

Zoom chassis camera
DI-SC220

HITACHI
Inspire the Next

Full HD resolution for sharp and detailed images

- 2.1-megapixel Full HD
- 20x optical zoom
- Minimum sensitivity: 1.6 lx
- Four selectable HD video modes



Full HD
2.1
MEGAPIXEL

20x
OPTICAL
ZOOM

1.6lx
minimum
sensitivity

F.N.R.
Frame Noise Reduction

W.D.R.
five selectable
modes

Four
selectable HD
video modes

Made in Japan

High performance 2.1-megapixel high resolution full HD-compatible chassis camera



2.1-megapixel high resolution 20x zoom lens

The Hitachi DI-SC220 features a CMOS sensor with full high definition resolution of 1920 x 1080. Its High index Low Dispersion (HiLD) optical zoom lens supports both outdoor and indoor surveillance. This lens uses HiLD glass, permitting the efficient capturing of images with a minimum of the chromatic aberration that generally affects long focal point lenses. The camera allows 20x optical zoom even at full high definition, and can rapidly follow subjects using Hitachi's proprietary high speed auto focus system. High resolution and high magnification optical zoom are valuable aids to security in a variety of situations. For example, they enable the capturing of vital evidence by accurately capturing images of license plate numbers and facial features, clothing and other characteristics of people far from the camera. They can also display sharp images of accidents on station platforms or on expressways.

Sharp and crisp images via 2.1 megapixels



At 20x zoom, crisp images via 2.1 megapixels

Technology for low-light performance

Complementing the HiLD lens and CMOS sensor, Hitachi's proprietary High Definition Digital Signal Processor (HD-DSP) achieves a minimum sensitivity (subject illumination) of 1.6 lx. What's more, the image processing engine in the HD-DSP increases visibility and reduces noise. This is an HD system with impressive nighttime surveillance capability.

■ Frame Noise Reduction

Hitachi's Frame Noise Reduction function minimizes after-images and random noise caused by movement, allowing the camera to be used in a wider range of surveillance scenarios. Providing sharp images even in low-light conditions where capturing clear images is generally difficult, it also facilitates high image compression in network camera systems.



■ White Spot Reduction

White spots are caused by the sensors when the illumination is low. The DI-SC220 reduces white spots to display sharper images, even at low illumination.

■ Digital Slow Shutter

This strengthens the security of outdoor and poorly lit locations at night.

■ Removable IR Cut Filter

In daylight conditions, the IR Cut Filter ensures clear, high-quality color images. At night or in other very low light situations, it is automatically removed to allow capture of bright, high-contrast black and white images.

Wide Dynamic Range modes

Images in which the luminous intensity varies greatly indoors and outdoors, at the entrance of a building for example, are prone to the occurrence of whiteout or loss of dark detail, reducing visibility. The DI-SC220 has a highly effective automatic compensation function that improves the visibility of these images. Two methods are used, resulting in double the effectiveness of the previous model (VK-S654N). The first is to combine two images taken at different shutter speeds and the second is to use contrast offset to correct the contrast of each pixel in the image. Even in scenes with widely varying luminous intensity, the improved visibility makes it possible to perceive the subject.



Four selectable HD video modes

High output flexibility meets the requirements of many kinds of surveillance systems.

■ Full HD mode: 1920 x 1080/60I, 50I

This mode outputs optimum images on full HD displays. It is effective when it is necessary to display smooth motion – for real time surveillance at expressway toll gates or teleconferences, for example.



■ Full HD progressive mode: 1920 x 1080/30P, 25P

This mode provides 30 images/second output of progressive images in full HD. When displaying still images as an IP network camera or printing, fork noise is not produced.

■ Full HD PsF mode: 1920 x 1080/30PsF, 25PsF

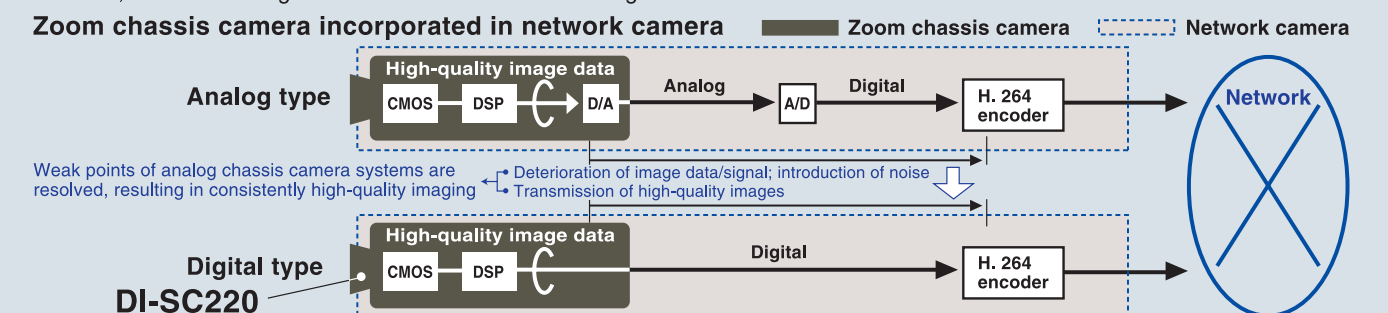
You can view progressive images even with an interlaced full HD display.

■ HD progressive mode: 1280 x 720/60P, 50P

With a display speed of 60 images/second, double the normal progressive output, this mode achieves excellent image definition and smoothness.

Digital output for transmission of high-quality images

The Hitachi DI-SC220 supports digital output of image signals, maximizing camera performance by permitting transmission of lossless, low-noise image data with no need for decoding.



Natural, faithful color reproduction

Correct reproduction of actual colors is extremely important in surveillance and crime prevention. The DI-SC220 reproduces colors with high accuracy in bright places, and even in dark places. This permits clearer recognition of objects under surveillance.



All the functions you want for visual surveillance

■ Low Power Consumption

The DI-SC220 is an environmentally friendly low power consumption camera. It is also PoE ready.

■ Digital Image Flip

Flips images vertically or horizontally, to track subjects moving underneath the camera in a single continuous shot.

■ Motion Detection

This function triggers various events when motion is detected in any of eight blocks of the surveillance frame.

■ Privacy Zone Masking

Masks windows, entrances and other areas subject to privacy concerns. The mask is maintained even when the camera pans, tilts or zooms.

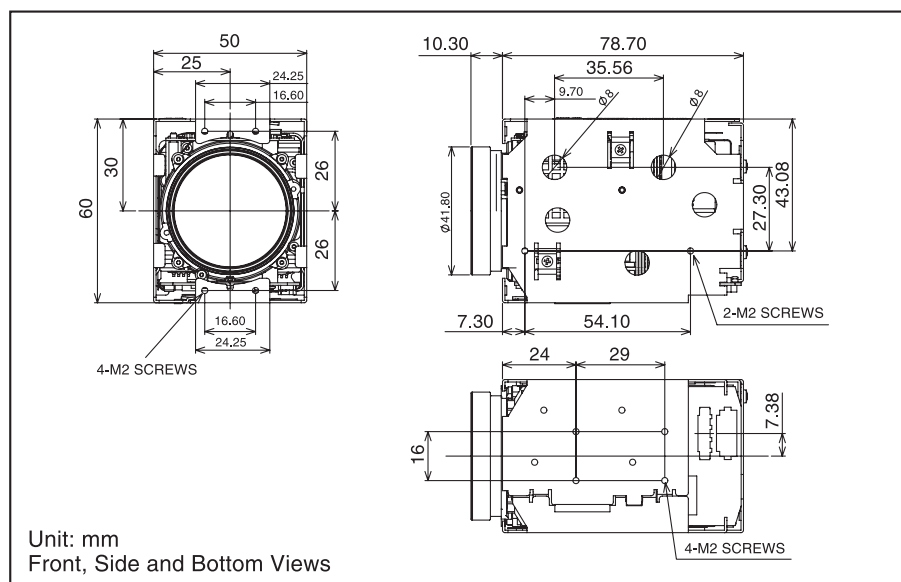
■ Environmentally Friendly

The RoHS-compliant DI-SC220 meets guidelines for permissible levels of lead, mercury, cadmium, hexavalent chrome, PBBs and PBDE.

Specifications

DI-SC220		
Image Sensor	Image Size	TYPE 1/2.8 CMOS
	Effective Pixels	2.3M (2096 x 1097)
	Progressive Scan	YES
	Output Pixels, Frame Rate	1920 (H) x 1080 (V)/60I, 50I, 30PsF, 25PsF, 30P, 25P 1280 (H) x 720 (V)/60P, 50P
Lens	Optical Zoom	20X
	Practical f-value	4.7— 94mm
	Practical H.angle	55.2° (w) — 2.9° (t)
	F-value	F1.6 (w) — F3.5 (t)
Focus		Auto/Manual (Far/Near)
IR Cut Filter Removable		Auto/Manual (ON/OFF)
DSP		HD-DSP
-Serial Interface-	Method : speed	RS-232C : 57.6k / 38.4k / 19.2k / 9.6k / 4.8k bps
	RS232C logic voltage level	3.3V
	-Functions-	Digital Slow Shutter/Image Freeze/Mirror/Vertical Invert/Image Reverse/Motion Detect/Frame Noise Reduction/White Spot Reduction
		OFF/WDR/AD-WDR/WDR+Contrast offset/AD-WDR+Contrast offset/Contrast offset
		OFF/ON [8 zone 3-D (4/1screen)]
		1x — 254x
Electrical Shutter	60I, 30PsF, 30P, 60P	Auto
		Auto (+ Digital slow shutter)
		Manual (Shutter priority)
	50I, 25PsF, 25P, 50P	Auto
		Auto (+ Digital slow shutter)
		Manual (Shutter priority)
	Manual (Sensitivity)	
Iris	BLC	
	Auto/offset	
White Balance		OFF/ON
Min. Sensitivity (Typ.)	Auto/Manual	
	1.6 lx	
	0.04 lx	
Sync System		F1.6 (w), 350mV equivalent
Power (@25°C)	Internal	
	9 — 12V DC	
	335 mA	
	435 mA	
Video Output (Digital)		YUV422 (Y8bit + C8bit), ITU-R BT.709, ITU-R BT.1120 compliance
Dimensions (W x H x D)		50 x 60 x 89mm
Weight		Approx. 260g
No. of Connectors		2 (24pin FFC/30pin Micro Coaxial)
Operating Temp.		0 — 60°C

Outer Dimensions



- Design and specifications are subject to change without notice.
- The expanded image and comparison photos in this catalog are simulations.

HITACHI
Hitachi, Ltd. Tokyo Japan

Hitachi America, Ltd
900 Hitachi Way, Chula Vista CA 91914-3556
Paul.watkins@hal.hitachi.com
http://www.hitachi-america.us/products/consumer/digitalmedia/hitachi_links/index.html

Hitachi Home Electronics Asia (S) Pte. Ltd.
438A Alexandra Road #01-01/02/03, Alexandra Technopark, Singapore 119967
Tel: +65-6536-2520 Fax: +65-6536-2521
www.hitachiconsumer.com

Hitachi Sales Corporation of Taiwan
2nd F1., No. 65 Nanking E Rd., Sec. 3 Taipei, 104 Taiwan
Tel: +866 (02) 2516 0500 Fax: +866 (02) 2516 0512