	Certifications	CE, NTRA, HDMI, FCC, VCCI, BSMI, ONVIF, UL 4200A
	Dimensions	<p>The technical drawing shows two views of the NVR. The front view on the left has a width dimension of 10.24 [260]. The side view on the right shows a depth of 1.85 [47] and a height of 9.07 [230.831]. A secondary height dimension of 9.29 [236.031] is also indicated. The drawing includes a note: 'Unit: inch[mm]'.</p>

*The number of simultaneously playable channels may be fewer than 16, or none, if the total resolution exceeds 20MP.

**The speed of the ports in long distance mode will downgrade to 10 Mbps. The actual transmission distance may vary due to power consumption of PoE-powered devices or the cable quality and type.

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