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Network Color PTZ Dome Camera WV-NS202





Introducing a network camera so clear, it exceeds the human eye



Exceptional quality, reliable performance, extreme versatility Panasonic's i-Pro WV-NS202 network surveillance camera has arrived.

Panasonic, the leader in video surveillance, introduces a PTZ network camera ahead of its time. Featuring **Super Dynamic III** and progressive output, Panasonic has created unparalleled high-sensitivity and high-resolution image reproduction. The highly reliable WV-NS202 features image backup functions and industrial grade mechanisms while remaining cost effective. Designed for professional surveillance applications, the WV-NS202 PTZ network camera is worthy of the leading role.

Designed to produce High-quality Images

Dealing with a variety of subjects

Pixel Based 128x Dynamic Range Super Dynamic III performs gradation compensation of contrast on the

pixel base, ensuring accurate reproduction of subjects in any situation. It achieves the 128x dynamic range by using images taken at 1/60-second and 1/8.000-second shutter



speeds.

Super Dynamic III Conventional Depending on subject position Pixel Based 128x Dynamic the image may be marred by Range faithfully

reproduces every subject

Capturing remote subjects smoothly 22x Zoom Lens

A 22x optical zoom lens with a focal distance f of 3.79-83.4mm comes standard equipment. Combined with the 10x electronic zoom, 220x

black spots or halo effects

magnification is achieved, allowing for high-power surveillance and the capture of subjects at long range.



Easy installation and IP configuration

Power Over Ethernet

With PoE (Power over Ethernet) IEEE802.3af, a separate power supply is not required. Both power and images are transmitted through the same cable. Just connect the cable to a PoE switch or PoE adapter for simple installation.

One-touch Fitting Mechanism

By simply aligning the recessed part of the main unit to the protruding part of the attached mounting bracket and rotating the main unit clockwise, a secure fit is ensured.



Moving subjects are smooth and easy to see **Progressive Output**

Progressive output is utilized for smooth reproduction of moving objects. Compared to interlaced output, images of moving people and passing cars are smooth and easy to see.

Powerful in low light situations Minimum illumination of 0.7 lux

The WV-NS202 features a minimum illumination of 0.7 lux (0.07 fc). Surveillance is possible in color, even at nighttime. The electronic

sensitivity feature (up to 32x) ensures use for night surveillance.



Setup pane



Various settings can be adjusted while

monitoring the camera image

Various settings, such as white balance, intensified sensitivity ON/OFF and shutter speeds can be adjusted while monitoring the actual camera image.

Versatile installations for various applications

Various optional fixtures are available, ensuring versatile installation; direct ceiling mount, embedded mount and wall mount. The use of the supplied black cover conceals the direction the camera is facing.



Networking Function

Versatile operation MPEG-4/JPEG dual streaming MPEG-4 JPEG

MPEG-4 and JPEG images can be output simultaneously. For example, MPEG-4 for monitoring and high-resolution JPEG for recording. Full-rate transmission of up to 30 fps is possible in either MPEG-4 or JPEG mode. Whether using MPEG-4, JPEG or both, the WV-NS202 allows for versatile operation.

WV-NS202 Live monitoring in MPEG-4 offering MPEG-4 、^{PC} MPEG-4 High-guality image ording using JPEG vork Disk Record W.I-ND200 Main Menu



• Up to 16 cameras can be viewed on a multi-screen display, or 4 cameras through a quad display.

- Pan and tilt camera control on a quad-display is possible.
- Full screen mode is available simply by clicking on an image. · Mouse controls allow for zoom, pan and tilt operations

FRAME RATE CHART

JPEG		Image Settings									MPEG-4			MPEG-4 Bit Rate Settings									
Image Resolution	Mode	O Super Fine	1 Fine	2	3	4	5 Normal	6	7	8	9 Low		Image Resolution	Mode	4,096 kbps	3,072 kbps	2,048 kbps	1,536 kbps	1,024 kbps	512 kbps	256 kbps	128 kbps	64 kbps
VGA	Image Size (KB)	128	96	80	64	56	48	40	32	28	24		VGA	Low	30	30	30	25	22	10	5	2	1
	Frame Rate (fps)	10	14	17	21	24	30	30	30	30	30		(640 x 480)	Normal	30	30	30	22	14	8	3	1	0.4
(640 x 480)	Bit Rate (Mbps)	10.2	10.8	10.9	10.8	10.8	11.5	9.6	7.7	6.7	5.8		(640 x 480)	Fine	27	22	19	13	9	4	1.5	0.5	0.2
QVGA	Image Size (KB)	44	40	36	32	28	24	20	16	14	12		QVGA	Low	30	30	30	30	30	28	24	10	4
(320 x 240)	Frame Rate (fps)	26	28	30	30	30	30	30	30	30	30		(320 x 240)	Normal	30	30	30	29	28	24	12	4	1.5
(320 X 240)	Bit Rate (Mbps)	9.2	9.0	8.6	7.7	6.7	5.8	4.8	3.8	3.4	2.9		(320 x 240)	Fine	30	28	28	28	27	12	5	2	0.5

Features and reliability for demanding surveillance applications

Industrial grade mechanism

Heavy duty materials are used for rotating sections. The unit is designed to operate over a long period of time as a result of Panasonic's expertise in manufacturing highly reliable, industrial grade surveillance cameras.

High-speed rotation of 300 degrees/sec.

The camera rotates 350 degrees horizontally at a rotation speed of 300 degrees/sec., max. (when moving between preset positions), enabling the guick capture of subjects. Vertical rotation is also Tilting Spead guick at up to 100 degrees/sec.



Conventional

Highly resistant to network interference **SD** memory card slot

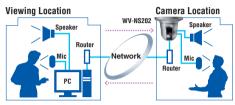
In the event of network interference, surveillance images are automatically backed up to an SD memory card. Even during network interruption. surveillance images can be viewed later. Manual recording on the SD memory card is also possible.



Voice exchange 2-way audio feature

Audio monitoring of the peripheral area is made possible by connecting a microphone directly to the camera. Furthermore, the provision of audio output enables voice public-addressing from a PC by connecting an

amplifier-integrated loudspeaker. (Voice alternates between transmission and reception.) (ITU-T Standard G.726 Voice Function)



Motion Detection:

When any movement occurs within the camera image, the movement is detected and an alarm signal is transmitted.

FTP server transfer:

JPEG images can be transferred to a pre-designated FTP server. Alarm mail notification:

E-mails can be transmitted to up to four mail addresses that are registered in advance

SYSTEM EXAMPLES



(above all figures are approximate, actual figures may differ depending on the network under the conditions.)



Up to 64 preset positions

Up to 64 camera positions can be registered in advance. The positions can be selected through simple operations.

Auto Tracking

Panning and tilting are automatically executed so that a moving subject can be centered on the screen.

Privacy Zone Masking

When private images exist within an image, masking those portions is possible. Up to eight masks can be applied.

Versatile alarm functions

Alarms from external sensors. VMD camera alarms, and command alarms from other devices can be set in advance.

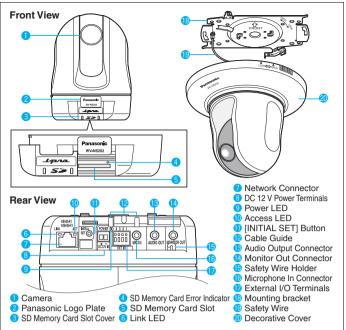
360-degree map-shot function

When still images of eight locations in a 360 degree arc are displayed as thumbnails and an image is clicked, the camera is directed to that position and displays a live image of the location.

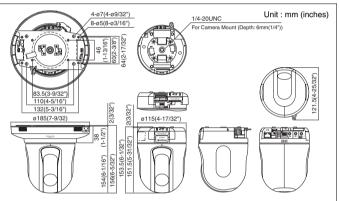
SPECIFICATIONS

Camera	1/4 inch interline transfer CCD
Image Sensor Effective Pixels	1/4 inch interline transfer CCD 768 (H) x 494 (V)
	3.59 mm (H) x 2.70 mm (V)
Scanning Area Scanning System	2:1 interlace scan (with motion adaptive interlace/progressive conversion function)
Minimum Illumination	0.7 lx (sensitivity up: OFF, AGC: HIGH)
wiininnunn munninauon	0.07 lx (sensitivity up: 10x, AGC: HIGH)
Dynamic Range	52 dB typ. (Super dynamic 3: ON, Shutter speed: OFF)
Gain	
Shutter Speed	ON (LOW)/ON (MID)/ON (HIGH)/OFF OFF (1/60), AUTO, 1/100
Sensitivity Up	Up to 32x
White Balance	ATW1/ATW2/AWC
Digital Noise Reduction (DNR)	LOW/HIGH
Electronic Zoom	Up to 10x
Camera Title	Up to 16 characters (alphanumeric characters, marks) ON/OFF
VMD Alarm	ON/OFF, 4 areas available
Image Hold	ON/OFF
Privacy Zone	ON/OFF (up to 8 zones available)
Lens	
	007
Zoom Ratio	22x 3.70 mm - 83.4 mm
Focal Length	3.79 mm ~ 83.4 mm 1 : 1.6 (WIDE) ~ 3.0 (TELE)
Maximum Aperture Ratio Macro	1.6 m
Aperture Range Horizontal Angle of View	F1.6 ~ 22, Close
	2.6° (TELE) ~ 51.7° (WIDE)
Vertical Angle of View Panning/tilting platform	2.0° (TELE) ~ 39.9° (WIDE)
	0° ~ 350°
Panning Range	
Panning Speed	Manual: Approx. 1°/s ~ 100°/s, preset: up to approx. 300°/s
Tilting Range	-30° ~ 90° (upward - level - downward)
Tillian One and	Selectable Tilting Angle 0° /–5° /–10° /–15° /–20° /–25° /–30°
Tilting Speed	MANUAL Approx. 1°/s ~ 100°/s, preset: up to approx. 100°/s
Number of The Preset Positions	
Auto Mode	OFF/preset sequence/auto pan/auto track
Map Shot	360° map shot/preset map shot
Network	ANDANE THOOPAGE TY, DIAS suggester
Network	10BASE-T/100BASE-TX, RJ45 connector
Resolution	VGA (640 x 480)/QVGA (320 x 240)
Image Compression	MPEG-4 Image quality: LOW/NORMAL/FINE
Method	Transmission type: UNICAST/MULTICAST
	JPEG Image quality: 0 SUPER FINE/1 FINE/2 ~ 5 NORMAL/6 ~ 9 LOW (10 steps: 0 ~ 9)
	Transmission type: PULL/PUSH
Refresh Interval (MPEG-4)	
	(Frame rate of JPEG display will be limited when displaying JPEG and MPEG-4 simultaneously.)
Audio Compression Method	G.726 (ADPCM) 32 kbps/16 kbps
Bandwidth Control	64 kbps/128 kbps/256 kbps/512 kbps/1,024 kbps/2,048 kbps/4,096 kbps/Unlimited
Protocol	TCP/IP, UDP/IP, HTTP, RTP, FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP
OS	Microsoft® Windows® 2000 Professional SP4, Microsoft® Windows® XP Home Edition SP2,
	Microsoft® Windows® XP Professional SP2
Web Browser	Microsoft® Internet Explorer® 6.0SP2 (Microsoft® Internet Explorer® 6.0 SP1 only
	when using Windows® 2000 Professional SP4)
Max. Access Number	8 Concurrently (Depends on network conditions)
FTP Client	Alarm image transmission, FTP periodic transmission
Multi-Screen	Images from 16 cameras (4 cameras x 4 groups) can be displayed simultaneously.
	Images from 16 cameras (4 cameras x 4 groups) can be displayed simultaneously. Manufactured by Panasonic (Performance with this camera has been checked.)
Multi-Screen SD Memory Card (Option)	Images from 16 cameras (4 cameras x 4 groups) can be displayed simultaneously.
Multi-Screen SD Memory Card (Option) General Specifications	Images from 16 cameras (4 cameras x 4 groups) can be displayed simultaneously. Manufactured by Panasonic (Performance with this camera has been checked.) Capacity: 64 MB, 128 MB, 256 MB, 512 MB, 1 GB
Multi-Screen SD Memory Card (Option) General Specifications Power Source	Images from 16 cameras (4 cameras x 4 groups) can be displayed simultaneously. Manufactured by Panasonic (Performance with this camera has been checked.) Capacity: 64 MB, 128 MB, 256 MB, 512 MB, 1 GB DC12 V, PoE (IEEE802.3af compliant)
Multi-Screen SD Memory Card (Option) General Specifications Power Source Power Consumption	Images from 16 cameras (4 cameras x 4 groups) can be displayed simultaneously. Manufactured by Panasonic (Performance with this camera has been checked.) Capacity: 64 MB, 128 MB, 256 MB, 512 MB, 1 GB DC12 V, PoE (IEEE802.3af compliant) DC 12 V Approx. 1,000 mA, PoE: Approx. 12.0 W (Class 0 device)
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Multi-Screen SD Memory Card (Option) General Specifications Power Source Power Consumption Ambient Temperature	Images from 16 cameras (4 cameras x 4 groups) can be displayed simultaneously. Manufactured by Panasonic (Performance with this camera has been checked.) Capacity: 64 MB, 128 MB, 256 MB, 512 MB, 1 GB DC12 V, PoE (IEEE802.3af compliant) DC 12 V Approx. 1,000 mA, PoE: Approx. 12.0 W (Class 0 device) -10 °C ~ +50 °C (14 °F ~ 122 °F) Recommended operating temperature +35 °C (95 °F)
Multi-Screen SD Memory Card (Option) General Specifications Power Source Power Consumption Ambient Temperature Ambient Humidity	Images from 16 cameras (4 cameras x 4 groups) can be displayed simultaneously. Manufactured by Panasonic (Performance with this camera has been checked.) Capacity: 64 MB, 128 MB, 256 MB, 512 MB, 1 GB DC12 V, PoE (IEEE802.3af compliant) DC12 V Approx. 1,000 mA, PoE: Approx. 12.0 W (Class 0 device) -10 °C ~ +50 °C (14 °F ~ 122 °F) Recommended operating temperature +35 °C (95 °F) 90 % or less
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Multi-Screen SD Memory Card (Option) General Specifications Power Source Power Consumption Ambient Temperature Ambient Humidity	Images from 16 cameras (4 cameras x 4 groups) can be displayed simultaneously. Manufactured by Panasonic (Performance with this camera has been checked.) Capacity: 64 MB, 128 MB, 256 MB, 512 MB, 1 GB DC12 V, PoE (IEEE802.3af compliant) DC12 V Approx. 1,000 mA, PoE: Approx. 12.0 W (Class 0 device) -10 °C ~ +50 °C (14 °F ~ 122 °F) Recommended operating temperature +35 °C (95 °F) 90 % or less
Multi-Screen SD Memory Card (Option) General Specifications Power Source Power Consumption Ambient Temperature Ambient Humidity Monitor Output	Images from 16 cameras (4 cameras x 4 groups) can be displayed simultaneously. Manufactured by Panasonic (Performance with this camera has been checked.) Capacity: 64 MB, 128 MB, 256 MB, 512 MB, 1 GB DC12 V, PoE (IEEE802.3af compliant) DC 12 V Approx. 1,000 mA, PoE: Approx. 12.0 W (Class 0 device) -10 °C ~ +50 °C (14 °F ~ 122 °F) Recommended operating temperature +35 °C (95 °F) 90 % or less VBS 1.0 V [P-P]/75 Ω, composite (BNC), ø3.5 mm mini jack (monaural)
Multi-Screen SD Memory Card (Option) General Specifications Power Source Power Consumption Ambient Temperature Ambient Humidity Monitor Output External I/O Terminals Microphone Input	Images from 16 cameras (4 cameras x 4 groups) can be displayed simultaneously. Manufactured by Panasonic (Performance with this camera has been checked.) Capacity: 64 MB, 128 MB, 256 MB, 512 MB, 1 GB DC12 V, PoE (IEEE802.3af compliant) DC 12 V Approx. 1,000 mA, PoE: Approx. 12.0 W (Class 0 device) -10 °C ~ +50 °C (14 °F ~ 122 °F) Recommended operating temperature +35 °C (95 °F) 90 % or less VBS 1.0 V [P-P]/75 Ω, composite (BNC), ø3.5 mm mini jack (monaural) ALARM IN 1, ALARM IN 2/ALARM OUT, ALARM IN 3/AUX OUT (x1 each)
Multi-Screen SD Memory Card (Option) General Specifications Power Source Power Consumption Ambient Temperature Ambient Humidity Monitor Output External I/O Terminals	Images from 16 cameras (4 cameras x 4 groups) can be displayed simultaneously. Manufactured by Panasonic (Performance with this camera has been checked.) Capacity: 64 MB, 128 MB, 256 MB, 512 MB, 1 GB DC12 V, PoE (IEEE802.3af compliant) DC 12 V DC 12 V Approx. 1,000 mA, PoE: Approx. 12.0 W (Class 0 device) -10 °C ~ +50 °C (14 °F ~ 122 °F) Recommended operating temperature +35 °C (95 °F) 90 % or less VBS 1.0 V [P-P]/75 Ω, composite (BNC), ø3.5 mm mini jack (monaural) ALARM IN 1, ALARM IN 2/ALARM OUT, ALARM IN 3/AUX OUT (x1 each) MIC IN (Applicable microphone: Plug-in power type)
Multi-Screen SD Memory Card (Option) General Specifications Power Source Power Consumption Ambient Temperature Ambient Humidity Monitor Output External I/O Terminals Microphone Input	Images from 16 cameras (4 cameras x 4 groups) can be displayed simultaneously. Manufactured by Panasonic (Performance with this camera has been checked.) Capacity: 64 MB, 128 MB, 256 MB, 512 MB, 1 GB DC12 V, PoE (IEEE802.3af compliant) DC12 V Approx. 1,000 mA, PoE: Approx. 12.0 W (Class 0 device) -10 °C ~ +50 °C (14 °F ~ 122 °F) Recommended operating temperature +35 °C (95 °F) 90 % or less VBS 1.0 V [P-P]75 Ω, composite (BNC), ø3.5 mm mini jack (monaural) ALARM IN 1, ALARM IN 2/ALARM OUT, ALARM IN 3/AUX OUT (x1 each) MIC IN (Applicable microphone: Plug-in power type) Supply voltage: 2.5 V ±0.5 V Input impedance: 3 kΩ ±10 %
Multi-Screen SD Memory Card (Option) General Specifications Power Source Power Consumption Ambient Temperature Ambient Humidity Monitor Output External I/O Terminals Microphone Input Audio Output	Images from 16 cameras (4 cameras x 4 groups) can be displayed simultaneously. Manufactured by Panasonic (Performance with this camera has been checked.) Capacity: 64 MB, 128 MB, 256 MB, 512 MB, 1 GB DC12 V, PoE (IEEE802.3af compliant) DC 12 V Approx. 1,000 mA, PoE: Approx. 12.0 W (Class 0 device) $-10 ^{\circ}C - +50 ^{\circ}C (14 ^{\circ}F - 122 ^{\circ}F)$ Recommended operating temperature +35 $^{\circ}C (95 ^{\circ}F)$ 90 % or less VBS 1.0 V [P-P]/75 Ω, composite (BNC), ø3.5 mm mini jack (monaural) ALARM IN 1, ALARM IN 2/ALARM OUT, ALARM IN 3/AUX OUT (x1 each) MIC IN (Applicable microphone: Plug-in power type) Supply voltage: 2.5 V ±0.5 V Input impedance: 3 kΩ ±10 % AUDIO OUT ø3.5 mm mini jack (monaural) Line level
Multi-Screen SD Memory Card (Option) General Specifications Power Source Power Consumption Ambient Temperature Ambient Humidity Monitor Output External I/O Terminals Microphone Input Audio Output	Images from 16 cameras (4 cameras x 4 groups) can be displayed simultaneously. Manufactured by Panasonic (Performance with this camera has been checked.) Capacity: 64 MB, 128 MB, 256 MB, 512 MB, 1 GB DC12 V, PoE (IEEE802.3af compliant) DC 12 V Approx. 1,000 mA, PoE: Approx. 12.0 W (Class 0 device) -10 °C - +50 °C (14 °F - 122 °F) Recommended operating temperature +35 °C (95 °F) 90 % or less VBS 1.0 V [P-P]/75 Ω, composite (BNC), ø3.5 mm mini jack (monaural) ALARM IN 1, ALARM IN 2/ALARM OUT, ALARM IN 3/AUX OUT (x1 each) MIC IN (Applicable microphone: Plug-in power type) Supply voltage: 2.5 V ±0.5 V AUDIO OUT ø3.5 mm mini jack (monaural) Line level ø115 mm x 154 mm (H) (ø4-17/32" x 6-1/16" (H))
Multi-Screen SD Memory Card (Option) General Specifications Power Source Power Consumption Ambient Temperature Ambient Humidity Monitor Output External I/O Terminals Microphone Input Audio Output Dimensions	Images from 16 cameras (4 cameras x 4 groups) can be displayed simultaneously. Manufactured by Panasonic (Performance with this camera has been checked.) Capacity: 64 MB, 128 MB, 256 MB, 512 MB, 1 GB DC12 V, PoE (IEEE802.3af compliant) DC 12 V Approx. 1,000 mA, PoE: Approx. 12.0 W (Class 0 device) -10 °C ~ +50 °C (14 °F ~ 122 °F) Recommended operating temperature +35 °C (95 °F) 90 % or less VBS 1.0 V [P-P]/75 Ω, composite (BNC), ø3.5 mm mini jack (monaural) ALARM IN 1, ALARM IN 2/ALARM OUT, ALARM IN 3/AUX OUT (x1 each) MIC IN (Applicable microphone: Plug-in power type) Supply voltage: 2.5 V ±0.5 V Input impedance: 3 KΩ ±10 % AUDIO OUT ø3.5 mm mini jack (monaural) Line level e115 mm x 154 mm (H) (ø4-17/32" x 6-1/16" (H)) (excluding the DC 12 V power cord plug)

MAJOR OPERATING CONTROLS & TERMINALS



DIMENSIONS



OPTIONAL COMPONENTS & ACCESSORIES



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