

4 x 5MP LumiFlex Multi-Directional Network Camera

N9P-20RAV



Key Features

- Captures 180°, 270°, and 360° Unstitched Video
- 2.8 mm to 12.0 mm Motorized Vari-Focal Lens
- Video Content Analytics+: Line Crossing, Intrusion, Loitering Detection, Parking Detection
- LumiAnalytics¹: Face Detection, People Counting, Smart Object Detection
- LumiFlex
- LumiDesertPro

Certifications and Compliance

- NDAA Compliant
- FCC
- IC
- ONVIF

Learn More



Learn more about this product's key technologies.

View all compatible accessories for this product.

Overview

The **N9P-20RAV** is part of Luminy's N9 Specialty series. N9 series devices are designed to improve operations and surpass today's highest security standards, providing increased situational awareness and comprehensive security.

Key Technologies

Video Content Analytics+ is the umbrella for Line Crossing, Intrusion, Loitering Detection, and Parking Detection analytics. Line Crossing identifies when a person or object crosses a defined line. Intrusion detects when a person or object breaches the boundaries of a defined area or enters a restricted area. Loitering Detection sends alerts to mobile devices when it detects a person or vehicle lingering in an area for a pre-set duration. Parking Detection establishes a virtual perimeter around designated parking zones and triggers alerts when vehicles exceed the allowed parking time. VCA+ is specifically designed for more advanced and specialized applications as it offers more advanced features compared to standard video content analytics (VCA).

LumiAnalytics¹ is the umbrella for Face Detection, People Counting, Queue Management, Smart Object Detection, and Heat Map. These analytics use detailed metadata and advanced AI algorithms to track important metrics such as people counting and behavior analysis. These insights give businesses highly valuable information to improve and optimize operations.

LumiFlex technology delivers the comprehensive, flexible coverage of multiple single-sensor cameras using one camera housing. LumiFlex cameras have multiple camera sensors that can be individually positioned to capture different areas of a scene. The footage from each sensor can then be combined to create one continuous stream to reduce the number of licenses required for a higher return on investment.

LumiDesertPro ensures dependable performance in temperatures up to 60 °C (140 °F).

Specifications

Camera

Luminys Series	N9 Series (Specialty)
Image Sensor	Four (4) 1/2.7-in. 5MP Progressive CMOS
Maximum Resolution	2592 × 1944 per Sensor
Minimum Illumination	Color: 0.005 Lux at F1.7 Black and White: 0.0005 Lux at F1.7 0 Lux With IR Illumination On
Number of Illuminators	Eight (8) IR LEDs
Illuminator Control	Automatic, Manual
Maximum Illumination Distance	Up to 30.0 m (98.4 ft)
Electronic Shutter Speed	Automatic, Manual 1/30 s to 1/100,000 s
Installation Angle	Pan: 0° to 360° Tilt: 0° to 75° Rotation: 0° to 355°
S/N Ratio	> 56 dB

Lens

Iris Type	Fixed
Lens Type	Motorized Vari-Focal
Focal Length	2.8 mm to 12.0 mm
Maximum Aperature	F1.7
Field of View	Horizontal: 100° to 42° Vertical: 74° to 32° Diagonal: 133° to 53°
Close Focus Range	0.8 m (2.6 ft)
DORI Distance	Detect: 66.0 m to 140.4 m (216.5 ft to 460.6 ft) Observe: 26.4 m to 56.1 m (86.6 ft to 184.1 ft) Recognize: 13.2 m to 28.8 m (43.3 ft to 94.5 ft) Identify: 6.6 m to 14.0 m (21.7 ft to 45.9 ft)

Video

Compression	Smart Encoding H.265+, H.265, Smart Encoding H.264+, H.264, MJPEG (Sub Stream Only)
Stream Capability	Three (3) Streams
Resolution	Single Stream: 5MP (2592 × 1944), 4MPP (2560 × 1440), 3MP (2304 × 1296/2048 × 1536), 1080p (1920 × 1080), 1.3MP (1280 × 960), 720p (1280 × 720), D1 (704 × 480), VGA (640 × 480), CIF (352 × 240) Consolidated Stream: 8MP (3296 × 2472), 5MP (2592 × 1944), 1080p (1920 × 1080)
Maximum Frame Rate	Single Stream • Main Stream: 5MP at 30 fps • Sub Stream 1: D1 at 30 fps • Sub Stream 2: 1080p 30 fps Consolidated Stream • Main Stream: 2MP at 30 fps • Sub Stream 1: D1 at 30 fps • Sub Stream 2: 8MP at 30 fps
Video Bit Rate	H.264: 3 kbps to 19,712 kbps H.265: 3 kbps to 19,712 kbps
Bit Rate Control	CBR/VBR
Day/Night	Auto (ICR), Color, Black and White

Video

Light Balancing	Digital Wide Dynamic Range (DWDR)
Noise Reduction	3D NR
Image Rotation	Supported
Mirroring	Supported
Region of Interest	Four (4) Areas
Privacy Masking	Eight (8) Areas

Analytics

Video Content Analytics+	Line Crossing (Human/Vehicle), Intrusion (Human/Vehicle), Loitering Detection, Parking Detection
Face Detection	Capture Snapshots and Facial Attributes
LumiAnalytics¹	Face Detection, People Counting, Smart Object Detection
People Counting	Tripwire and In-Area People Counting, Queue Management With Report

Audio

Compression	PCM, G.711, G.726
Interface	Input: One-Channel RCA Port Output: One-Channel RCA Port

Alarm

Event	No SD Card, Disk Full, SD Card Error, Offline, IP Conflict, Illegal Access, Motion Detection, Video Tampering, Voltage Detection, Security Exception, Line Crossing, Intrusion, Abandoned Object, Missing Object, Loitering Detection, People Gathering, Parking Detection, Scene Changing, Audio Detection, External Alarm, Face Detection, People Counting In Area, Abnormal Number of People Detection, People Counting, People Stay Detection
Interface	Input: Three (3) Channels (Max. 5 VDC, 5 mA) Output: Two (2) Channels (Max. 12 VDC, 300 mA)

Network

Network Interface	RJ-45 (10/100/1000 Base-T)
RS-485 Interface	One (1) Channel (Baud Rate Range: 1,200 bps to 115,200 bps)
Protocol	IPv4, IPv6, HTTP, HTTPS, TCP, UDP, ARP, RTP , RTSP, RTCP, RTMP, SMTP, FTP, SFTP, DHCP, DNS, DDNS, QoS, UPnP; NTP, Multicast, ICMP, IGMP, NFS, PPPoE, 802.1x
Interoperability	ONVIF (Profile S/G/T), API, P2P
Browser	Firefox, Chrome, Edge
Client	LumiViewer, LumiViewer Mobile App
Storage	MicroSD Card (Max. 256 GB), FTP, SFTP, NAS

Electrical

Power Supply	12 VDC, PoE+ (802.3at)
Power Consumption	< 24.7 W



Construction

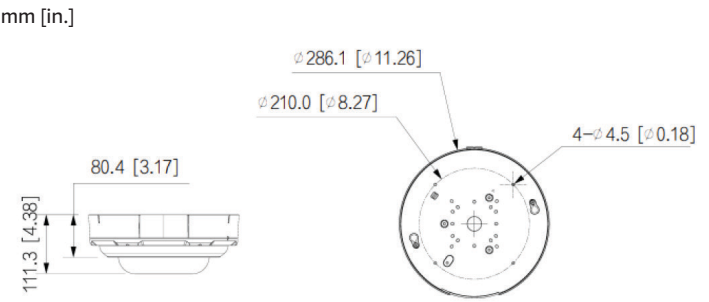
Net Weight	2.8 kg (6.1 lb)
Gross Weight	4.5 kg (9.9 lb)
Operating Temperature	-30 °C to 60 °C (-22°F to 140°F) < 95% RH (Non-Condensing)
Storage Temperature	-30 °C to 60 °C (-22 °F to 140 °F)
Protection Ratings	IP67, IK10
Dimensions	111.3 mm × Ø286.1 mm (4.4 in. × Ø11.3 in.)
Material	Metal, Plastic

Certifications and Compliance

Certifications	FCC, IC
Compliance	NDAA

1. This product does not support heat map or queue management analytics.

Dimensional Drawing



Compatible Accessories

Below are the compatible accessories for this product. Not all accessories are included with purchase; some must be purchased separately. For each mount type, all listed SKUs are required to ensure proper installation.

Cross-check the accessories in this datasheet with the Luminyx accessory selector tool, and verify that the mount size corresponds to the camera size. Failure to check may result in an incorrect or incomplete mount.

Accessory Combination	SKU(s)	Description
Pendant Mount*	LUM-A05 (Must be Purchased Separately)	Adapter Plate
	LUM-A08 (Must be Purchased Separately)	Mount Adapter
	LUM-E02 (Must be Purchased Separately)	Pendant Mount Bracket
Wall Mount*	LUM-A05 (Must be Purchased Separately)	Adapter Plate
	LUM-A08 (Must be Purchased Separately)	Mount Adapter
	LUM-W06 (Must be Purchased Separately)	Wall Mount Bracket
Pole Mount (Horizontal)*	LUM-A05 (Must be Purchased Separately)	Adapter Plate
	LUM-A08 (Must be Purchased Separately)	Mount Adapter
	LUM-E02 (Must be Purchased Separately)	Pendant Mount Bracket
	LUM-P01 (Must be Purchased Separately)	Pole Mount Bracket
Pole Mount (Vertical)*	LUM-A05 (Must be Purchased Separately)	Adapter Plate
	LUM-A08 (Must be Purchased Separately)	Mount Adapter
	LUM-W06 (Must be Purchased Separately)	Wall Mount Bracket
	LUM-P01 (Must be Purchased Separately)	Pole Mount Bracket
Corner Mount*	LUM-A05 (Must be Purchased Separately)	Adapter Plate
	LUM-A08 (Must be Purchased Separately)	Mount Adapter
	LUM-W06 (Must be Purchased Separately)	Wall Mount Bracket
	LUM-C01 (Must be Purchased Separately)	Corner Mount Bracket

*All SKUs listed must be used to complete the mounting combination. Verify the compatibility of the listed mounting components prior to ordering. Failure to use all SKUs listed and ensure compatibility may result in an incorrect or incomplete mount.

