Cisco Meraki

MV23 Series Datasheet

Overview

The Meraki MV23, part of the third generation of MV smart cameras, combines physical security and advanced analytics in a powerful, yet compact varifocal dome form factor. With an edge architecture that minimizes physical infrastructure and software requirements, MV23 enables faster, easier deployments and greater scalability.

Security in high definition

The ultra-high-performance MV23 series camera supports up to 4K resolution for high-definition video, delivering the level of detail needed to stay on top of what matters.

Compact and easy to install, MV23 series cameras are compatible with a variety of mounting accessories, delivering the right viewing angle wherever they are placed. MV23 series cameras are ideal for monitoring entrances and exits, as well as the general perimeter, from walls, ceilings, or even corner-mount locations.

Using machine-learning-based computer vision, MV23 cameras can perform real-time object detection, classification, and tracking of people and vehicles to increase safety and provide useful insights into activity. These smart cameras deliver powerful business intelligence without compromising physical security.

Product Highlights

- Varifocal lens dome camera

- Robust form factor with 36°-112° horizontal FoV

- More detailed information with up to 4K resolution

- Support for Attribute Search

- Machine-learning capability for intelligent object detection

- Secure video access to ensure privacy with role-
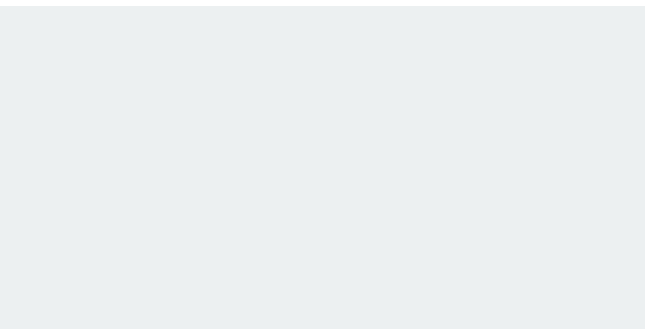
- Guaranteed days of video with Smart Retention

- Night vision with IR illumination up to 30 m (98 ft)

- Intelligent motion indexing with search engine

- Built-in analytics like motion search, motion recap, and motion heatmaps.

based user accounts

- Cloud-augmented edge storage for minimal physical infrastructure

- Built-in automatic security with secure boot and signed firmware, backed by a hardware security chip

- Suitable for deployments of all sizes, from 1-10,000+ cameras

- NDAA Compliant

MV23 camera specifications

Category	Specifications
Camera	1/2.8" 8.41MP (3854x2176) progressive CMOS image sensor 512 GB high-endurance solid-state storage (MV23M) 1 TB high-endurance solid-state storage (MV23X) 3.0 - 9.0 mm focal length - f/1.6-2.9 aperture - Field of view: horizontal 36 - 112° 1/30 second to 1/32,000 second shutter speed - Auto day/night capable - Built-in IR illuminators, effective up to 30 m (98 ft)
Video	4K (3840x2160) with H.264 Smart Codec, up to 15fps 4MP (2560 x 1440) with H.264 Smart Codec, up to 24fps 1080p (1920x1080) with H.264 Smart Codec, up to 24fps - High dynamic range (HDR) - Cloud augmented edge storage (locally stored video, metadata in the cloud) - Optimized retention settings (scheduling, motion-based)

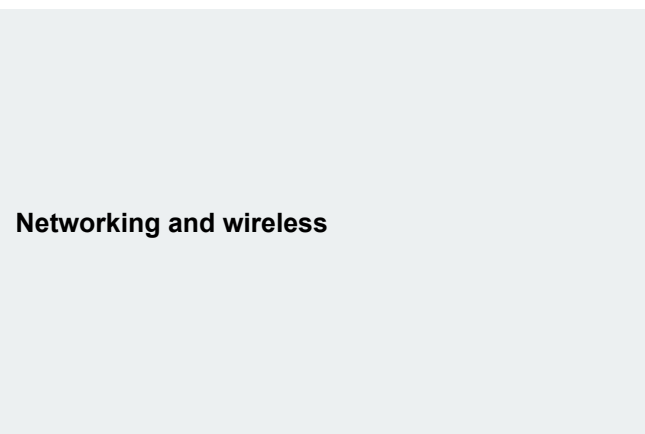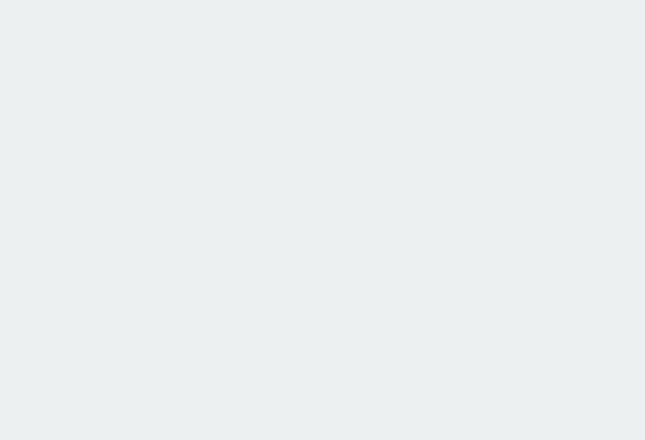|	
	for variable retention • Direct live streaming with no client software (native browser playback)* • Stream video anywhere with automatic cloud proxy • Audio recording supported with four (4) built-in microphones

DORI Specifications (Maximum Resolution)	**Maximum FoV [Wide]**
	
	• Detect (25 ppm/ 8 ppf)
	  ◦ 63.8 m / 209.3 ft
	• Observe (63 ppm/ 19 ppf)
	  ◦ 25.3 m / 83 ft
	• Recognize (125 ppm/ 38 ppf)
	  ◦ 12.8 m / 41.9 ft
	• Identify (250 ppm/ 76 ppf)
	  ◦ 6.4 m / 21 ft
	
	Minimum FoV [Telescopic]
	
	• Detect (25 ppm/ 8 ppf)
	  ◦ 244.5 m / 802.2 ft
	• Observe (63 ppm/ 19 ppf)
	  ◦ 97 m / 318.2 ft
	• Recognize (125 ppm/ 38 ppf)
	  ◦ 48.9 m / 160.4 ft
	• Identify (250 ppm/ 76 ppf)
	  ◦ 24.4 m / 80 ft

Networking and wireless	• 1x 10/100/1000BASE-T Ethernet (RJ45)
	• DSCP traffic marking
	• Supported frequency bands (country-specific restrictions apply):
	• 2.4 GHz 802.11b/g/n radio
	  ◦ 2.412 - 2.484 GHz
	• 5 GHz 802.11a/n/ac radio
	  ◦ 5.150 - 5.250 GHz (UNII-1)

	◦ 5.250 - 5.350 GHz (UNII-2) ◦ 5.470 - 5.600, 5.660 - 5.725 GHz (UNII-2e) ◦ 5.725 - 5.825 GHz (UNII-3) • 1x1 with one spatial stream • 20, 40, and 80 MHz channels (802.11ac) • Up to 256 QAM on 5 GHz band • Integrated omnidirectional antennas • MT Gateway Support for all MT sensors
Power	Power consumption 15.4W maximum via 802.3af PoE 12VDC/24VAC Terminal power input
Environment	Temperature: 0°C to 45°C (32°F to 113°F)**
Data and network security	• Full disk encryption (AES 256-bit) • Automatically purchased and provisioned TLS certificates (publicly signed) • Management encryption and two-factor authentication • Wireless security: ◦ WPA, WPA2-PSK, WPA2-Enterprise with 802.1X EAP-TTLS TKIP and AES encryption
Physical characteristics	• Dimension: 148.54 mm x 95.80 mm (diameter x height) • Weight: 840 grams • Varifocal lens • Female RJ45 Ethernet connector • Multicolor, multifunction status LED • External microphone switch • Reset button
Warranty	Five-year hardware warranty with advanced replacement
Hardware	• MV23M-HW Varifocal lens indoor dome camera with 512GB storage

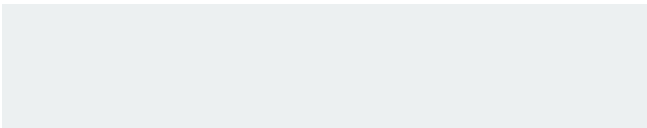|	
	• MV23X-HW: Varifocal lens indoor dome camera with 1TB storage
Licensing	LIC-MV-XYR: Meraki MV Enterprise license (X = 1, 3, 5, 7, 10 years) [Optional] LIC-MV-SEN-XYR: Meraki MV Sense license (X = 1, 3, 5, 7, 10 years) [Optional] LIC-MV-CA30-XY: MV Cloud Archive license (X = 1, 3, 5 years) [Optional] LIC-MV-CA90-XY: MV Cloud Archive license (X = 1, 3, 5 years) [Optional] LIC-MV-CA180-XY: MV Cloud Archive license (X = 1, 3, 5 years) [Optional] LIC-MV-CA365-XY: MV Cloud Archive license (X = 1, 3, 5 years)
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In the box	• Quick-start and installation guide • MV camera hardware

• Wall-mounting kit

Each Meraki camera requires a license to operate.