

Product Information



FCB-EH4300

The FCB-EH4300 combines full HD images at up to 1080/30p with a 20x optical zoom lens capability.

The FCB-EH4300 camera module incorporates a 1/3-type HD Exmor™ CMOS sensor, providing high image quality and high sensitivity.

When in high-sensitivity mode, the camera is capable of achieving an outstanding minimum illumination of 0.5lx (F1.6, 50IRE) in colour.

The camera module is compatible with a variety of video signal systems - from SD (NTSC & PAL) to full HD (1080p) - with both analogue and digital output modes, thus supporting legacy infrastructure and new architecture, allowing maximum flexibility and future-proof based integration.

The FCB-EH4300 also inherits many outstanding features from Sony's world-renowned FCB Series. Incorporated within the module are a host of security orientated features, including Wide Dynamic Range technology; Day/Night function and Sony's unique digital noise reduction.

In addition, the camera includes other key features such as Spherical Privacy Zone Masking, Picture Freeze Function, SPOT AE Function, and Electronic Shutter/Slow Shutter.

This camera is ideally suited for use within the video surveillance and security industry, but can also be used in applications such as inspection, video conferencing, broadcast and low vision due to additional features such as Colour Enhancement.

Features

Superb picture quality with Exmor™ CMOS sensor technology

The FCB-EH4300 employs a 1/3-type HD CMOS sensor providing excellent high definition picture quality with superb high sensitivity mode capabilities.

Multi-format video outputs from NTSC/PAL to Full HD

The FCB-EH4300 achieves Full HD 1080/30p. Depending on your application and configuration, you can select the format that is right for you. With eight HD video formats and the inclusion of legacy SD (PAL & NTSC), the FCB-EH4300 camera module allows you to easily migrate from SD to HD

200x Zoom Ratio (20x Optical + 10x Digital)

The FCB-EH4300 incorporates a 20x optical zoom lens allowing for a zoom capability of up to 200x when used in combination with its 10x digital zoom. It is when the module's optical zoom is utilised in Full HD 1080p that the benefit of HD can really be seen.

Precise Alignment Technology

The picture quality is further enhanced by the implementation of a new 6-axis alignment technology from Sony. This new mechanism provides precise alignment between the lens and the image sensor, allowing focus performance to be optimised.

Simple connection – one cable, one connector

Covering video, VISCA communication, and power supply with a single cable, the FCB-EH4300 is intelligently designed to minimise any complexity of integration. The camera supports both 30-pin thin coaxial and 24-pin FFC interfaces.

Day/Night & Wide-D functions

The FCB-EH4300 is able to further optimise picture quality in changing light conditions - which is a typical challenge in round-the-clock security operations. When operating in high sensitivity mode, the FCB-EH4300 can achieve a minimum illumination of 0.5 lx with ICR off, and an impressive 0.095 lx when ICR is activated (measured at F1.6, 50 IRE). In addition the FCB-EH4300 is equipped with a Wide Dynamic Range function, further facilitating image quality when used in high contrast environments.

Compact and lightweight design

The compact and lightweight body of the FCB-EH4300 allows it to be installed in many different space-restricted environments.

Technical Specifications

Image sensor 1/3-type CMOS

Signal system HD 1080p/29.97, 1080p/25, 1080i/59.94 (Frame out 25 PsF) 720/59.94p, 720/50p, 720p/29.97, 720p/25

Number of total pixels Approx. 2,000,000 pixels

Lens 20x optical zoom, f=4.7 mm (wide) to 94.0 mm (tele), F1.6 to F3.5

Digital zoom 12x (120x with optical zoom)

Angle of view (H) 1080p/30 mode: 55.4° (wide end) to 2.9° (tele end) 720p/60, 30 mode: 37.6° (wide end) to 1.95° (tele end)

Minimum working distance 10 mm (wide) to 800 mm (tele)

Sync system Internal

Minimum illumination High sensitivity mode: 0.5 lx (ICR Off) 0.095 lx (ICR On) (F1.6, 50 IRE)
Normal mode: 1.7 lx (ICR Off) 0.3 lx (ICR On) (F1.6, 50 IRE)

S/N ratio More than 50 dB

Electronic shutter 1/2 to 1/10,000 s, 22 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)
Focusing system	Auto (Sensitivity: normal, low), One-push AF, Manual, Infinity, Zoom Trigger AF
Video output	HD Analogue: Component Y/Pb/Pr; Digital Y/Cb/Cr 4:2:2 via LVDS SD VBS: 1.0 Vp-p (sync negative)
Camera control interface	VISCA (TTL signal level), baud rate: 9.6 Kb/s, 19.2 Kb/s, 38.4 Kb/s, stop bit: 1/2 bit selectable
Storage temperature	-20°C to 60°C (-4°F to 140°F)
Operating temperature	-5°C to 60°C (23°F to 140°F)
Power consumption	4.7W (motors active), 3.1W (motors inactive)
Power requirements	6.0 V to 12.0 V DC
Weight	260g (4.2 oz)
Dimensions	50.0 x 60.0 x 87.9mm (2 x 2 3/8 x 3 1/2 inches) Includes protrusions

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