

## 1080/30p 30x Optical Zoom Chassis Camera



- Full HD 1080p
- 30x Optical Zoom Lens
- Electronic Image Stabilization
- Whiteout Reduction
- Minimum Sensitivity 0.4 lx
- Enhanced Intensity
- Auto Defog

Made in Japan

**The video has never been clearer, combining our proprietary image processing technology and 30x optical zoom.**

### Features

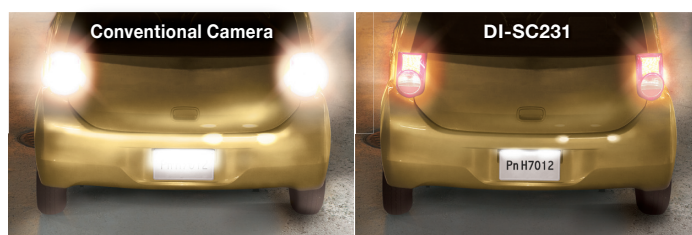
#### Full HD camera with 30x optical zoom lens and EIS

The DI-SC231 can zoom in at up to 30x magnification even during Full HD resolution capture (1920x1080). Hitachi's unique high-speed autofocus system allows for swift tracking of the subject in high resolution, while Electronic Image Stabilization (EIS) reduces the effect of image shake caused by strong winds or vehicle vibrations, ensuring a stable picture even at high levels of zoom.



#### Whiteout Reduction

When very bright sources of light such as vehicle headlights are captured, neighboring surfaces may cause reflections leading to whiteout. In these situations, the DI-SC231 will reduce peak light levels to improve visibility, useful for situations such as reading number plates.



#### Minimum sensitivity 0.4 lx

The sensitive CMOS sensor, lens and Hitachi's unique Digital Signal Processor provide a minimum photo subject illumination of 0.4 lx. They excel in urban monitoring situations such as traffic monitoring, station platforms and busy commercial streets, where lighting conditions change throughout the day.

#### Other low illumination technologies

- Frame Noise Reduction
- Digital Slow Shutter
- White Spot Reduction
- Removable IR Cut Filter

#### Enhanced Intensity

Conventional cameras have difficulty capturing dark areas such as night scenes or unlit areas.

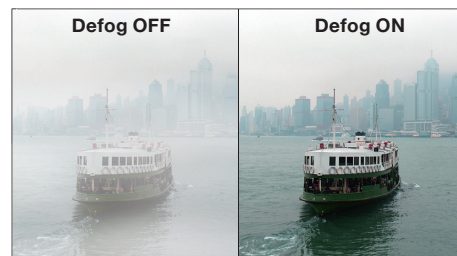
The DI-SC231's Enhanced Intensity function brightens dark areas while leaving light areas untouched. This enables it to produce clear images even with people in shadows, providing greater security in low light conditions.



#### Auto Defog

The camera's built-in defogging capability automatically provides clear images even in foggy areas such as in ship monitoring, high altitude monitoring, airports and highways.

The DI-SC231 can be used in a wide range of installation locations for monitoring even in environments with low visibility due to fog or heavy rain.

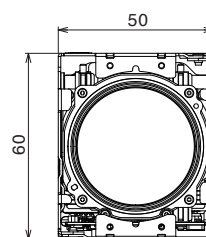


# Specifications

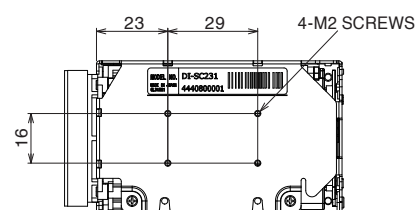
DI-SC231		
CMOS Image Sensor	Image Size	TYPE 1/3 CMOS
	Effective Pixels	2 Megapixels
	Output Pixels, Frame Rate	1920(H) x 1080(V)/30p, 25p, 29.97p, 60i, 50i, 59.94i 1280(H) x 720(V)/60p, 50p, 59.94p
Lens	Optical Zoom	30x
	Practical f-value	4.4 - 132mm
	Practical H.angle	63.4° (w) - 2.3° (t)
	Practical V.angle	37.3° (w) - 1.3° (t)
	F-value	F1.4 (w) - F4.6 (t)
Focus		Auto/Manual (Far/Near)
Minimum working distance		10mm(w) - 1500mm(t)
IR Removable		Auto (Pro.AER, Pro.AER+) / Manual
DSP		DSP10
-Serial Interface-	Method : speed	RS-232C : 57.6k / 38.4k / 19.2k / 9.6k / 4.8k bps
	Command Protocol	EAP (Echo control based on Address Protocol)/ AFP (Ack control based on Function Protocol)
-Functions-	RS-232C logic voltage level	3.3V
	Digital Slow Shutter	YES w/o WDR
	Wide Dynamic Range	OFF/WDR+Contrast offset/AD-WDR+Contrast offset/Contrast offset
	Image Freeze	OFF/ON
	Mirror	OFF/ON
	Vertical Invert	OFF/ON
	Image Reverse	OFF/ON
	Privacy Masking	OFF/ON [ 16 zone 3-D(16 masks/screen) ]
	Motion Detect	OFF/ON
	Motion Tracking	OFF/ON (area assignable)
	Frame Noise Reduction	OFF/ON
	Various Customizable Settings	YES [ Preset memory store (max. 111) , WB tuning ]
	White Spot Reduction	YES
	Slow AE Response	1x - 254x
	Defog	OFF/ON (Defog-1/Defog-2/Defog-3/Auto)
	Enhanced Intensity	OFF/ON (Enhanced Intensity/Whiteout Reduction)
	Digital Zoom (Zoom Magnification)	OFF/ON (max. 12x)
	Electronic Image Stabilization	OFF/ON (Digital Zoom max.2.0x)
Electrical Shutter	Auto	ProAE (1/30s - 1/30,000s)
	Auto (+ Digital Slow Shutter)	ProAE+ (1/2s - 1/30,000s)
	Manual (Shutter Priority)	1/1s - 1/30,000s
Iris		Auto (Average Offset/Peak Offset)
BLC		OFF/ON
White Balance		Auto (Normal/Sodium/Mercury) / Manual
Min. Sensitivity (Typ.)	IR-cut ON (1/30s)	0.4 lx
	IR-cut ON (1/8s)	0.1 lx
	IR-cut OFF (1/8s)	0.01 lx
	Condition	F1.4 (Wide), 350mV (50IRE) equivalent
Sync System		Internal
Power	Supplied voltage	9 - 12V DC
	Supplied current (@9V) all motors inactive	335mA ( at 60°C / 3.0W )
	Supplied current (@9V) Focus/Zoom motors active	425mA ( at 60°C / 3.8W )
	Supplied current max. (@9V) Focus/Zoom/IR motors active	670mA ( at 60°C / 6.0W )
	Consumption max.(@9V)	6.0W ( at 60°C )
	Video Output (Digital)	YUV422 (Serial LVDS)
Dimensions (W x H x D)		50 x 60 x 89.5mm (w/ M-case) (excluding projection)
Weight		Approx. 260g (w/ M-case)
No. of Connectors		2 (30pin Micro Coaxial/24pin FFC)
Operating Temp. (Recommended)		AF: -10 - 60°C MF: 0 - 60°C (0 - 40°C)

## Outer Dimensions

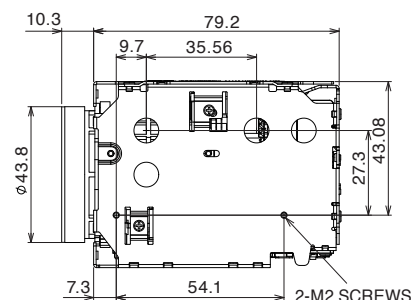
Front Views



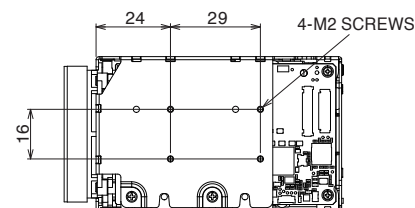
Top Views



Side Views



Bottom Views



Unit: mm

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### Hitachi America, Ltd.

2420 Fenton St., Suite 200, Chula Vista, CA 91914-3556  
SSGsales@hal.hitachi.com  
<http://www.hitachi-america.us/securityblockcameras/>

### Hitachi Europe Ltd.

7th Floor, 40 Holborn Viaduct  
London EC1N 2PB, United Kingdom  
Tel: +44-1628-585715 Fax: +44-1628-585757  
chassis.cameras@hitachi-eu.com  
<http://www.hitachi.eu/chassiscameras/>

### 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  
enquiries@hitachiconsumer.com  
[http://www.hitachiconsumer.com/sg/  
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