DATA/ SPEC SHEET

V920D SERIES NETWORK ROUGHNECK CAMERA DOME

H.264   PoE   Day/Night   WDR   Motorized LENS

- 3 MP, 2 MP/1080p, 1.3 MP/720p and SD resolution models
- True day/night camera with a built-in varifocal autoiris lens; models available with motorized lens, WDR and IR illuminators
- H.264 high-profile, MPEG-4 and M-JPEG compression
- ONVIF interface provides interoperability with open platform solutions
- 0.01 lux low light capabilities @ 50 IRE
- Power-over-Ethernet (IEEE 802.3af), 24 VAC or 12 VDC
- Triple streaming video
- Two-way audio
- SD card slot for on-camera storage
- Rugged construction for harsh indoor or outdoor environments, IP66 rated; heater provides all-weather protection
- IK10 rated for impact protection
- Surface mounting on wall or ceiling; pendant and

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Driving network video through global standardization

Overview

Vicon's Roughneck® V920D Series of HD IP Camera Domes is designed for performance in the most demanding security installations. The megapixel camera series offers a number of fixed network camera versions that deliver crisp clear images to fit any installation need. The V920D series offers models with 3 MP, 2 MP/1080p, 1.3 MP/720p and SD (standard resolution, D1) resolutions. There are models with a manual or motorized varifocal autoiris lens, WDR and IR illuminators. Refer to the table for a list of models.

The V920D Series provides triple-streaming video and supports H.264 compression technology, drastically reducing file sizes and conserving valuable network bandwidth. Users can receive multiple streams simultaneously in different resolutions, frame rates and image qualities for viewing on different platforms. MPEG-4 and M-JPEG compression are 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 12 VDC and 24 VAC. The V920D can be mounted on a wall, ceiling or standard 4 x 4 electrical box. With an adapter, it can also be pendant mounted on a wall mount or in-ceiling.

The camera position is adjustable to any view required. 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 V920D series features an autoiris lens to protect from damage induced by direct sunlight. The true day/night camera also includes a removable IR cut filter for superior image quality around the clock. Models with Wide Dynamic Range (WDR) further improve 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 vandal-proof casing to withstand rain, dust, and vandalism; it is secured by tamperproof screws. The heater further enhances the dome's performance and reliability in extremely weather conditions. The camera dome provides 3-axis adjustment for any angle of view.

Model	V920D-N39-IP V920D-39MD-IP	V921D-N39-IP V921D-N39MIR-IP V921D-39MD-IP	V922D-N39-IP V922D-N39MIR-IP V922D-39MD-IP	V923D-N39M-IP V923D-N39MIR-IP
Image Sensor:	1/2.8-inch progressive scan RGB CMOS			
Max Resolution:	SD (D1)	1.3 MP/720p	2 MP/1080p	3 MP
Image Settings:	Dynamic adjustable bit rate. Digital image effects: horizontal and vertical flip. Configurable brightness, contrast, saturation, hue, sharpness. White balance. Digital zoom. Gain control. Electronic shutter speed. Day/night mode. BLC (Backlight Compensation). Dynamic Noise Reduction (2D). Motion detection. Sense-Up. Privacy masking. Event notification. Digital WDR on select models (refer to model descriptions).			
Electronic Shutter Speed:	1/4 ~ 1/20,000			
Digital Zoom:	1 ~ 10X (client software)			
Day/Night Performance:	True day/night (IR cut filter)			
Minimum Illumination:	Color: 0.08 fc (0.8 lux), B/W: 0.02 fc (0.2 lux) @f/1.2, 50 IRE IR Color: 0.02 fc (0.2 lux), IR BW: 0.0 fc/lux, IR On @f/1.2, 50 IRE			
IR Distance (IR models only):	82 ft (25 m) (with 24 IR LEDs)			

Lenses

Focal Length:	3-9 mm (3X zoom)			
Max. Aperture:	f/1.2			
Iris:	Autoiris			
Zoom/Focus Adjust:	Screw lever adjustable (manual units) or motorized focus and zoom			Motorized focus and zoom
Horizontal Field of View:	3-9 mm: 93° - 31.7°			

Network Video Transmission

Network:	10Base-T, 100Base-TX, RJ-45			
Image Compression:	H.264; MPEG-4; M-JPEG			
Resolution:	704x480/576 (D1), 352x240/288 (CIF), 640x480 (VGA), 320x240 (QVGA)	1280x1024 (1.3 MP), 1280x720 (720P), 704x480/576 (D1), 352x240/288 (CIF), 640x480 (VGA), 320x240 (QVGA)	1920x1080 (1080P), 1280x720 (720P), 704x480/576 (D1), 352x240/288 (CIF), 640x480 (VGA), 320x240 (QVGA)	2048x1536 (3 MP); 1920x1080 (1080P), 1280x720 (720P), 704x480/576 (D1), 352x240/288 (CIF), 640x480 (VGA), 320x240 (QVGA)
Protocol:	IPv4/IPv6, TCP/IP, HTTP, HTTPS, RTSP, RTCP, RTP, SMTP, DHCP, NTP, FTP, DDNS, UDP, SNMP, uPnP, ARP, QoS, Zeroconf, Bonjour, Manual			
Frame Rate:	2.5 ~ 30 fps (2.1 ~ 25 fps, PAL). Refer to Frame Rate and Resolution Performance sheet for details.			20 fps @ 2048x1536 (3 MP capture mode); 30 fps in all resolutions (full HD capture mode)
Streams:	Dual or Triple streaming			
Users:	Live viewing for up to 10 clients			
Web Browser:	Internet Explorer®; Safari®; Firefox®, Google Chrome®, Opera®			
Security:	IP address filtering, HTTPS encrypted data transmission, SSL, password protection			

Mechanical and Electrical

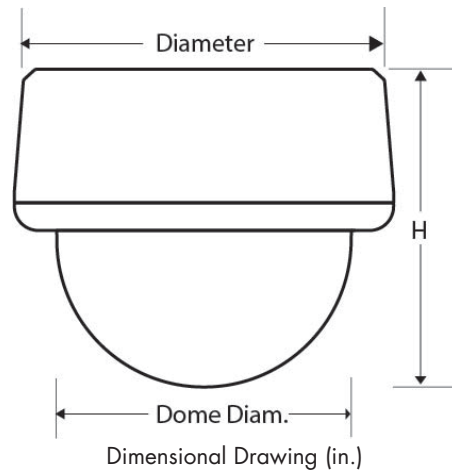|				
Construction:	Die-cast aluminum base; polycarbonate plastic clear dome; tamperproof screws			
Camera Angle of Adjustment:	3-axis adjustment, pan, tilt and roll (azimuth): 355° pan; 70° tilt; 355° rotation			
Mounting:	Surface mount. Mounting accessories available for pendant/wall and in-ceiling.			
Dimensions:	6.06 in. (154 mm) (Diam) x 5.0 in. (127.4 mm) (H), 4.3 in. (110 mm) (Dome Diam)			
Weight:	2.5 lb (1.1 kg)			

Input Power:	12 VDC, 24 VAC, PoE IEEE 802.3af Class 0
Current (IR on):	12 VDC: 550 mA; 24 VAC: 590 mA; PoE: 150 mA, max. Heater (with fan) on: 12 VDC: 900 mA; 24 VAC: 930 mA; PoE: 260 mA, max.
Power Consumption (IR on):	12 VDC: 6.5 W; 24 VAC: 7.5 W; PoE: 6.4 W, max. Heater (with fan) on: 12 VDC: 10.5 W; 24 VAC: 12.3 W; PoE: 11.8 W, max.
Storage:	Slot for Micro SD card on camera (card not supplied)

Controls and Connectors

External Controls:	Focus, Zoom: control levers on non-motorized lens versions
Connectors:	Power: 12 VDC/24 VAC: screw terminal; PoE/Network: RJ-45 CAT 5. Alarm In/Out: screw terminal. Audio In and Out: jack (Audio Out requires external amplifier). Local Storage: Micro SD card slot. Composite output provided for installation (NTSC/PAL selectable).

Environmental

Operating Conditions:	Temp: -40 to 122° F (-40 to 50° C) with heater; -4 to 122° F (-20 to 50° C) without heater Humidity: up to 90%, non-condensing Heater: 41° F (5° C) (ON)/59° F (15° C) (OFF); tolerance: ±5° C
Approvals:	UL, FCC Class A, CE, IP66, IK10
Warranty:	3 years

Dimensional Drawing (in.)

Resolution	Lens	Model Number
SD resolution (0.3 MP)	3 - 9 mm mm autoiris varifocal lens	V920D-N39-IP
	3 - 9 mm mm motorized zoom and focus; WDR	V920D-39MD-IP
720p resolution (1.3 MP)	3 - 9 mm autoiris varifocal lens	V921D-N39-IP
	3 - 9 mm motorized zoom and focus; IR illuminators	V921D-N39MIR-IP
	3 - 9 mm motorized zoom and focus; WDR	V921D-39MD-IP
1080p resolution (2 MP)	3- 9 mm autoiris varifocal lens	V922D-N39-IP
	3 - 9 mm motorized zoom and focus; IR illuminators	V922D-N39MIR-IP
	3 - 9 mm motorized zoom and focus; WDR	V922D-39MD-IP
3 MP	3 - 9 mm motorized zoom and focus; WDR	V923D-N39M-IP
	3 - 9 mm motorized zoom and focus; WDR, IR illuminators	V923D-N39MIR-IP

Model Descriptions

Model Number	Description
V920-PH	Pendant housing used to convert V920D to pendant mounting; it can then be used with a variety of wall mounts
V920D-ICD	In-ceiling mounting kit for dropped ceiling
V920D-ICH	In-ceiling mounting kit for hard ceiling
V920-PLATE	Adapter plate to allow the V920D to be mounted on a 4x4 electrical box
Surge Protectors	Refer to datasheet

Mounting Accessories

Model Number	Description
V920D-OSD	OSD controller; for making changes from the OSD on the V920D series camera domes
V920D-AUDIO	Audio jack cable assembly; used for audio in (mic)/audio out (speaker) on the V920D camera series

Cable Adapters

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