



# I-ONYX IP CAMERAS



## IP Camera with Digital Noise Reduction

- Powered by ViconNet software; supports version 4 and higher
- Maximum video transmission rate of 30 fps (25 fps PAL) at 720 x 488 pixels (4 CIF) (864 x 586 PAL)
- ViconNet MPEG-4 compression optimizes file size and maximizes picture quality
- Power over Ethernet (PoE) eliminates the need for separate power supply
- Simultaneous transmission of multiple-channel video across the LAN and WAN to connected Kollektor Elite Recorders and ViconNet NVR Workstations
- Remote configuration across the network
- Programmable privacy masking zones
- Mirror setting that reverses an image from a mirror to its proper orientation
- Digital noise reduction (DNR) provides superior performance in low light conditions
- SensUp feature increases camera sensitivity in low light or dark environments

Vicon® introduces three powerful IP video I-ONYX® cameras for use with the ViconNet® Digital Video Management System. The VN-856 series, which includes high-resolution color (VN-856), day/night (VN-856DN) and wide dynamic range (VN-856WDR) models, all feature digital noise reduction (DNR), allowing the cameras to provide superior performance in low light conditions. The DNR algorithms process the video prior to transmission, greatly reducing the noise that typically plagues video captured in low light. The result is cleaner images with more detail, as well as smaller video files that require lower bandwidth for transmission and less storage space.

The VN-856 series delivers premium performance, providing sharp color images with resolution up to 540 TV lines, accurate color rendition and a capture resolution up to 4 CIF [720 x 488 (864 x 586 PAL)]. As part of a ViconNet system, the cameras utilize an MD5 video authentication algorithm to verify data integrity and support museum search, motion detection, alarm reporting, macros and alarms.

VN-856 cameras are equipped with a 100 Mbps LAN interface board that allows them to directly plug in to a network switch on ViconNet NVRs. Cameras may be powered by either PoE or a 24 VAC fully isolated power input that ensures stable images when the cameras are powered by a common power supply.

Model No.	Product Code	Description
VN-856V5/VN-856V5-C	9149-70/9149-71	1/3 in. high resolution IP camera with DNR; NTSC/PAL
VN-856DNV5/VN-856DNV5-C	9149-80/9149-81	1/3 in. high resolution day/night IP camera with DNR; NTSC/PAL
VN-856WDRV5/VN-856WDRV5-C	9149-90/9149-91	1/3 in. high resolution day/night IP camera with Wide Dynamic Range and DNR; NTSC/PAL

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# Technical Specifications

## ELECTRICAL

Input Voltage:	24 VAC $\pm$ 15%, fully isolated, or PoE (802.3af compatible).
Current:	VN-856: 198 mA max. VN-856DN: 235 mA max. VN-856WDR: 224 mA max. Powered by PoE: 175 ma @ 48 VDC.
Power Consumption:	VN-856: 4.8 W max. VN-856DN: 5.6 W max. VN-856WDR: 5.4 W max.
Vicon Power Supplies:	S24WPS-1, V2448-175PS, V248-600PS, V2416-600PS.

## VICONNET (IP)

Communication Hardware:	ViconNet Digital Video Management System.
LAN Interface:	100/10 Mbps, TCP/IP Unicast
Number of Channels:	1, over LAN connection.
Resolution:	4 levels, up to 4 CIF [480 horizontal TV lines maximum at 720 x 488 pixel pallet (864 x 586, PAL)].
Number of Simultaneous Video Streams:	Maximum of 10 viewing/recording streams of video per camera.
Alarm/Audio:	1 dry contact (NO/NC)/1 line-level microphone input.

## SOFTWARE

Network Setup:	Standard network protocol type using IP addressing scheme and separate PC application software.
Site Authorization:	Camera can be set up using remote recorder or workstation. Permissions can be assigned for macro create & edit, alarm setup, Authentication, Reports and System Status. Supports up to 20 Groups and 100 Users.
Macro Create & Edit:	System macros can be configured to use the camera's video. Within macros, alarms can be sent and remote macros run.
Alarm Setup:	Can be triggered on video motion detection and loss. The alarm can be sent to remote units.
Authentication:	Can be set to view the Authentication symbol on displayed video.
Picture Quality and FPS Priority:	Can prioritize recorded picture quality and video fps.

## VIDEO CHARACTERISTICS

Image Device:	1/3-inch interline transfer CCD.
Synchronization In:	Internal.
Horizontal Resolution:	540 TV lines.
Sensitivity:	VN-856: 0.03 fc (0.3 lux); 0.0002 fc (0.002 lux) at 128x SensUp. VN-856DN: 0.03 fc (0.3 lux) in color mode; 0.004 fc (0.04 lux) in BW mode; 0.0002 fc (0.002 lux) at 128x SensUp. VN-856WDR: 0.03 fc (0.3 lux) in color mode; 0.004 fc (0.04 lux) in BW mode; 0.0001 fc (0.001 lux) at 256x SensUp.
Gain Control:	Automatic (AGC), ON/OFF.
Signal-to-Noise Ratio:	Better than 52 dB.
Backlight Compensation/Wide Dynamic Range:	ON/OFF select.
Electronic Iris:	1/60 (1/50)-1/100,000.
Lenses:	Accepts DC drive (CS-G) lenses; 4-pin molded connector.

## CONNECTORS

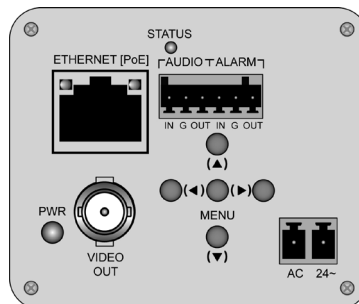
Power:	2-pin terminal.
Autoiris DC Lens:	4-pin.
Video Out:	BNC.
Alarm/Audio:	Screw terminal.
Network:	RJ-45.
Camera Setup:	OSD menu.

## MECHANICAL

Dimensions:	Height: 2.2 in. (60 mm). Width: 2.9 in. (74 mm). Length: 5.3 in. (135 mm).
Lens Mount:	C or CS mount.
Camera Mounting:	1/4-20 threaded hole, bottom and top.

## ENVIRONMENTAL

Operating Temperature:	14 to 122°F (-10 to 50°C).
Operating Humidity:	Up to 85% relative, non-condensing.



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Vicon part number 8015-5103-03-00 Product specifications subject to change without notice.