

# 4MP Network LumiCloud LumiLuxSmart Dome Camera (Vari-Focal)

N5D-4LAVC



## Key Features

- 4MP Dome Housing
- 2.7 mm to 12.0 mm Motorized Lens
- Direct-to-Cloud<sup>1</sup> Technology With LumiCloud
- One-Year HD Unity Trial Subscription Included<sup>2</sup>
- Video Content Analytics+: Line Crossing, Intrusion, Loitering Detection<sup>3</sup>
- LumiLuxSmart — IR and White-Light LEDs
- Intelligent Motion Detection (iMD)

## Certifications and Compliance

- NDAA Compliant
- FCC
- IC

## Learn More



Learn more about the LumiCloud platform and ecosystem.



View all compatible accessories for this product.

## Overview

Luminys LumiCloud cameras combine best-in-class analytics and low-light technology with the power of cloud technology. These cameras are powered by LumiCloud, a Video Surveillance as a Service (VSaaS) platform, powered by advanced algorithms that enable users to search video, receive alerts, and analyze detection patterns across multiple locations and historical data. Access live and playback video from a web-browser or the LumiCloud app.

## Key Technologies

**Direct-to-Cloud<sup>1</sup>** technology allows this camera to be remotely added and managed by LumiCloud. Data is processed and stored both on the camera and securely in the cloud, enabling advanced analytics with low latency.

The **LumiCloud HD Unity subscription<sup>2</sup>** enables remote management capabilities and access to high-powered analytics for Luminys cameras and NVRs. With a license, users can authorize devices for sub-account management or revoke authorization for enhanced security and troubleshooting. Live streams and events can be shared with third parties for increased situational awareness. Over-the-air updates are supported for hassle-free device management. Adding a **LumiCloud 24/7 Storage subscription** enables continuous (24/7) video recording to the cloud for one Direct-to-Cloud Luminys Camera. This subscription provides unlimited cloud storage for one year with rolling video playback retention from 30 to 180 days, depending on the selected plan.

**Video Content Analytics+ (VCA+)<sup>3</sup>** is the umbrella for Line Crossing, Intrusion, and Loitering Detection. 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. VCA+ is specifically designed for more advanced and specialized applications as it offers more advanced features compared to standard video content analytics (VCA).

**LumiLuxSmart** technology allows cameras to capture clear, full-color video day or night. When motion is detected, LumiLuxSmart cameras switch from IR LEDs to white-light LEDs to illuminate a scene, then switch back to IR mode once motion has ceased to prevent light pollution and energy inefficiency.

**Intelligent Motion Detection (iMD)** technology accurately detects and filters humans and vehicle in a monitoring area. Using an advanced algorithm, iMD can accurately detect humans and vehicles while reducing false alarms caused by other objects, animals, or lighting. Users can be alerted to iMD events for timely security. iMD events can be saved for future reference and easily searched for at a later time for forensic analysis and to assist in investigations.

1. This camera is only compatible with LumiCloud and does not support third-party cloud platforms.  
 2. A LumiCloud HD Unity subscription must be purchased separately after the trial subscription expires.  
 3. This camera does not support parking detection.

# Specifications

## Camera

Luminys Series	Mainstream
Image Sensor	1/1.8-in. 4MP Progressive CMOS
Maximum Resolution	2688 × 1520
Minimum Illumination	<b>Color:</b> 0.0006 Lux (F1.2) <b>Black/White:</b> 0.0003 Lux at (F1.2) 0 Lux With IR Light On
Number of Illuminators	Four (4) Dual-Core (IR and White Light) LEDs, Supports LumiLuxSmart
Illuminator Control	Automatic, Manual
Maximum Illumination Distance	<b>IR:</b> Up to 30.0 m (98.4 ft) <b>White Light:</b> Up to 30.0 m (98.4 ft)
Electronic Shutter Speed	Automatic, Manual 1/3 s to 1/100,000 s
Installation Angle	<b>Pan:</b> 0° to 355° <b>Tilt:</b> 0° to 80° <b>Rotation:</b> 0° to 355°
S/N Ratio	> 50 dB

## Lens

Iris Type	Automatic
Lens Type	Motorized Vari-Focal
Focal Length	2.7 to 12 mm
Maximum Aperature	F1.2
Field of View	<b>Horizontal:</b> 114° to 48° <b>Vertical:</b> 59° to 27° <b>Diagonal:</b> 143° to 56°
Close Focus Range	0.2 m (0.5 ft)
DORI Distance	<b>Detect:</b> 60.4 m to 128.7 m (198.2 ft to 425.5 ft) <b>Observe:</b> 24.2 m to 51.5m (79.4 ft to 167.0 ft) <b>Recognize:</b> 12.1 m to 25.7 m (39.7 ft to 84.3 ft) <b>Identify:</b> 6.0 m to 12.9 m (19.7 ft to 42.3 ft)

## Video

Compression	H.265, H.264, H.264H, H.264B, MJPEG (Sub Stream Only)
Stream Capability	Three (3) Streams
Resolution	4MP (2688 × 1520), 3.6MP (2560 × 1440), 3MP (2048 × 1536), 3MP (2304 × 1296), 1080p (1920 × 1080), 1.3MP (1280 × 960), 720p (1280 × 720), D1 (704 × 576/704 × 480), VGA (640 × 480), CIF (352 × 288/352 × 240)
Maximum Frame Rate	<b>Main Stream:</b> 2688 × 1520 at 30 fps <b>Sub Stream 1:</b> D1 at 30 fps <b>Sub Stream 2:</b> 1080p at 30 fps
Video Bit Rate	<b>H.265:</b> 12 kbps to 11776kbps <b>H.264:</b> 32 kbps to 16384 kbps
Bit Rate Control	CBR/VBR
Day/Night	Automatic (ICR), Color, Black and White
Light Balancing	Wide Dynamic Range (130 dB)
Noise Reduction	3D NR
Image Rotation	0°/90°/180°/270° (Supports 90°/270° with 2MP Resolution and Lower)
Mirroring	Supported

## Video

Defog	Supported
Region of Interest	Four (4) Zones
Privacy Masking	Four (4) Zones

## Audio

Compression	G.711a, G.711Mu, PCM
Interface	<b>Input:</b> Built-In Microphone and 1-Channel RCA Input <b>Output:</b> 1-Channel RCA Output

## Alarm

Event	No SD Card, Disk Full, SD Card Error, Offline, IP Conflict, Illegal Access, Motion Detection, Video Tampering, Line Crossing, Intrusion, Loitering Detection, Parking Detection, Scene Changing, Audio Detection, Voltage Detection, External Alarm, Face Detection, iMD, Security Exception, Area People Counting, Stay Alarm, People Counting, People Number Exception Detection, Object Detection
Interface	<b>Input:</b> One (1) Channel (Max. 5 VDC, 5 mA) <b>Output:</b> One (1) Channel ((Max. 12 VDC, 300 mA)

## Network

Protocol	RJ-45 (10/100 Base-T)
Protocol	IPv4, IPv6, HTTP, TCP, RTSP, RTMP, SNMP, FTP, NAS, DHCP, DDNS, QoS, UPnP, NTP, Multicast, NFS, PPPoE, SNMP
Interoperability	ONVIF (Profile S/G/T), API, SDK
Browser	Chrome, Firefox, Edge
Client	LumiViewer, LumiViewer Mobile App
Storage	FTP, NAS, Micro SD Card (Max. 512 GB)

## Electrical

Power Supply	12 VDC, PoE (802.3at), LumiPower
Power Consumption	<b>12 VDC</b> <ul style="list-style-type: none"><li>• <b>Maximum:</b> 11.4 W</li><li>• <b>Normal:</b> 4.3 W</li></ul> <b>PoE</b> <ul style="list-style-type: none"><li>• <b>Maximum:</b> 12.6 W</li><li>• <b>Normal:</b> 5.2 W</li></ul>

## Construction

Net Weight	0.6 kg (1.2 lb)
Gross Weight	0.7 kg (1.6 lb)
Operating Temperature	-30 °C to 60 °C (-22 °F to 140 °F) < 95% RH (Non-Condensing)
Storage Temperature	-40 to 60 °C (-40 to 140 °F)
Protection Ratings	IP67, IK10
Dimensions	126.0 mm × 100.0 mm (5.0 in. × 3.9 in.)
Material	Metal

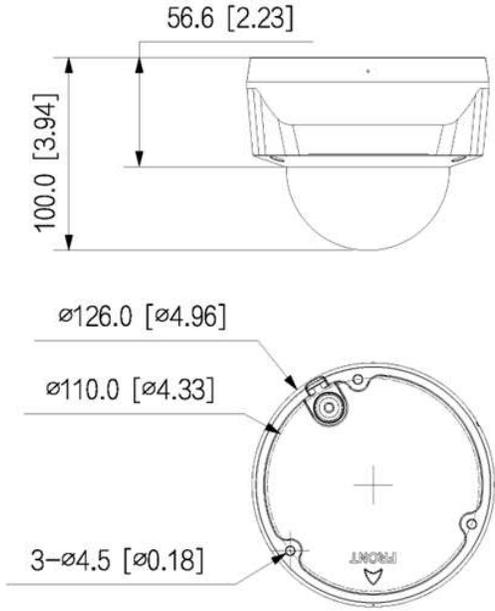


## Certifications and Compliance

Certifications	FCC, IC
Compliance	NDAA

## Dimensional Drawing

mm [in.]



## Supported Analytics and Technologies

LumiCloud cameras are designed specifically for use with the LumiCloud platform; however, the cameras may be paired with a network video record (NVR) to support specific analytics and technologies. Consult the table below to see which analytics the camera supports with LumiCloud, an NVR, and with both.

	LumiCloud	NVR
Line Crossing	✓	✓
Intrusion	✓	✓
Loitering Detection		✓
Parking Detection		✓
Intelligent Motion Detection (iMD)	✓	✓
LumiAnalytics <i>Face Detection, People Counting, Queue Management, Smart Object Detection, and Heat Mapping</i>		✓
LumiSearch+* <small>*Only supported when paired with a LumiSearch+-enabled NVR</small>		✓

# Ordering Information

## 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 Luminys 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
Junction Box	LUM-J02 <i>(Must be Purchased Separately)</i>	Junction Box for Select Standard Size Dome and Mini Turret Camera Models
Wall Mount	LUM-W01 <i>(Must be Purchased Separately)</i>	Wall Mount Bracket for Select N5D Dome and N5T/N3T Turret Cameras
Horizontal Pole Mount*	LUM-W01 <i>(Must be Purchased Separately)</i>	Wall Mount Bracket for Select N5D Dome and N5T/N3T Turret Cameras
	LUM-P02 <i>(Must be Purchased Separately)</i>	Pole Mount Bracket for Select N3 and N5 Series Cameras
Vertical Pole Mount*	LUM-A01 <i>(Must be Purchased Separately)</i>	Adapter Plate for Select Dome and Turret Cameras
	LUM-E01 <i>(Must be Purchased Separately)</i>	Ceiling Mount Bracket for Standard Dome, Dome Wedge, and Mini Turret Cameras
	P01 <i>(Must be Purchased Separately)</i>	Pole Mount Bracket for Select N3 and N5 Series Cameras
Pendant Mount*	LUM-A01 <i>(Must be Purchased Separately)</i>	Adapter Plate for Select Dome and Turret Cameras
	LUM-E01 <i>(Must be Purchased Separately)</i>	Ceiling Mount Bracket for Standard Dome, Dome Wedge, and Mini Turret Cameras
Corner Mount*	LUM-A01 <i>(Must be Purchased Separately)</i>	Adapter Plate for Select Dome and Turret Cameras
	LUM-W02 <i>(Must be Purchased Separately)</i>	Wall Mount Bracket for Select N5D, N5T, N3T, P45, P54, and P55 Cameras
	CO1 <i>(Must be Purchased Separately)</i>	Corner Mount Bracket for N3, N5, N9, P4, P5 Series Cameras
In-Ceiling Mount	LUM-M01 <i>(Must be Purchased Separately)</i>	In-Ceiling Mount Bracket for Select Dome Camera Models

\*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.

## Replacement Components

Below are the replacement components available for this product. Not all product components are available for replacement. Replacement component must be purchased separately. Cross-check the components in this datasheet with the Luminys accessory selector tool, and verify that the component size corresponds to the camera size. Failure to check may result in the purchase of an incorrect or incompatible component.

SKU	Description
LUM-B01 <i>(Must be Purchased Separately)</i>	Smoked Polycarbonate Replacement Bubble (3.4 inch) for Select Dome Cameras

## Subscription Licenses

Consult the tables below to see the available subscription licenses available for LumiCloud cameras. LumiCloud subscription-based licenses require registration to the Luminys MVP program. Register at <https://mvpprogram.luminyscorp.com/>.

### HD Video Unity

All LumiCloud cameras come with a one-year trial subscription of LumiCloud HD Unity. A renewal subscription of HD Unity is available for separate purchase. For more information, refer to the LumiCloud HD Video Unity Subscription datasheet on the official Luminys website.

SKU	License	Description
LCL-HDV-UC	LumiCloud HD Video Unity Subscription	LumiCloud HD Video Unity Direct-to-Cloud subscription supports one LumiCloud Camera (no NVR required) for one year with high-performance video surveillance solution utilizing AI-based events, 30-day rolling AI-event cloud storage, remote maintenance, real-time device health monitoring, comprehensive support for enhanced security monitoring. Archive important video events indefinitely in the cloud (requires active license and provides up to 30 GB archive storage per end-user company account).

## 24/7 Unlimited Storage

A LumiCloud 24/7 storage subscription enables unlimited cloud storage for one year with rolling video playback retention from 30 to 180 days (depending on the selected plan) for one LumiCloud camera. This subscription must be used with an active LumiCloud HD Video Unity subscription; it cannot be purchased on its own. For more information, refer to the LumiCloud 24\*7 Storage Plans datasheet on the official Luminys website.

SKU	Product	Description
LCL-30CLOUD-UC	LumiCloud 24*7 Storage, 30 Day Rolling Playback for One LumiCloud Direct-to-Cloud Camera (Annual Subscription License)	LumiCloud 24*7 Storage, 30 Day Rolling Playback for One LumiCloud Direct-to-Cloud Camera with one-year Subscription License, HD. All LumiCloud Cameras include a one-year subscription of LumiCloud Unity which provides 30 days of rolling events recording in the cloud. Adding 24*7 LumiCloud Storage license provides unlimited cloud storage for a Direct-to-Cloud Luminys Camera for one year, includes rolling playback of stored video in LumiCloud for 30 days.
LCL-60CLOUD-UC	LumiCloud 24*7 Storage, 60 Day Rolling Playback for One LumiCloud Direct-to-Cloud Camera (Annual Subscription License)	LumiCloud 24*7 Storage, 60 Day Rolling Playback for One LumiCloud Direct-to-Cloud Camera with one-year Subscription License, HD. All LumiCloud Cameras include a one-year subscription of LumiCloud Unity which provides 30 days of rolling events recording in the cloud. Adding 24*7 LumiCloud Storage license provides unlimited cloud storage for a Direct-to-Cloud Luminys Camera for one year, includes rolling playback of stored video in LumiCloud for 60 days.
LCL-90CLOUD-UC	LumiCloud 24*7 Storage, 90 Day Rolling Playback for One LumiCloud Direct-to-Cloud Camera (Annual Subscription License)	LumiCloud 24*7 Storage, 90 Day Rolling Playback for One LumiCloud Direct-to-Cloud Camera with one-year Subscription License, HD. All LumiCloud Cameras include a one-year subscription of LumiCloud Unity which provides 30 days of rolling events recording in the cloud. Adding 24*7 LumiCloud Storage license provides unlimited cloud storage for a Direct-to-Cloud Luminys Camera for one year, includes rolling playback of stored video in LumiCloud for 90 days.
LCL-180CLOUD-UC	LumiCloud 24*7 Storage, 180 Day Rolling Playback for One LumiCloud Direct-to-Cloud Camera (Annual Subscription License)	LumiCloud 24*7 Storage, 180 Day Rolling Playback for One LumiCloud Direct-to-Cloud Camera with one-year Subscription License, HD. All LumiCloud Cameras include a one-year subscription of LumiCloud Unity which provides 30 days of rolling events recording in the cloud. Adding 24*7 LumiCloud Storage license provides unlimited cloud storage for a Direct-to-Cloud Luminys Camera for one year, includes rolling playback of stored video in LumiCloud for 180 days.