

# FCB-H11

## High Definition Colour Camera Block



FCB-H11

The world of HD expanded into the industrial imaging arena with the debut of Sony's first HD block camera, the FCB-H10. Now, continuing its commitment to HD picture quality for applications that require dynamic, high-resolution images that are also flexible, Sony is introducing the FCB-H11.

This stunning new model extends application possibilities by incorporating a new Day/Night function that enables the camera to capture high-quality colour images during the day and clear, black-and-white images at night. In addition, the FCB-H11 camera achieves a minimum illumination of 1.0 lx by dynamically removing the infrared cut filter and allowing the spectral responsivity range to extend into the near infrared.

The FCB-H11 incorporates a 1/3-type HD CMOS image sensor boasting approximately two million effective pixels, and provides a 16 x 9 aspect ratio, making it ideal for use with wide-screen displays. This camera also features multi-format video outputs, satisfying user needs for high-definition (HD) and standard-definition (SD) applications. When extremely clear, super picture quality HD images are required, the FCB-H11 camera offers 1080i and 720p signals. This versatile and flexible camera can also be used with an SD system to allow easy migration from SD to HD when you are ready.

The FCB-H11 inherits a multitude of functions from the world-renowned FCB Series. With a 120x zooming capability, Picture Freeze function, SPOT AE function, and Slow Shutter, the FCB-H11 is ideal for applications such as inspection, video conferencing, cable TV broadcasting, and point-of-view (POV) applications. Furthermore, with the incorporation of the Day/Night function, which is essential for monitoring, this camera is a great choice for a wide range of security applications in, for example, parking lots, retail stores, and many other locations.



IMAGE SENSING SOLUTIONS

Combining Excellent Picture Quality, Multiple Video Outputs, and a Newly Added Day/Night Function, the FCB-H11 Makes Vision Solutions Crystal Clear

### Features

#### ■ Superb Picture Quality with Two Megapixel HD CMOS Sensor

The FCB-H11 employs a 1/3-type HD CMOS sensor (approximately two million effective pixels) providing excellent picture quality and high-resolution images.

#### ■ Multi-Format Video Outputs from NTSC/PAL to Full HD

The FCB-H11 can provide full high-definition video in 1080i format. Depending on your application and configuration, you can select the format that is right for you. With eight video formats from SD to full HD, the FCB-H11 camera module allows you to easily migrate from SD to HD.

#### ■ Day/Night Function

With a new Day/Night capability, the FCB-H11 offers optimal sensitivity in changing light conditions, which is a typical challenge in round-the-clock security operations. As the scene darkens, an infrared filter is automatically replaced with a clear filter, and the camera switches to black-and-white mode, allowing for operation at a minimum illumination of 1.0 lx (F1.8, 50 IRE).

## Features

### ■ 120x Zoom Ratio (10x Optical + 12x Digital)

The FCB-H11 incorporates a 10x optical zoom lens allowing for a zoom capability of up to 120x when used in combination with its 12x digital zoom. Combining these lens features, users can effortlessly capture close-up or wide-angle shots.

### ■ Compact and Lightweight Design

The compact and lightweight body of the FCB-H11 allows it to be installed in many different space-restricted environments.

### ■ Picture Freeze Function

The Picture Freeze Function outputs a still image while the FCB-H11 camera is panning, tilting, zooming, focusing, initializing the lens, or performing preset operations. This helps prevent the display of unnecessary images during these operations.

## Other Features

- SPOT AE Function
- Slow Shutter
- Low Power Consumption (4.8 W)

## Pin assignment & connector

24 P FFC Connector for Camera Control, Analog Video Output, Power

Pin No.	Name	Level
1	GND	
2	TxD	TTL Level (0 V - 5.0 V)
3	TxD	TTL Level (0 V - 5.0 V)
4	RESET-IN	Reset: Low (GND) Normal: Open
5	GND	
6	Y_OUT	Y/C_Y_OUT
7	GND	
8	C_OUT	Y/C C_OUT
9	GND	
10	VBS OUT	
11	GND	
12	Y_OUT	HD Analog Component
13	GND	
14	Pb OUT	HD Analog Component
15	GND	
16	Pr OUT	HD Analog Component
17	GND	
18	POWER	6.0 V - 12.0 V DC
19	POWER	6.0 V - 12.0 V DC
20	POWER	6.0 V - 12.0 V DC
21	POWER	6.0 V - 12.0 V DC
22	GND	
23	POWER	6.0 V - 12.0 V DC
24	GND	

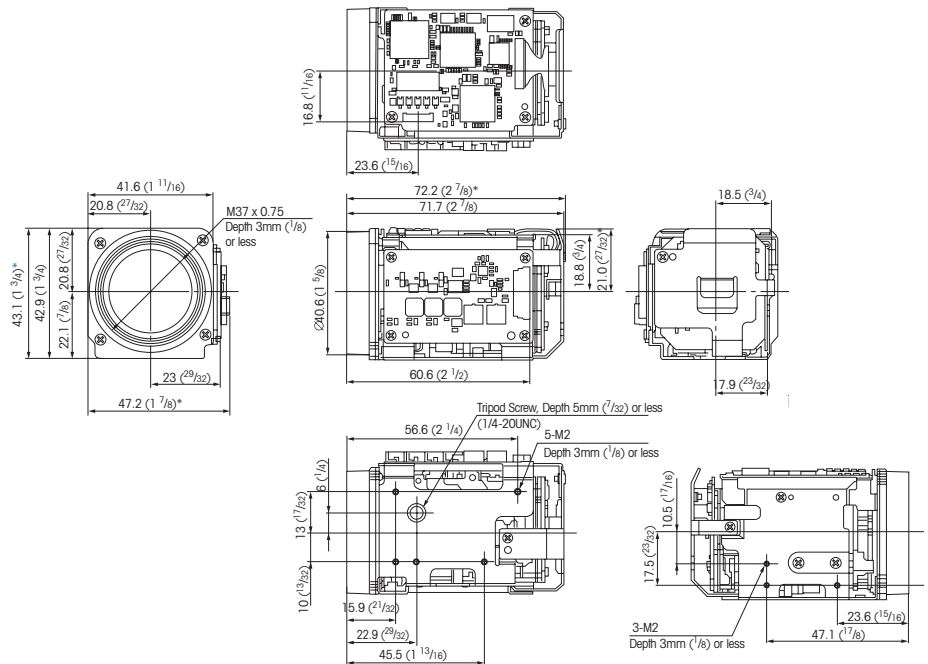
Connector: KYOCERA ELCO 04 6240 224 006 848+

## Specifications

FCB-H11	
Image sensor	1/3-type CMOS
Effective number of pixels	Approx. 2,000,000 pixels
Aspect ratio	HD
	SD
Lens	10x optical zoom, f=5.1 mm (wide) to 51.0 mm (tele), F1.8 to F2.1
Digital zoom	12x (120x with optical zoom)
Horizontal angle of view	50° (wide) to 5.4° (tele)*
Minimum object distance	10 mm (wide) to 800 mm (tele)
Sync system	Internal
Minimum illumination	ICR off mode : 12 lx (typical) (F1.8, 50 IRE) ICR on mode : 1 lx (typical) (F1.8, 50 IRE)
S/N ratio	More than 50 dB
Electronic shutter	1/2 to 1/10,000 s, 21 steps
White balance	Auto, Indoor, Outdoor, One-push, Manual
Gain	Auto/Manual (-3 to 18 dB, 8 steps)
AE control	Auto, Manual, Shutter Priority, Iris Priority, Bright, Spot AE
EV compensation	-10.5 to 10.5 dB (15 steps, 1.5 dB increments)
Backlight compensation	On/Off
Signal system	HD
	SD
Video output	HD
	SD
Focus system	Full Auto (Normal AF/Interval AF/Zoom Trigger AF), One-push Trigger, Manual, Infinity, Near Limit Setting
Picture effects	Nega Art, Black & White, Picture Freeze
Camera operation switch	Zoom tele, Zoom wide
Camera control interface	VISCA (TTL signal level), baud rate: 9.6 Kb/s, 19.2 Kb/s, 38.4 Kb/s, stop bit: 1 bit
Storage temperature	-20 to 60 °C (-4 to 140 °F)
Operating temperature	0 to 45 °C (32 to 81 °F)
Power consumption	6 to 12 V DC/4.8 W
Mass	Approx. 120 g (4.2 oz)
Dimensions (w x h x d)	47.2 x 43.1 x 72.2 mm (1 7/8 x 1 3/4 x 2 7/8 inches)
Supplied accessory	24P FFC (Flat Flexible Cable)

\* in HD and SD SQUEEZE output mode

## Dimensions (mm)



Unit: mm (Inches)

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