SONY

FCB-EV7315

FCB-EV7100

FCB-IV7315

Colour Block Camera

Exmor™

Specifications

		FCB-IV7315	FCB-EV7100
Image sensor		1/2.8-type Exmor CMOS	
Image sensor (Number of effective pixels)		Approx. 2.38 Megapixels	
Signal system		1080p/59.94, 1080p/50, 1080p/60, 1080p/30, 1080p/29.97, 1080p/25, 1080i/59.94, 1080i/50, 1080i/60, 1080i/30, 720p/59.94, 720p/50, 720p/60, 720p/30, 720p/29.97, 720p/25, NTSC*1, PAL*	
Minimum illumination (50%)	High sensitivity mode	Colour: 0.1 lx (F1.6, AGC on, 1/30 s)	Colour: 0.35 lx (F1.8, AGC on, 1/30 s)
	Normal mode	Colour: 0.4 lx (F1.6, AGC on, 1/30 s)	Colour: 1.4 lx (F1.8, AGC on, 1/30 s)
S/N ratio		More than 50 dB	
Gain		Auto/Manual (0 step to 28 step (0 dB to 47.8 dB), +2 step/total 15 steps)	Auto/Manual (0 step to 28 step, +2 step/total 15 steps)
		Max. Gain Limit (6 step to 28 step (17.1 dB to 47.8 dB), +2 step step/ total 12 steps)	Max. Gain Limit (6 step to 28 step, +2 step/total 12 steps)
Shutter speed		1/1 s to 1/10,000 s, 22 steps	
Sync system		Internal	
Exposure control		Auto, Manual, Priority mode (shutter priority & iris priority), Bright, EV compensation, Slow AE	
Backlight compensation		Yes	
Aperture control		16 steps	
White balance		Auto, ATW, Indoor, Outdoor, Outdoor Auto, Sodium Vapor Lamp (Fix/Auto/Outdoor Auto), One-push, Manual	
Lens		20x optical zoom f = 4.7 mm (wide) to 94 mm (tele) F1.6 to F3.5	10x optical zoom f = 3.8 mm (wide) to 38 mm (tele) F1.8 to F3.4
Digital zoom		12x (240x with optical zoom)	12x (120x with optical zoom)
Focusing system		Auto (Sensitivity: normal, low), One-push AF, Manual, Interval AF, Zoom Trigger AF, Focus compensation in ICR on	
Horizontal viewing angle	1080p mode	59.5° (wide end) to 3.3° (tele end)	67.0° (wide end) to 7.6° (tele end)
	720p mode	59.5° (wide end) to 3.3° (tele end)	67.0° (wide end) to 7.6° (tele end)
	SD	44.6° (wide end) to 2.5° (tele end)	50.3° (wide end) to 5.7° (tele end)
Minimum object distance		10 mm (wide end) to 1,000 mm (tele end) (Default: 300 mm)	10 mm (wide end) to 800 mm (tele end) (Default: 320 mm)

* Non-standard video format

Sony proudly introduces a new family of Full-HD modules to its FCB block cameras suitable for non-security applications.

The new FCB-IV7315 camera module incorporates a 20x optical zoom lens suitable for short distance applications. In addition, this camera incorporates an Optical Low Pass Filter (OLPF) that provides extremely clear images, decreasing the effect of moiré when shooting documents or artificial patterns from a close distance. These useful features are ideal for low vision systems.

The FCB-EV7100 camera module incorporates a10x optical zoom lens and wide dynamic range. This camera provides high quality images with both digital and analog output.

Now with a choice of non-security modules, you can select the right camera to match your specific needs. Each camera provides flexibility and high image quality for a wide variety of applications, including document scanning.

	FCB-IV7315	FCB-EV7100
Auto ICR	Yes	
Wide-D*	No	Yes (130 dB)
Visibility Enhancer	Yes	
De-fog	Yes	
HLC	Yes	
Noise reduction	Yes (6 steps)	
Progressive scan mode	Yes	
Image stabilization	No	
Image stabilization for still image	No	
StableZoom	Yes	
Digital output	Yes	
Spherical privacy zone masking	Yes	
Motion detection	Yes	
Alarm	No	
Slow AE response	Yes	
Picture effects	E-Flip, Nega Art, Black & White, Mirror image, Colour enhancement	
Picture freeze	Yes	
Slow shutter	Yes	
Temperature readout	Yes	
Title display	20 characters/line, max. 11 lines	
Camera mode display	Yes	
Key switch control	No	
Camera operation switch	No	
Video output	HD	N/A	Analog: Component (Y/Pb/Pr)
		Digital: Y/Cb/Cr 4:2:2 via LVDS (Signal format conforms to SMPTE 274/SMPTE 296.)	
	SD	VBS	
Camera control interface	VISCA (CMOS 5 V level)	VISCA protocol (CMOS 5V level)
	Baud rate: 9.6 Kbps, 19.2 Kbps, 38.4 Kbps, 115.2 Kbps, Stop bit: 1 bit	
Power requirements	6.0 V to 12.0 V DC	
Power consumption	2.4 W (zoom/focus inactive)	3.4 W (zoom/focus inactive)
	2.9 W (zoom/focus active)	3.7 W (zoom/focus active)
Operating temperature	-5°C to +60°C (23°F to 140°F)	
Storage temperature	-20°C to +60°C (-4°F to 140 °F)	
Operating humidity	20% to 80%, Absolute humidity: 36 g/m³	
Storage humidity	20% to 95%, Absolute humidity: 36 g/m³	
Dimensions (W x H x D)	50.0 x 60.0 x 87.9 mm (2 x 2 3/8 x 3 1/2 inches)	45.6 x 48.8 x 78.0 mm (1 13/16 x 1 15/16 x 3 1/8 inches)
Mass	270 g (9.6 oz)	210 g (7.4 oz)

* Wide dynamic range

Pin assignments

CN401

| Pin No.	Name	Level
1	TXOUT3+	
2	TXOUT3-	
3	TXCLKOUT+	
4	TXCLKOUT-	
5	TXOUT2+	
6	TXOUT2-	
7	TXOUT1+	
8	TXOUT1-	
9	TXOUT0+	
10	TXOUT0-	
11	GND	
12	TxD	CMOS 5 V (Low: Max. 0.1 V, High: Min. 4.4 V)
13	RxD	CMOS 5 V (Low: Max. 1.0 V, High: Min. 2.3 V)
14	DC IN	6 to 12 V DC
15	DC IN	6 to 12 V DC
16	DC IN	6 to 12 V DC
17	DC IN	6 to 12 V DC
18	DC IN	6 to 12 V DC
19	GND	
20	GND	
21	TXOUT7+	Single out mode: open
22	TXOUT7-	Single out mode: open
23	TXOUT6+	Single out mode: open
24	TXOUT6-	Single out mode: open
25	NC	
26	RESET	Reset: Low (GND) Normal: Open (1.8 V)
27	TXOUT5+	Single out mode: open
28	TXOUT5-	Single out mode: open
29	TXOUT4+	Single out mode: open
30	TXOUT4-	Single out mode: open

Connector: USL00-30L-C (KEL Co.)

CN501

Pin No.	Name	Level
1	GND	
2	TxD	CMOS 5 V (Low: Max. 0.1 V, High: Min. 4.4 V)
3	RxD	CMOS 5 V (Low: Max. 1.0 V, High: Min. 2.3 V)
4	RESET	Reset: Low (GND) Normal: Open (1.8 V)
5	GND	
6	NC	
7	GND	
8	NC	
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	DC IN	6 to 12 V DC
19	DC IN	6 to 12 V DC
20	DC IN	6 to 12 V DC
21	DC IN	6 to 12 V DC
22	GND	
23	DC IN	6 to 12 V DC
24	GND	

Connector: 046240024006800+ (Kyocera-elco)

Dimensions

FCB-IV7315
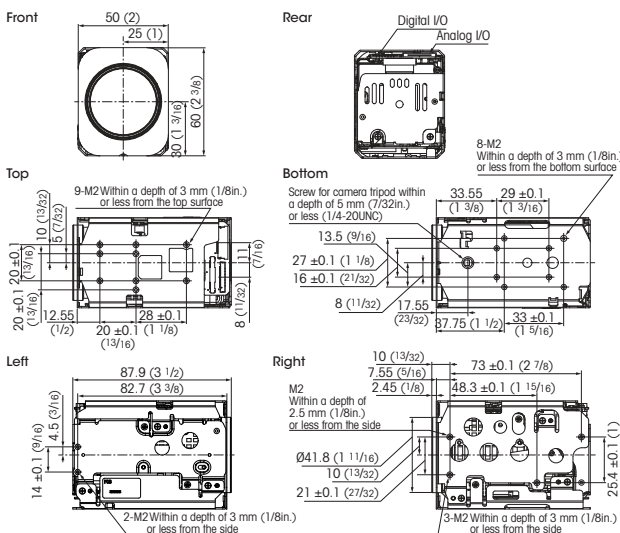
FCB-EV7100
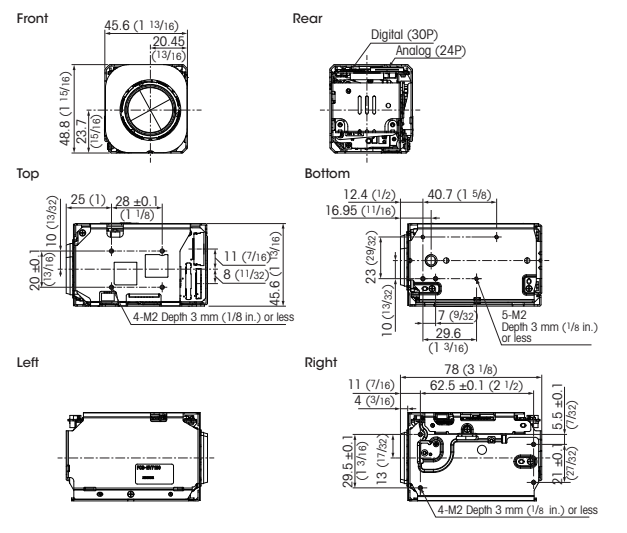
Unit: mm (inches)

Distributed by

PHC_14/01/2015

SONY