

4MP Network 45x LumiSearch PTZ Camera

P55-4SA45



Key Features

- 4MP Dome Housing
- 45x Maximum Optical Zoom
- Video Content Analytics+: Line Crossing, Intrusion, Loitering Detection, Parking Detection
- Face Detection, People Counting
- LumiSearch
- iMD, LumiTracking, LumiFocus
- LumiPolarPro and LumiDesertPro

Certifications and Compliance

- NDAA Compliant
- FCC
- IC

Learn More



Learn more about this product's key technologies.



View all compatible accessories for this product.

Overview

The **P55-4SA45** is part of Luminys's mainstream series of security devices. Mainstream series devices are designed with a suite of advanced LumiTechnologies to meet the needs of today's evolving security market.

Key Technologies

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.

LumiSearch technology enables fast target detection and tracking in security video using a single reference image. The algorithm analyzes body shape to locate a person across any LumiSearch-enabled camera or NVR. It does not use facial recognition, require pre-registration, or collect personal data; instead, individuals are assigned random numbers used only for matching.

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 60 °C (140 °F).

Specifications

Camera

Luminys Series	Mainstream
Zoom	45x
Image Sensor	1/2.8-in. 4MP Progressive CMOS
Maximum Resolution	2560 × 1440
Minimum Illumination	Color: 0.005 Lux at F1.6 Black/White: 0.0005 Lux at F1.6 0 Lux With IR Light On
Number of Illuminators	Four (4) IR LEDs
Illumination Range	492.1 ft (150.0 m)
Illuminator Control	Manual, Smart IR, Zoom Priority, Off
Electronic Shutter Speed	1/3 s to 1/100,000 s
Control Speed	Manual Control Pan: 0.1° to 250°/s Tilt: 0.1° to 140°/s
S/N Ratio	> 55 dB

Lens

Focal Length	4.0 mm to 177.8 mm
Aperature	F1.6 to F4.95
Field of View	Horizontal: 65.7°to 1.9° Vertical: 39.4°to 1.1° Diagonal: 73.1°to 2.1°
Close Focus Range	0.1 m to 1.0 m (0.3 ft to 3.3 ft)
DORI Distance	Detect: 258.5 ft to 11,661.8 ft (78.8 m to 3,554.5 m) Observe: 103.6 ft to 4,665.4 ft (31.5 m to 1,422.0 m) Recognize: 51.2 ft to 2,332.0 ft (15.6 m to 710.8 m) Identify: 24.6 ft to 1,164.7 ft (7.5 m to 355.0 m)

Pan/Tilt/Zoom

Range	Pan: 0° to 360° Endless Tilt: -15° to 90°, Auto Flip: 180°
Pan Speed	Manual Control: 0.1°/s to 250°/s Preset: 250°/s
Tilt Speed	Manual Control: 0.1°/s to 140°/s Preset: 140°/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
LumiFocus	Images Maintain Focus When Zooming In or Out

Video

Compression	Smart Encoding H.265+, H.265, Smart Encoding H.264+, H.264, MJPEG (Sub Stream Only)
Smart Codec	Supported
Stream Capability	Three (3) Streams

Video

Resolution	4MP (2560 × 1440), 3MP (2048 × 1536/ 2304 × 1296), 1080p (1920 × 1080), 1.3MP (1280 × 960), 720p (1280 × 720), D1 (704 × 480), VGA (640x480), CIF (352 × 240)
Maximum Frame Rate	Main Stream: 4MP/3MP/2.9MP/1080p/1.3MP/720p at 1 to 30 fps Sub Stream 1: D1/CIF at 1 to 30 fps Sub Stream 2: 720p at 1 to 30 fps
Video Bit Rate	H.265: 38 kbps to 8960 kbps H.264: 96 kbps to 14848 kbps
Bit Rate Control	CBR/VBR
Day/Night	Automatic (ICR), Color, Black and White
Light Balancing	Wide Dynamic Range (120 dB), BLC, HLC
Noise Reduction	3D NR
Image Rotation	180°
Image Stabilization	Electronic
Defog	Electronic
Region of Interest	8 Regions
Privacy Masking	24 Areas (Up to 8 Areas in the Same View)

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
Face Detection	Capture Snapshots and Facial Attributes
LumiSearch	Supported When Used With LumiSearch-Enabled NVRs
People Counting	Tripwire and In-Area People Counting, Queue Management With Report
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: One (1) Channel

Alarm

Event	Motion/Tampering Detection, Audio Detection, Network Disconnection Detection, IP Conflict Detection, Memory Card State Detection, Memory Space Detection
Linkage	Capture, Recoding, Send Email, Preset, Tour, Pattern, Alarm Digital Output, Audio
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	24 VDC (2.5 A $\pm$ 25%), PoE+ (802.3at)
Power Consumption	23 W (Max.)

Construction

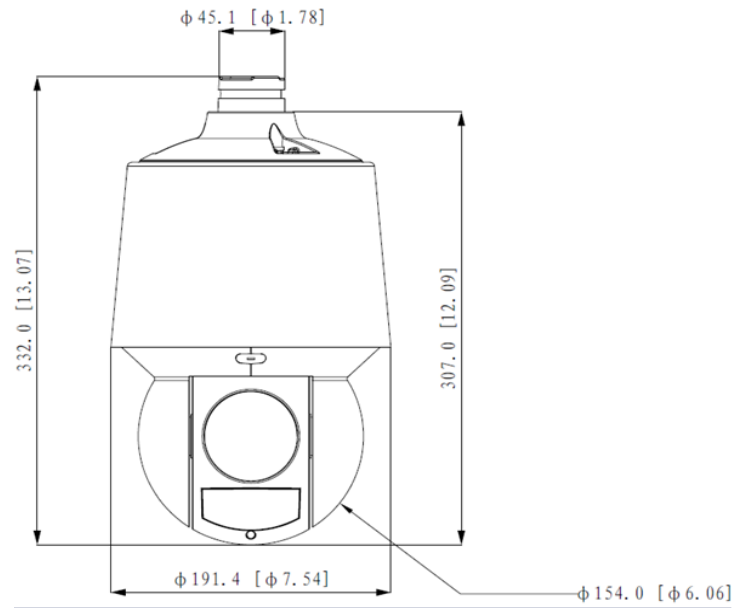
Net Weight	8.0 kg (17.6 lb)
Gross Weight	4.7 kg (10.4 lb)
Operating Temperature	-40 °F to 158 °F (-40 °C to 70 °C)
Protection Ratings	IP67, IK10
Dimensions	$\Phi 191.0$ mm $\times$ 332.0 mm ($\Phi 7.5$ in. $\times$ 13.1 in.)
Material	Metal

Certifications and Compliance

Certifications	FCC, IC
Compliance	NDAA

Dimensional Drawing

mm [in.]



Packaging Information

Included Components

Below are the included components when purchasing the product.

Quantity	Component
1	4MP Network 45x LumiSearch+ PTZ Camera (Luminys SKU: P55-4SA45)
1	Wall Mount Bracket (Luminys SKU: N5D/N5T/N3T/P45/P5-W01)
1	Wall Mount Rubber Grommet
1	Set Waterproof Connector
1	Power Adapter
1	Steel Wire Rope
4	Expansion Bolts
3	Hex Screws
1	T15 L-Shaped Allen Wrench
1	S5.0 L-Shaped Allen Wrench
1	Set Anti-Static Gloves
1	Roll of Waterproof Tape
1	Quick Start Guide
1	Regulatory 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
Wall Mount	LUM-W02 <i>(Included With Product)</i>	Wall Mount Bracket (Standard Size)
	LUM-W02 <i>(Included With Product)</i>	Wall Mount Bracket (Standard Size)
Horizontal Pole Mount*	LUM-D01 <i>(Must be Purchased Separately)</i>	Distribution Box
	LUM-P01 <i>(Must be Purchased Separately)</i>	Pole Mount Bracket
Vertical Pole Mount*	LUM-A08 <i>(Must be Purchased Separately)</i>	Adapter
	LUM-E02 <i>(Must be Purchased Separately)</i>	Pendant Mount Bracket (Standard Size)
	LUM-P01 <i>(Must be Purchased Separately)</i>	Pole Mount Bracket
Pendant Mount*	LUM-A08 <i>(Must be Purchased Separately)</i>	Adapter
	C01 <i>(Must be Purchased Separately)</i>	Pendant Mount Bracket
Corner Mount*	LUM-W02 <i>(Included With Product)</i>	Wall Mount Bracket (Standard Size)
	LUM-C01 <i>(Must be Purchased Separately)</i>	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.