# V9360-1 SERIES HEMISPHERIC NETWORK DOME CAMERAS







## 360 Degree Vision

The V9360-1 series provides a high-resolution, hemispherical view of your world that eliminates blind spots and improves long term reliability. Onboard image processing of the 6 megapixel sensor image provides crisp distortion free images. An integral fisheye lens provides an extremely wide angle of view for a panoramic image, capturing a complete 360° view (ceiling mount) or 180° view (wall mount). The Edge Dewarping function is done in the camera itself; this image is then sent as a single stream to the VMS to be used for recording and live view. As an alternative, Software Dewarping is provided, for those VMS that support it.

Resolution	Environment	Model Number			
Up to 3072x2048 pixels (6 megapixel)	Outdoor	V9360W-1			
Up to 3072x2048 pixels (6 megapixel)	Indoor	V9360-1			
Mounting Options					
Pendant mounting kit	Indoor/Outdoor	V9360-1MK			
Universal (4S) box adaptor	Indoor/Outdoor	V9360-1BA			

# ★ Product at a Glance

- ▶ 6 megapixel progressive scan CMOS sensor
- ▶ Day/night with mechanical IR cut filter
- ▶ Minimum illumination 0.002 lux at F2.8
- ▶ 180°/360° panorama at full HD resolution
- ▶ Built-in 1.05 mm / F2.8 megapixel fisheye lens
- ▶ 6 MP (3072 x 2048) maximum resolution
- ▶ Selectable H.264 and M-JPEG compressions with dual streaming
- ▶ Built-in microphone and speaker (indoor version)
- ▶ Integrated IR LEDs
- ▶ Motion detection
- ▶ Wide Dynamic Range (WDR)
- ▶ Micro SD card slot for local storage
- ▶ Powered by PoE; 12 VDC; 24 VAC
- ▶ Indoor and outdoor models; outdoor version has weatherproof IP66 rated housing

#### Overview

The V9360-1 provides dual-streaming video and supports H.264 compression technology, drastically reducing file sizes and conserving valuable network bandwidth; M-JPEG compressions is also supported.

The hemispheric camera series offers indoor and outdoor models. The indoor version is the V9360-1; the V9360W-1 is designed for outdoor security installations. The camera provides up to 6 MP (3072x2048) resolution, depending upon video stream mode. An IR cut filter provides low light sensitivity up to 0.002 lux.

Installation of the V9360-1 is made easy and cost effective with Power over Ethernet (IEEE 802.3af), which eliminates the need for power cables; 12 VDC and 24 VAC are also accepted.

The camera can be used with many popular VMS systems, including ViconNet®; each VMS may support different camera functions. Using ViconNet, it is possible to digitally zoom in to live or recorded video, providing a close look at any object within the two panoramic views; pixilation is minimal due to the 6 MP resolution.

#### **SPECIFICATIONS**

Model	V9360W-1 Outdoor and V9360-1 Indoor				
Camera					
Device Type:	Indoor and outdoor hemispheric cameras				
Image Sensor:	1/1.8" Sony progressive scan CMOS				
Max Resolution:	SW Dewarping: 3072x2048 (6 MP); Edge Dewarping: 2048x2048 (4 MP)				
Image Settings:	WDR (wide dynamic range). Backlight Compensation. Configurable brightness, contrast, saturation, hue, sharpness. White balance. Exposure. Edge de-warping. DNR (3D). Digital zoom. Motion detection. Privacy masks. ICR. Tampering Alarm.				
Electronic Shutter Speed:	1 - 1/10000 sec				
Day/Night Performance:	Day/Night with mechanical IR cut filter				
IR Sensitivity:	850 nm; up to 16 ft (5 m)				
Minimum Illumination:	Color: 0.04 lux; BW: 0.002 lux) @F/2.8				
Lenses					
Lens:	Fisheye 1/2.5"; 1.05 mm focal length, F2.8; M12 lens mount				
Angle of View:	180° @ full resolution				
Network Video Transmission					
Network:	1 Gbps Ethernet; RJ-45				
Image Compression:	H.264 (MPEG-4 Part 10/AVC) Baseline/ Main Profile/ High Profile/SVC, M-JPEG				
Video Streaming:	Simultaneous dual streams based on two configurations in single view mode; multiple streams based on single configuration in 6 cropped VGA mode				
Max. Frame Rate vs Resolution Performance:	Refer to Table that follows				
	1				
Audio:	Two-way audio (line in/line out). Indoor: Built-in speaker (max. 2W mono) and microphone. G.711/G.726				
Protocols:	IPv4/IPv6, TCP/IP, UDP, HTTP, RTP, RTSP, DHCP, SMTP, HTTPS, PPPoE, ICMP, ARP, UPnP, SNMP, FTP, IGMP, QoS, ONVIF				
Users:	Up to 20 clients				
Web Browser:	Internet Explorer® 6.0 and above/Chrome®/Firefox®/Safari®				
Alarms:	i alarm input/1 alarm output				
Security:	Password protection, IP address filtering, HTTPS, IEEE 802.1X network access control				
Mechanical and Electrical					
Construction:	Plastic				
Mounting:	2 mounting holes provided				
Controls and Connectors:	PoE/Network: RJ-45. Alarm/Audio: 8 pin terminal block (2 of each). Power: 3 pin terminal block. Audio In/Out: phone jacks with cable (indoor); terminal block (outdoor). Micro SDHC card slot.				
Dimensions:	Outdoor: H: 2.3 in. (58.7 mm); D: 6 in. (152 mm). Indoor: H: 1.8 in. (45.3 mm); D: 5.9 in. (150 mm).				
Weight:	Outdoor: 1.76 lb (0.8 kg). Indoor: 0.93 lb (0.42 g)				
Input Power:	PoE (IEEE 802.3af Class 3); 12 VDC				
Current:	Outdoor: 0.8 A. Indoor: 0.64 A				
Power Consumption:	Outdoor: 9.6 W. Indoor: 7.68 W				
Environmental					
Operating Conditions:	Temp: 14 to 140° F (-10 to 60° C). Humidity: 10% - 85%, non-condensing.				
Approvals:	FCC Class A, CE. Outdoor: IP66				
Warranty:	3 years				

Data Sheet Number: V271-00-02 Vicon Data Sheet Number: 8009-7271-00-02



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#### V9360-1 Connectors





## V9360W-1 Connectors



### **Mounting Accessories**



- 1. Power Connector: 12 VDC Pole 1 12 VDC; Pole 2 Reserved 24 VAC - Pole 1 24 VAC1; Pole 2 24 VAC2
- 2. RJ-45 Connector: Network and PoE connections
- 3. Alarm and Audio Connector: Input and output
- 4. Default Button: Press to restore factory defaults
- 5. MicroSD Card Slot: Insert microSD card for storage

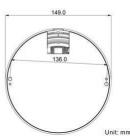
## NPT 3/4" (in) – NPT 1-1/2" (out) V9360-1MK Provides 1-1/2" male thread and 3/4" female thread.

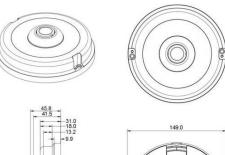


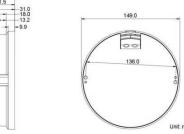
## **Dimension Drawings**











Outdoor Model

#### Performance Table

Dewarping Type	Video Resolution	Streaming	Video Streaming (fps)
Edge Dewarping	H.264:-2048x2048/2688x1520/2048x1536/1920x1080/ 1600x1200/1408x1408/960x960/960x720/960x554	Dual*	H.264: 4MP (2048x2048) @20fps + H.264 1080p @20fps
			H.264: 1.98MP (1408x1408) @25/30fps+ H.264 1080p @25/30fps
	M-JPEG:1920x1080/1600x1200/1408x1408/960x960/ 960x720/960x554	Single	H.264 6MP (3072x2048) @25/30fps
			H.264/M-JPEG 1080p @50/60fps
Software Dewarping	H.264: 6MP (3072x2048)/Full HD 1080P/SXGA/HD 720P/XGA/ SVGA/D1/VGA/CIF/QVGA M-JPEG: Full HD 1080P/SXGA/720P/XGA/SVGA/D1/VGA/CIF/ QVGA	Dual*	H.264 6MP (3072x2048) @25/30fps + H.264 720p @25/30fps
			H.264 1080p @60fps + 1080p @25/30fps
		Quad**	NTSC: H.264 1080p @60fps + H.264 SXGA @60fps + H.264 D1 @60fps + H.264 CIF @60fps
			PAL: H.264 1080p @50fps + H.264 1080p @50fps + H.264 VGA @50fps + H.264 CIF @50fps

<sup>\*</sup>Note: M-JPEG supports for resolution of 1080P or under.

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<sup>\*\*</sup> Note: 1 of the streamings can be M-JPEG