

# 4MP Network 25x LumiDeterrent Dual-Stitched Lens PTZ Camera

P54-4DA25



## Key Features

- 4MP PTZ With 2 x 4MP Dual-Stitched Lens Camera
- 25x Maximum Optical Zoom
- LumiDeterrent With Red/Blue Lights and Built-In Speaker
- Dual-Illumination — IR and White-Light LEDs
- Video Content Analytics+: Line Crossing, Intrusion, Loitering Detection, Parking Detection
- iMD, LumiTracking, LumiFocus
- LumiPolarPro and LumiDesertPro

## Certifications and Compliance

- NDAA Compliant
- FCC
- IC
- UL

## Learn More



Learn more about this product's key technologies.



View all compatible accessories for this product.

## Overview

The P54-4DA25 is part of Luminys's P5-D mainstream series of security devices. P5-D mainstream series devices are designed with a suite of advanced LumiTechnologies to meet the needs of today's evolving security market.

## Key Technologies

**Video Content Analytics+ (VCA+)** 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).

**LumiDeterrent** technology integrates full-color video, active deterrence, and AI algorithms to provide 24/7 security. This technology can accurately identify potential risks and prevent incidents with red and blue light alarms and enhanced sound alarms.

**LumiTracking** technology enhances security and efficiency by automating tracking of people and vehicles. It uses advanced AI algorithms to monitor and predict the direction and speed of moving targets, enabling quick response to potential issues for enhanced security and smooth operation.

**LumiFocus** technology ensures a target stays in focus during the zooming process. LumiFocus uses advanced algorithms to accurately measure the distance from a target and predict the direction of its movement for enhanced image stability and clarity when zooming.

**LumiPolarPro** and **LumiDesertPro** technology ensure rugged all-weather performance. LumiPolarPro enables dependable performance in temperatures as low as -40 °C (-40 °F). LumiDesertPro allows operation in temperatures up to 65 °C (149 °F).

# Specifications

## Camera

Luminys Series	P5-D Series (Mainstream)
Zoom	25x
Image Sensor	<b>Panoramic:</b> 1/2.7-in. Progressive CMOS <b>PTZ:</b> 1/2.8-in. Progressive CMOS
Maximum Resolution	<b>Panoramic:</b> 4096 x 1860 <b>PTZ:</b> 2560 x 1440
Minimum Illumination	<b>Panoramic</b> <ul style="list-style-type: none"><li>Color: 0.005 Lux at F1.4</li><li>Black/White: 0.0005 Lux at F1.4</li><li>0 Lux With Illuminators On</li></ul> <b>PTZ</b> <ul style="list-style-type: none"><li>Color: 0.005 Lux at F1.6</li><li>Black/White: 0.0005 Lux at F1.6</li><li>0 Lux With Illuminators On</li></ul>
Number of Illuminators	<b>Panoramic:</b> Two (2) IR LEDs, Two (2) White-Light LEDs <b>PTZ:</b> Two (2) IR LEDs, Two (2) White-Light LEDs
Illumination Range	<b>Panoramic</b> <ul style="list-style-type: none"><li>IR: 30.0 m (98.4 ft)</li><li>White Light: 30.0 m (98.4 ft)</li></ul> <b>PTZ</b> <ul style="list-style-type: none"><li>IR: 100.0 m (328.1 ft)</li><li>White Light: 40.0 m (131.2 ft)</li></ul>
Illuminator Control	<b>Panoramic:</b> Manual, Automatic, Off <b>PTZ:</b> Zoom Priority, Manual, Automatic, Off
Electronic Shutter Speed	1/1 s to 1/300,000 s
Control Speed	Manual
Power Off Memory	Supported
S/N Ratio	> 55 dB

## Lens

Focal Length	<b>Panoramic:</b> 2.8 mm <b>PTZ:</b> 5.0 mm to 125.0 mm
Aperature	<b>Panoramic:</b> F1.4 <b>PTZ:</b> F1.6 to F3.6
Field of View	<b>Panoramic</b> <ul style="list-style-type: none"><li>Horizontal: 180.0°</li><li>Vertical: 86.0°</li></ul> <b>PTZ</b> <ul style="list-style-type: none"><li>Horizontal: 51.9° to 3.0°</li><li>Vertical: 39.7° to 2.2°</li><li>Diagonal: 63.1° to 3.7°</li></ul>
Close Focus Range	<b>Panoramic:</b> 0.6 m (2.0 ft) <b>PTZ:</b> 0.1 m to 0.5 m (0.3 ft to 1.6 ft)
DORI Distance	<b>Panoramic</b> <ul style="list-style-type: none"><li>Detect: 55.5 m (182.1 ft)</li><li>Observe: 22.0 m (72.2 ft)</li><li>Recognize: 11.0 m (36.1 ft)</li><li>Identify: 5.3 m (17.4 ft)</li></ul> <b>PTZ</b> <ul style="list-style-type: none"><li>Detect: 99.9 m to 2549.5 m (327.8 ft to 8364.5 ft)</li><li>Observe: 39.5 m to 1000.0 m (129.6 ft to 3280.8 ft)</li><li>Recognize: 19.5 m to 495.5 m (64.0 ft to 1625.7 ft)</li><li>Identify: 9.8 m to 249.5 m (32.2 ft to 818.6 ft)</li></ul>

## Pan/Tilt/Zoom

Range	Pan: 0° to 360° Endless Tilt: -15° to 90° Auto Flip: 180°
Pan Speed	Manual Control: 0.1°/s to 180°/s Preset: 180°/s
Tilt Speed	Manual Control: 0.1°/s to 90°/s Preset: 90°/s
Preset	300
Tour	8 (Up to 32 Presets per Tour)
Pattern	5
Scan	5
Scheduled Modes	Preset, Pattern, Tour, Scan
Preset Freezing	Freezes Images Between Presets
3D Positioning	Automatically Pans, Tilts, and Zooms to a Selected Area
LumiFocus	Images Maintain Focus When Zooming In or Out

## Video

Compression	<b>Panoramic:</b> Smart Encoding H.265, H.265, Smart Encoding H.264, H.264, MJPEG (Sub Stream 1 Only)
PTZ	Smart Encoding H.265, H.265, Smart Encoding H.264, H.264, MJPEG (Sub Stream 1 Only)
Standard Codec	Supported
Stream Capability	Three (3) Streams
Resolution	<b>Panoramic:</b> 8MP (4096 x 1860), 2MP (2048 x 928), 1080p (1920 x 1080), 720p (1280 x 720), 1024 x 448, D1 (704 x 576/704 x 480), VGA (640 x 480), CIF (352 x 288/352 x 240)  <b>PTZ:</b> 4MP (2560 x 1440), 3MP (2304 x 1296), 1080p (1920 x 1080), 1.3MP (1280 x 960), 720p (1280 x 720), D1 (704 x 480), VGA (640 x 480), CIF (352 x 240)
Maximum Frame Rate	<b>Panoramic</b> <ul style="list-style-type: none"><li>Main Stream: 4096 x 1860 at 30 fps</li><li>Sub Stream 1: 1024 x 448/D1/VGA/CIF at 30 fps</li><li>Sub Stream 2: 2048 x 928/1080p/1.3 M/720p at 30 fps</li></ul> <b>PTZ</b> <ul style="list-style-type: none"><li>Main Stream: 4MP/3MP/1080p/1.3MP/720p at 30 fps</li><li>Sub Stream 1: D1/VGA/CIF at 30 fps</li><li>Sub Stream 2: 1080p/1.3MP/720p at 30 fps</li></ul>
Video Bit Rate	<b>Panoramic</b> <ul style="list-style-type: none"><li>H.265: 51 kbps to 13,312 kbps</li><li>H.264: 128 kbps to 16,384 kbps</li></ul> <b>PTZ</b> <ul style="list-style-type: none"><li>H.265: 38 kbps to 10,240 kbps</li><li>H.264: 96 kbps to 16,384 kbps</li></ul>
Bit Rate Control	CBR/VBR
Day/Night	Automatic (ICR), Color, Black and White
Light Balancing	Wide Dynamic Range (120 dB), BLC, HLC
Noise Reduction	2D NR, 3D NR
Image Rotation	180°



## Video

Image Stabilization	Electronic
Defog	Electronic
Region of Interest	Eight (8) Regions

## Analytics

Video Content Analytics+	Line Crossing, Intrusion, Loitering Detection, Parking Detection, Crossing Virtual Fence, Abandoned/Missing Object, Aggregate Detection, Vehicle/Human Alarm Classification, Linkage Tracking
Intelligent Motion Detection	Supported with Alarms for Vehicles and Humans
LumiDeterrent	Built-In Speaker and Flashing Red and Blue Lights
LumiTracking	Automatically Tracks a Target in Motion for an Allotted Amount of time or Until the Object Exits the Scene

## Audio

Compression	G.711a, G.711Mu, PCM
Sampling Bitrate	PCM: 8,000 Hz, 16,000 Hz, 32,000 Hz G.711A: 8,000 Hz G.711Mu: 8,000 Hz
Interface	Input: One (1) Channel Output: Built-In Speaker and One (1) Channel

## Alarm

Event	Motion/Tampering Detection, Offline, IP Conflict, No SD Card, Disk Full, SD Card Error, Scene Changing
Linkage	Capture, Record, Send Email, Alarm Digital Output, Audio, Warning Light
Interface	Input: Two (2) Channel Output: One (1) Channel

## Network

Interface	RJ-45 (10/100 Base-T)
Protocol	HTTP, HTTPS, TCP/IP, IPv4, RTSP, SMTP, NTP, DHCP, DNS, DDNS, IPv6, 802.1x, SSL, QoS, FTP, UPnP, SNMP, ARP, RTCP, RTP, PPPoE, RTMP, Bonjour, NFS
Interoperability	ONVIF (Profile S/G/T), CGI, SDK, P2P
Browser	Chrome, Firefox, Safari, Edge
Client	LumiViewer, LumiViewer Mobile App
Storage	FTP/SFTP, NAS, Micro SD Card (Max. 512 GB)

## Electrical

Power Supply	12 VDC, 3 A ± 10%, PoE+ (802.3at)
Power Consumption	25 W (Max.)

## Construction

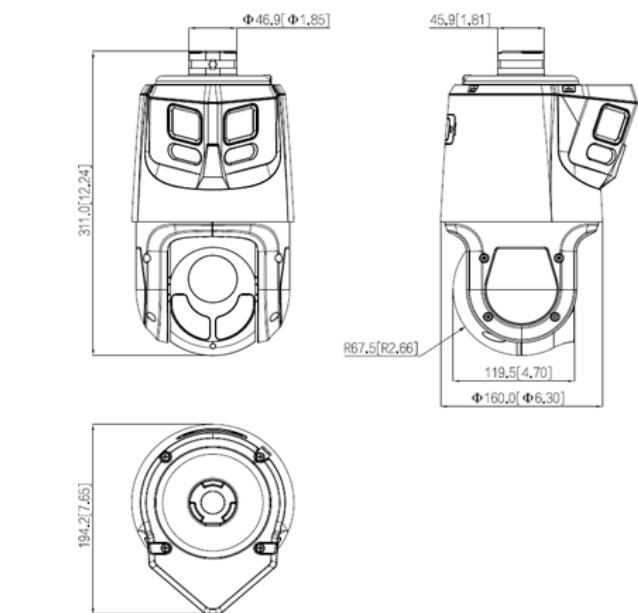
Net Weight	3.1 kg (6.8 lb)
Gross Weight	4.6 kg (10.1 lb)
Operating Temperature	-40 °F to 149 °F (-40 °C to 65 °C)
Protection Ratings	IP66
Dimensions	194.2 mm × 160.0 mm × 311.0 mm (7.7 in. × 6.3 in. × 12.2 in.)
Material	Metal

## Certifications and Compliance

Certifications	FCC, UL, IC
Compliance	NDAA

## Dimensional Drawing

mm [in.]



## Optional Accessories

Below are the optional accessories for this product. All SKUs listed must be purchased to complete an accessory combination. For more information and to see mounting combinations, please view our accessory selector at <https://www.luminyscorp.com/products/accessories>.

Accessory Combination	SKU(s)	Description
Wall Mount	N5D/N5T/N3T/P45/P5-W01 <i>(Included With Product)</i>	Wall Mount Bracket
Wall Mount (Option 2)*	N5D/N5T/N3T/P45/P5-W01 <i>(Included With Product)</i>	Wall Mount Bracket
	P55/P54/P45-D01 <i>(Must be Purchased Separately)</i>	Distribution Box
Pole Mount*	N5D/N5T/N3T/P45/P5-W01 <i>(Included With Product)</i>	Wall Mount Bracket
	P01 <i>(Must be Purchased Separately)</i>	Pole Mount Bracket
Corner Mount*	N5D/N5T/N3T/P45/P5-W01 <i>(Included With Product)</i>	Wall Mount Bracket
	C01 <i>(Must be Purchased Separately)</i>	Corner Mount Bracket

\*All SKUs must be purchased to complete the mounting combination. Failure to purchase all SKUs listed will result in an incomplete mount.