Panasonic ideas for life

Super Dynamic III **Weather Resistant Dome Camera** WV-CW960 Series

NTSC WV-CW964 (24 V AC) PAL WV-CW960 (220 ~ 240 V AC) WV-CW964 (24 V AC)











All-in-one 24-hour outdoor surveillance camera featuring 30x zoom and Super Dynamic III

Key Features

- Super Dynamic III technology delivers 128x (NTSC) / 160x (PAL) wider dynamic range compared to conventional cameras.
- High resolution: 540 TV lines typical / 520 TV lines minimum (Color HIGH mode), 480 TV lines minimum (Color NORMAL mode), 570 TV lines minimum (B/W mode)
- High sensitivity with Day-Night function: 0.5 lux (Color) at F1.4 (WIDE), 0.04 lux (B/W) at F1.4 (WIDE). IR cut filter switches on and off to ensure optimal picture quality in both color and B/W.
- Adaptive Digital Noise Reduction: 2D-DNR and 3D-DNR integration ensures reduced noise in various conditions.
- Electronic sensitivity enhancement Auto (Up to 32x), Manual (Up to 32x).
- Electronic shutter from 1/100 (NTSC), 1/120 (PAL) to 1/10,000 sec.
- 30x zoom lens: 3.8mm ~ 114mm (approx. 300x with digital zoom)
- Panning speed of max. 400°/s at preset mode and 0.065°/s super fine control at manual mode.
- 5 degrees upper view for various applications
- 256 preset positions that can be activated from the system controller with a switcher or recorder (specific models).
- Auto tracking: The camera follows the largest movement in the image automatically. The camera will pan and tilt to keep the subject in the center of the image.
- Built-in Video Motion Detector with Sensitivity 256 steps, Mask 8 x 6 areas
- Scene Change Detection alarms when lens is covered, spray painted, removed or defocused.
- Four alarm inputs and two outputs terminals.
- Alarm actions include Terminal output, Camera positioning, Auto pan, Patrol, SEQ, Sort, Auto track, B/W and command output.
- Auto image stabilizer for applications where vibration or wind is a concern.

- Internal / Line-lock / Multiplexed Vertical Drive (VD2) synchronization.
- Over the coaxial cable or RS-485 data communication.
- 16 alphanumerics camera title display.
- Multi language setup menu: English, French, Italian, Spanish, German, Russian
- IP66 rated water and dust resistant. IEC60529 measuring standard compatible.
- Built-in fan/heater for temperature changes of -40 °C ~ +50 °C (-40 °F ~ +122 °F).
- · Built-in sun shield permits camera locations in direct sunlight.

Standard Accessories

Operating Instructions	Connector for 24 V AC (only for WV-CW964)
• 4P Alarm Cable 1 pc.	2 pcs. (*one screw is a spare)
- 41 Alaini Gable 1 pc.	Waterproof cap 3 pcs.

Optional Accessory

Wall Mount Bracket WV-Q122



This catalog is provided for all over the world. Some accessories may not be available in some countries

Specifications

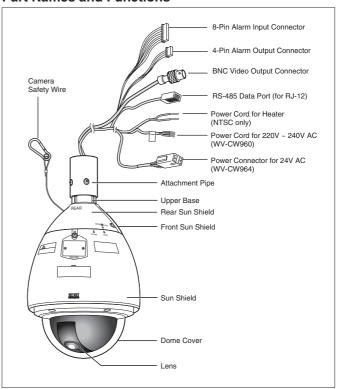
TV Syster Camera	Image Sensor	NTSC 1/4-type interline transfer CCD	PAL	
Calliela	Effective Pixels	768 (H) x 494 (V)	752 (H) x 582 (V)	
	Scanning Mode	2:1 interlace	752 (H) X 562 (V)	
	Scanning Area	3.65 (H) x 2.74 (V) mm	3.65 (H) x 2.71 (V) mm	
	Scanning Frequency	Horizontal: 15.734 kHz Vertical: 59.94 Hz		
	Scanning Line	525 lines	625 lines	
	Horizontal Resolution	540 TV lines typical / 520 TV lines minimum (Color HIGH mode) 480 TV lines minimum (Color NORMAL mode), 570 TV lines minimum (BW mode		
	Minimum Illumination	Color (30 IRE): 0.5 lux (SENS UP: OF	F), 0.016 lux (SENS UP: 32x) at F1.	
	Signal-to-Noise Ratio White Balance	B/W (10 IRE): 0.04 lux (SENS UP: OFF), 0.0013 lux (SENS UP: 32x) at F1. 50 dB (AGC: OFF, Weight: ON)		
	Light Control	AWC (2,000 ~ 10,000 K), ATW1 (2,700 ~ 6,000 K), ATW2 (2,000 ~ 6,000 L) ALC / MANUAL		
	AGC Super Dynamic III	ON (LOW, MID, HIGH) / OFF ON / OFF (With BLC masking 8 x 6 areas)		
	Dynamic Range	52 dB typical (Super Dynamic III : ON)		
	Electronic Shutter	OFF (1/60), AUTO, 1/100, 1/250, 1/500, 1/1,000, 1/2,000, 1/4,000, 1/10,000 s	OFF (1/50), AUTO, 1/120, 1/250, 1/50 1/1,000, 1/2,000, 1/4,000, 1/10,000 s	
	Electronic Sensitivity UP	OFF / AUTO (2x, 4x, 6x, 10x, 16x,		
	Digital Noise Reduction Resolution Mode	-		
	Black and White Mode	Mode: AUTO / ON / OFF, Level: High / Low, with external control		
	Digital Zoom Scene File	10x 10 patterns (Shutter, AGC, Sens UP, White balance, VMD)		
	Scene Select Setting	INDOOR (L) / INDOOR (H) / OUTDOOR (L) / OUTDOOR (H)		
	Video Motion Detection	OFF / Mode1 (VMD) / Mode2 (Scene chan	ge), Sensitivity 256 steps, Mask 8 x 6 area	
	Privacy Zone OFF / Gray / Mosaic, 8 zones Auto Image Stabilizer ON / OFF Area Title 8 Area titles, 16 Characters / area			
			эа	
	Camera Title	16 alphanumeric characters		
	Auto Focus Synchronization	Manual S/M/L (one push) / AUTO S/M/L (after PTZ operation) Internal (INT), Multiplexed Vertical Drive (VD2), Line-Lock (LL)		
Lens	Focal Length	3.8 mm ~ 114 mm, 30x zoom (approx. 300x with digital zoom)		
	Zoom Speed	approx. 6.0 second (TELE ~ WIDE) in manual mode		
	Zoom Limit	1x ~ 300x (Over 30x is digital zoom)		
	Angular Field of View	H: 1.8° (TELE) ~ 52.3° (WIDE), V: 1.4° (TELE) ~ 39.9° (WIDE)		
	Maximum Aperture Ratio	1:1.4 (WIDE) ~ 3.6 (TELE)		
	Focusing Range	1.5 m (4.9 ft.) ~ ∞		
	Aperture Range	F1.4 ~ 22, Close		
Pan and	Panning Range	360° endless		
Tilt	Panning Speed	Manual: approx. 0.065 °/s ~ 120 °/s, 256 steps, Preset: approx. 400 °/s		
	Tilting Range Tilting Speed	-5° ~ 185° (5° upper view available) Manual: approx. 0.065 °/s ~ 120 °/s, 256 steps, Preset: approx. 400 °/		
	Proportional Pan/Tilt Control			
	Number of Preset Positions			
	Auto Mode	OFF, Home, SEQ, SORT, AUTO PAN, PATROL 1 ~ 4, AUTO TRAC		
	Auto Track	Standard Auto Track		
	Patrol	Selectable: 2 min. (1 program) / 1 min. (2 programs) / 30 sec. (4 programs		
	Image Hold	ON / OFF		
	Digital Flip	ON / OFF		
	Area Title	8 Area titles, 16 Characters / area		
	Preset Alarm	ON / OFF		
Alarm	Alarm Source Alarm Actions	Terminal input, VMD, Command alarm Preset position 1 ~ 4, PATROL 1 ~ 4, AUTO TRACK 1 ~ 4,		
		SEQ, SORT, AUTO PAN, B/W		
Input / Output General	Video Output	1.0 V [p-p] / NTSC composite 75 Ω /		
		BNC Connector, Multiplexed VD2		
	RS-485 Control IF	and control data capable RS-485 (RJ-11) x1, 2/4wire, full	and control data capable	
	External I/O Terminals	4 inputs (ALARM IN 1 ~ ALARM IN 4)		
	Setup Method	OSD setup menu		
General	Password Lock	ON / OFF		
	Language	English, Russian (For setup menu and car		
	Safety/EMC Standard	(For setup menu), Chinese, Japanese (Fo UL (6500 Edition2), FCC (Part15 ClassA),		
		C-UL (E60065), DOC (ICES003 ClassA)	ClassB), GOST (R 51558)	
	Power Source and	24 V AC, 60 Hz, 17 W,	WV-CW964:	
	Power Consumption	(for camera) 62 W (for heater)	24 V AC, 50 Hz, 77 W (including heater)	
			WV-CW960: 220 ~ 240 V AC, 50 Hz, 90 W	
	Ambient Or	40.00 .50.00 / 40.05	(including heater)	
	Ambient Operating Temperature Ambient Operating Humidity	-40 °C ~ +50 °C (-40 °F ~ 122		
	Dimensions	IP66, IEC60529 measuring standard compatible. ø239 mm (D) x 395.5 mm (H) (ø9-7/16" (D) x 15-9/16" (H))		
	Weight (approx.)	4.7 kg (10.4 lbs.)		
	Finish	Camera: Die cast Aluminum, backed on coating (Pain color: Fine Silver		
		Sun Shield: ASA resin, coated (Paint color: Fine Silver)		
		Dames Olean makes at a		

Important

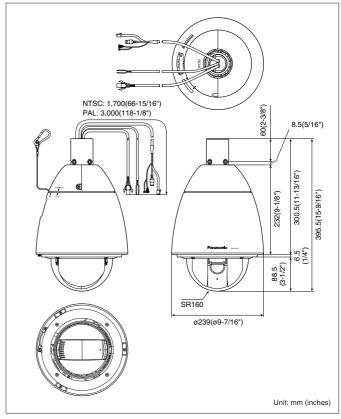
 $- \stackrel{\cdot}{\text{Safety}} \text{ Precaution: carefully read the operating instructions and installation manual before using this product.} \\$

Dome: Clear polycarbonate resin

Part Names and Functions



Appearance



- All TV pictures are simulated.
- Weights and dimensions are approximate.
 Specifications are subject to change without notice.
 These products may be subject to export control regulations.
- Product pictures shown in this catalog are all NTSC models.

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