



## Product at a Glance

- ▶ 2 MP, 4 MP and 5 MP models; starlight (ultra-high-sensitivity) 2 MP model provides high-quality video even in extremely low-light environments
- ▶ True WDR (120 dB); 2 MP model with 132 dB WDR
- ▶ H.265/H.264 compression
- ▶ Smart encoding
- ▶ Smart IR LED technology (98 ft/30 m range)
- ▶ Motorized zoom and focus varifocal lens
- ▶ Video Content Analysis (VCA)
- ▶ Museum Search
- ▶ Triple streaming
- ▶ Power-over-Ethernet (PoE), 12 VDC or 24 VAC
- ▶ Two-way audio
- ▶ Analog composite video out
- ▶ SD card slot for on-camera storage
- ▶ IP66 rated for outdoor environments
- ▶ IK10 rated for impact protection
- ▶ Surface mounting on wall or ceiling

## Overview

Vicon's V940D Series of HD IP Camera Domes is designed for performance in the most demanding security installations. There are 1080P (2 MP), 4 MP and 5 MP models with a motorized varifocal autoiris lens; there are two additional 2 MP models with enhanced WDR (132 dB) and sensitivity (starlight). Starlight technology delivers the highest quality video even in extremely low-light conditions, providing video in color when a typical camera has switched to B&W mode. The camera includes IR illuminators. The camera offers Smart IR technology that maintains proper exposure in the scene and includes narrow and wide angle LEDs that manage beam spread that adjusts to the lens field-of-view.

The V940D Series provides triple-streaming video and supports H.264/H.265 compression technology, significantly reducing file sizes and conserving valuable network bandwidth. The camera provides Smart Encoding, which monitors the amount of motion in a scene, resulting in overall savings in storage requirements and bandwidth without sacrificing video quality. M-JPEG compression is also provided.

The camera dome is designed for easy installation. Power over Ethernet (IEEE 802.3af) eliminates the need for power cables, providing a cost-effective method of installation. The camera also accepts 24 VAC and 12 VDC. The V940D can be directly mounted on a wall or ceiling; other mounting options, as well as a back box for ease of cabling, are available. The camera dome provides 3-axis adjustment for any angle of view. Additionally, a composite output is provided for installation using a spot monitor (NTSC/PAL selectable).

In order to adapt to constantly changing outdoor lighting conditions, the V940D series features an autoiris lens to adjust the lens opening to the changing light levels. The true day/night progressive scan camera also includes a removable IR cut filter for superior image quality in all lighting conditions. Wide Dynamic Range further improves video exposure quality in scenes with high contrast between bright and dark areas.

For protection against the elements, the camera dome is IP66 rated with a IK10 vandal-proof casing to withstand rain, dust, and vandalism; it is secured by tamperproof screws.

SPECIFICATIONS

Model	V942D-W312MIR	V942D-W310MIR-XW	V942D-W310MIR-XS (Starlight)	V944D-W312MIR	V945D-W310MIR
<b>Image Sensor:</b>	1/3 inch progressive scan CMOS Sensor	1/2.8 inch progressive scan CMOS Sensor	1/1.9 inch progressive scan CMOS Sensor	1/3 inch progressive scan CMOS Sensor	1/1.8 inch progressive scan CMOS Sensor
<b>Max Resolution:</b>	1920 x 1080 (1080p)			2592x1520 (4 MP)	2592x1944 (5 MP)
<b>Image Settings:</b>	Digital image effects: mirror (horizontal and vertical) and corridor. Configurable brightness, contrast, saturation, hue, sharpness. White balance. Gain control (AGC). Electronic shutter speed. Day/night mode. Dynamic Noise Reduction (3D). Motion detection (4 programmable zones). Privacy masking (4 masks). ROI (8 regions). Event notification.				
<b>Video Contents Analytics:</b>	EIS, Defog, Video Contents Analysis (including Intrusion Detection, Line Cross Detection and Camera Tampering, which includes Scene Change. Defocus, Low/High Brightness); Museum Search				
<b>Electronic Shutter Speed:</b>	Auto (1 ~ 1/32,000 sec), manual	Auto (1 ~ 1/30,000 sec), manual		Auto (1 ~ 1/32,000 sec), manual	Auto (1 ~ 1/30,000 sec), manual
<b>Day/Night Performance:</b>	True day/night (IR cut filter)				
<b>Wide Dynamic Range</b>	True WDR; 120 dB	132 dB	True WDR; 120 dB		True WDR @15 fps; Digital WDR @ 30 fps
<b>Minimum Illumination:</b>	Color: 0.01 lux @f/1.4 30 IRE, AGC On, BW: 0.0 lux, IR On	Color: 0.01 lux; BW: 0.001 lux @f/1.4 AGC On, 0.0 lux, IR On	Color: 0.002 lux; BW: 0.0006 lux @f/1.5 AGC On, 0.0 lux, IR On	Color: 0.01 lux @f/1.4 30 IRE, AGC On, BW: 0.0 lux, IR On	Color: 0.1 lux; BW: 0.02 lux @f/1.5 AGC On, 0.0 lux, IR On
<b>IR Distance:</b>	98 ft (30 m) (850 nm); Smart IR LED technology				

**Lenses**

<b>Focal Length:</b>	2.7-12 mm	3-10.5 mm	3.6-10 mm	2.7-12 mm	3.6-10 mm
<b>Max. Aperture:</b>	f/1.4		f/1.5	f/1.4	f/1.5
<b>Iris:</b>	Autoiris				
<b>Zoom/Focus Adjust:</b>	Motorized zoom and focus (supporting auto focusing)				
<b>Field of View: Horizontal/Vertical</b>	29.8° (tele) - 85° (wide)/ 17.3° (tele) - 40.3° (wide)	33° (tele) - 92.5° (wide) 18.8° (tele) - 49.6° (wide)	44.3° (tele) - 101.8° (wide) 24.5° (tele) - 56.5° (wide)	31° (tele) - 94° (wide)/ 19.2° (tele) - 48.9° (wide)	38.4° (tele) - 87.9° (wide)/ 28.1° (tele) - 65° (wide)

**Network Video Transmission**

<b>Network:</b>	10Base-T, 100Base-TX, RJ-45				
<b>Image Compression:</b>	H.264; H.265; M-JPEG				
<b>Resolution:</b>	2 MP: Major streams: 1920x1080 (1080P), 1280x720/960 (720P); Minor streams: 1920x1080 (1080P), 1280x720/960 (720P), 720x480, 704x480 (D1), 640x480 (VGA), 352x240, 320x240 (QVGA); Third Stream MJPEG/H.264: 640x480 (VGA), 352x240, 320x240 (QVGA)  4 MP: Major streams: 2592x1520, 2560x1440, 2048x1520, 2304x1296, 1920x1080 (1080P), 1280x720/960 (720P); Minor streams: 1920x1080 (1080P), 1280x720/960 (720P), 720x480, 704x480 (D1), 640x480 (VGA), 352x240, 320x240 (QVGA); Third Stream MJPEG/H.264: 640x480 (VGA), 352x240, 320x240 (QVGA)  5 MP: Major streams: 2592x1944, 2560x1920, 2048x1536, 1920x1080 (1080P), 1280x720/960 (720P); Minor streams: 720x480, 704x480 (D1), 640x480 (VGA), 352x240, 320x240 (QVGA); Third Stream MJPEG/H.264: 720x480, 640x480 (VGA), 352x240, 320x240 (QVGA)				
<b>Protocol:</b>	IPv4/IPv6, TCP, HTTP, HTTPS, RTSP, RTCP, RTP, SMTP, DHCP, NTP, FTP, DDNS, UDP, uPnP, ARP, QoS, IGMP, SNMP (V3), TLS, SSL, 802.1x, PPPoE, DNS, ICMP				
<b>Frame Rate:</b>	1920x1080 @ 30 fps*			2592x1520 @ 20 fps; 2048x1520 @ 30 fps; 1920x1080 @ 30 fps*	2592x1944 @ 30 fps; 2592x1520 @ 30 fps 2048x1520 @ 30 fps 1920x1080 @ 30 fps**
<b>Streams:</b>	Triple streams: H.264/H.265 - 2; H.264/H.265/M-JPEG - 1				
<b>Users:</b>	10 users				
<b>Web Browser:</b>	Internet Explorer® (min IE8)				
<b>Security:</b>	IP address filtering, HTTPS encrypted data transmission, SSL, password protection				
<b>Alarm:</b>	2 inputs/1 output				
<b>Audio Streaming:</b>	1 input/1 output; 2-way G.711 codec.				

\*If the camera is set to Corridor mode for 90°, 180° or 270° rotation, the max. is 15 fps.

\*\*Without T-WDR. With T-WDR: 2592x1944 @ 15 fps; 2592x1520 @ 15 fps 2048x1520 @ 15 fps 1920x1080 @ 30 fps

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Specifications subject to change without notice.

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**SPECIFICATIONS**

**Mechanical**

<b>Construction:</b>	Aluminum base; polycarbonate clear dome; tamperproof screws
<b>Camera Angle of Adjustment:</b>	3-axis adjustment, pan, tilt and roll (azimuth): 360° pan; 80° tilt; 360° rotation
<b>Mounting:</b>	Surface mount. Mounting accessories available for pendant/wall.
<b>Dimensions:</b>	4.76 in. (121 mm) (H) x 5.91 in. (150 mm) (Diam)
<b>Weight:</b>	2.32 lb (1.05 kg)

**Electrical**

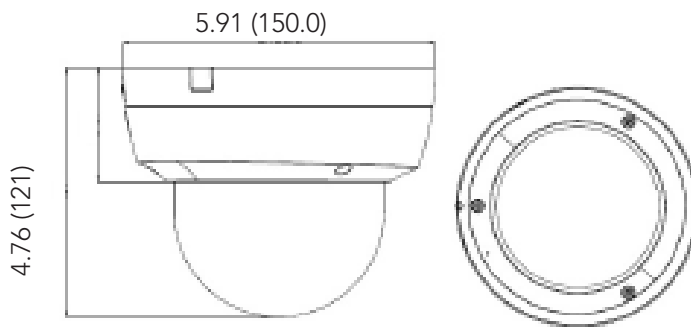
<b>Input Power:</b>	PoE IEEE 802.3af, 12 VDC, 24 VAC
<b>Current (IR on):</b>	12 VDC: 750 mA; 24 VAC: 375 mA
<b>Power Consumption (IR on):</b>	<9 W
<b>Storage:</b>	Slot for SD/SDHC/SDXC card on camera (128G max; card not supplied)

**Controls and Connectors**

<b>Connectors:</b>	Power: standard jack for adapter; PoE/Network: RJ-45 CAT 5. Alarm In/Out: pin connectors. Audio In and Out: RCA jack. Analog Video Output: BNC for setup only. Local Storage: SD card slot.
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**Environmental**

<b>Operating Conditions:</b>	Outdoor rated Temp: -40 to 140° F (-40 to 60° C) Humidity: up to 90%, non-condensing
<b>Approvals:</b>	FCC Class A, CE, UL, IP66, IK10
<b>Warranty:</b>	3 years




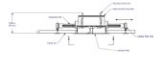
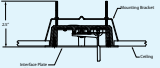








Dimension Drawing [in. (mm)]

**Ordering Information**

Resolution	Lens	Model Number
1080 p resolution (2 MP)	2.7-12 mm motorized zoom and focus	V942D-W312MIR
1080p resolution (2 MP); 132 dB WDR	3-10.5 mm motorized zoom and focus lens	V942D-W310MIR-XW
1080p resolution (2 MP); ultra-high-sensitivity	3.6-10 mm motorized zoom and focus lens	V942D-W310IR-XS
4 MP	2.7-12 mm motorized zoom and focus	V944D-W312MIR
5 MP	3.6-10 mm motorized zoom and focus lens	V945D-W310MIR
<b>Mounting Options</b>		
Back Box	For ease of cabling	V940D-BOX
Pendant Adapter	To allow pendant mounting	V940-PH
Electrical Box Adapter	To allow mounting to a 4x4 electrical box	V940-PLATE

# V940D SERIES

## Mounting Accessories

	Description	Model Number
	Pendant adapter; allows V940D to work with a variety of mounting options mounts	V940-PH
	In-ceiling mounting kit; for drop ceilings	V940-ICD
	In-ceiling mounting kit; for hard ceilings	V940-ICH
	Adapter plate that allows the V940D to be mounted on a 4x4 electrical box	V940-PLATE
	Back box for ease of cabling	V940D-BOX
	Wall mount; can be used with V940-PH	SVFT-UWM-1
	Wall mount (short); can be used with V940-PH	SVFT-WM-1
	Ceiling mount; can be used with V940-PH	SVFT-UCM-1
	Parapet mount	SVFT-UPM-2
	Corner mounting bracket	V24CMB-1
	Pole mount adapter	V20B-A-1