

R4 Mainstream Series NVR, 8K 16 Channel, 16 PoE

R42-16PA



Key Features

- 8K NVR
- 16 Channels With Two (2) SATA Ports
- HDMI and VGA Output
- Supports Analytics by Camera and Analytics by Recorder¹

Certifications and Compliance

- NDAA Compliant
- FCC

Learn More



Learn more about this product's key technologies.

Overview

The **R42-16PA** is part of Luminy's Mainstream series. Mainstream series devices are designed with a suite of advanced LumiTechnologies to meet the needs of today's evolving security market.

Key Technologies

Analytics by Camera includes Intelligent Motion Detection (iMD), Video Content Analysis (VCA), Face Detection, Face Recognition, and Video Metadata by Camera. The analytical metadata is created by the Luminy cameras at the time the video is encoded. The NVR leverages these camera-edge analytics to create smarter video for the end-user to ease their video searching, authentication and video capabilities.

Analytics by Recorder¹ includes Intelligent Motion Detection (iMD), Video Content Analysis (VCA), Face Detection, and Face Recognition, and Video Metadata by Recorder.

License Plate Recognition (LPR) technology is supported by Luminy LPR cameras. This technology improves safety and operational efficiency by automatically capturing and reading vehicle license plates for easy and accurate identification.

LumiViewer streamlines security management by providing real-time surveillance, playback of historical footage, and instant alarm notifications. With features like device sharing, an alarm hub for safety alerts, visual intercom for video calls and door control, and remote access management, LumiViewer ensures comprehensive and efficient monitoring. The platform is available for desktop and mobile devices.

1. Only a limited amount of channels support Analytics by Recorder on R4 series NVRs.

Specifications

Video

Video Input	16 Channels
Recording Resolutions	16MP, 12MP, 8MP, 6MP, 5MP (3072 x 1728/2592 x 1944), 4MP (2688 x 1520/2560 x 1440), 3MP (2304 x 1296/2048 x 1536), 1080p, 720p, D1, VGA, CIF
Output Resolutions	HDMI: 4K (3840 x 2160), 1920 x 1080, 1280 x 1024, 1280 x 720 VGA: 1920 x 1080, 1280 x 1024, 1280 x 720
Live View/Playback Resolutions	16MP, 12MP, 8MP, 6MP, 5MP, 4MP, 3MP, 1080p, 720p, D1, VGA, CIF

Decoding

Format	Smart Encoding H.265+, H.265, Smart Encoding H.264+, H.264, MJPEG
Capability	AI On 1CH at 16MP (30 fps) 3CH at 8MP (30 fps) 5CH at 4MP (30 fps) 8CH at 1080p (30 fps) AI Off 2CH at 16MP (30 fps) 4CH at 8MP (30 fps) 8CH at 4MP (30 fps) 16CH at 1080p (30 fps)
Live View Window Division	1, 4, 9, 16 Views
Auxiliary Port Window Division	1, 4, 9, 16 Views
Synchronous Playback	16 Channels

Supported Analytics

Intelligent Motion Detection	Camera: 8CH NVR: 4CH
Video Content Analytics (VCA)	Camera: 8CH NVR: 2CH
License Plate Recognition	8CH (LPR Camera Required) Two (2) Block List, Two (2) Allow List Up to 20,000 Plate Numbers
Face Detection	Camera: 8CH NVR: 8CH
Face Recognition	Face Capture and Recognition: 1CH Face Picture Comparison Alarm From Camera: 8CH Up to 10 Face Picture Libraries (Max. 20,000 Pictures Total)

Interface

SATA	Two (2) Ports
HDD	Up to 16TB per HDD
Network	One (1) RJ-45 Self-Adaptive Ethernet (10/100/1000 Mbps)
PoE	16 x RJ-45 Self-Adaptive Ethernet (10/100 Mbps)
USB	Front Panel: 1 x USB 2.0 Rear Panel: 1 x USB 2.0
Alarm	Input: Four (4) Channels Output: Two (2) Channels
Audio	Input: 1-Channel RCA Input, Two-Way Audio Supported Output: 1-Channel RCA Output

Network

Bandwidth	AI On Incoming/Recording: 180 Mbps Outgoing: 180 Mbps AI Off Incoming/Recording: 256 Mbps Outgoing: 256 Mbps
Protocol	HTTP, HTTPS, TCP/IP, IPv4, IPv6, UPnP, SNMP, RTSP, UDP, SMTP, NTP, DHCP, DNS, DDNS
Interoperability	ONVIF, RTSP
PoE Standard	IEEE 802.3 af/at
Client	LumiViewer, LumiViewer Mobile App

Electrical

Power Supply	100-240 V, 50-60 Hz
Power Consumption	< 10 W (HDD Not Included) PoE: 130 W (Max. Output for Single Port: 25.5 W)

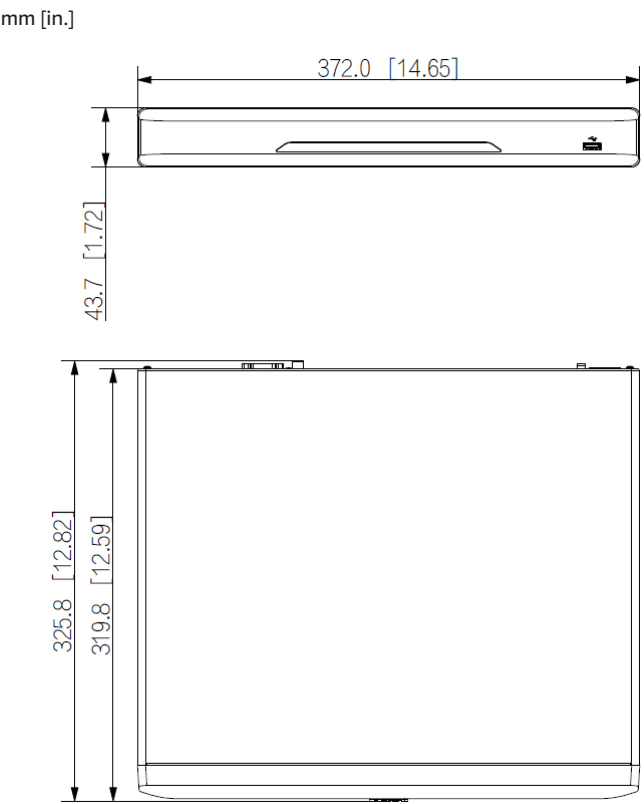
Construction

Installation Method	Rack Mount, Desktop
Weight	2.7 kg (5.9 lb) Without HDD
Operating Temperature	-10 °C to 55 °C (14 °F to 131 °F) 10% to 93% RH
Dimensions (W x L x H)	372.0 x 325.8 x 43.7 mm (14.7 in. x 12.8 in. x 1.7 in.)

Certifications and Compliance

Certifications	FCC
Compliance	NDAA

Dimensional Drawing



R4 NVR Series Feature Comparison

The Luminys R4 NVR series is designed for smarter security management and offers camera-side analytics when paired with Luminys cameras. Available in up to 16 channel configurations, the R4 series provides a powerful and cost-effective solution for video recording needs.

SKU	Channels	PoE Ports	Max. Camera Resolution Supported	Max. Recording Bandwidth	HDMI Output Resolution	Chassis Height
R42-8PA	8	8	Up to 4K	180 Mbps (AI On) 256 Mbps (AI Off)	4K	1U
R42-16PA	16	16	Up to 4K	256 Mbps (AI On) 400 Mbps (AI Off)	4K	1U

Packaging Information

Included Components

Below are the included components when purchasing the product.

Quantity	Component
1	R4 Mainstream Series NVR
1	Power Cable, USA Plug, Type B, 3 Pin Plug, 15 A, 120 VAC
2	Mounting Bracket
1	USB Mouse
1	Set of Screws
1	Set of Anti-Slip Pads
2	SATA Data Cable
1	SATA Power Cable
1	CAT5E Ethernet Cable
1	Quick Start Guide
1	Regulatory Information

Ordering Information

Below is the ordering information for the product. Larger capacity drives (up to 10 TB) and enterprise-grade models with enhanced durability are also available upon request.²

SKU	Product
R42-8PA	R4 Mainstream Series NVR, 16MP 8 Channel 1U 8-Port PoE, 2SATA, Analytics by Recorder
R42-16PA	R4 Mainstream Series NVR, 16MP 16 Channel 1U 16-Port PoE, 2SATA, Analytics by Recorder

2. Costs may vary depending on hard drive capacity and enterprise-grade model.

