

Monochrome Block Camera FCB-EX45M / FCB-EX45MCE



While inheriting the basic functions of FCB-EX Series, improved features mean that this monochrome video camera expands the range of suitable surveillance and monitoring applications.

Incorporating a 1/4 type B/W EXview HAD CCD™, the FCB-EX45M/EX45MCE achieves excellent sensitivity of less than 0.01 lx – making it ideal for extremely low-light environments. Featuring a high-performance Digital Signal Processor (DSP), the FCB-EX45M/EX45MCE camera also realises high resolution of 520 TV lines and is equipped with an 18x optical zoom lens. In addition, the FCB-EX45M/EX45MCE inherits many popular functions found in the FCB-EX Series, such as Spot AE, Privacy Zone Masking, quick camera control via a high-speed serial interface (max. 38.4 kb/s) and customizable settings. Combining superb picture quality and a variety of convenient functions, the FCB-EX45M/EX45MCE is a match for a wide range of surveillance and monitoring applications.

Superb picture quality and a variety of convenient functions make the FCB-EX45M/EX45MCE especially suitable for security dome, traffic monitoring, airline security and facial recognition applications.

Features

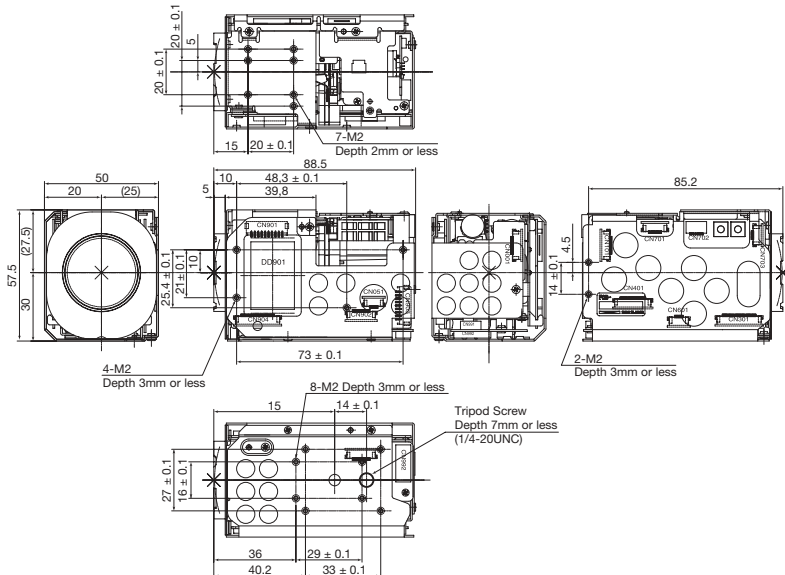
- ▲ **1/4 type EXview HAD CCD™**
FCB-EX45M: 380,000 pixels (EIA)
FCB-EX45MCE: 440,000 pixels (CCIR)
- ▲ **Extremely low minimum sensitivity of 0.01 lx (typical)**
- ▲ **High horizontal resolution of 520 TV lines**
- ▲ **216x zoom ratio (18x optical, 12x digital)**
- ▲ **Spot AE**
The AE area is selected from one of the 16 vertical/16 horizontal blocks of the picture to optimise brightness within the desired area.
- ▲ **Privacy Zone Masking**
Unwanted areas of an image can be masked and not captured. The masking area can be applied to any of 12 vertical and 16 horizontal masking blocks, and up to six block positions can be selected together.
- ▲ **High-speed serial interface**
(max. 38.4 kb/s) and TTL signal-level control (VISCAs™ protocol)
- ▲ **Various customizable settings**
- ▲ **Internal/External sync**
- ▲ **Low power consumption – min. 1.5 W**
(with motors inactive)
- ▲ **Lead-free solder mounting board**

FCB-EX45M / FCB-EX45MCE

	FCB-EX45M	FCB-EX45MCE
Image sensor	1/4 type EXview HAD CCD	
Number of effective pixels (H x V)	768 x 494	752 x 582
Signal system	EIA	CCIR
Lens	18x zoom f=4.1 mm (wide) to 73.8 mm (tele), F1.4 to F3.0	
Digital zoom	12x (216x with optical zoom)	
Angle of view (H)	48° (wide end) to 2.7° (tele end)	
Minimum working distance	35 mm (wide end), 800 mm (tele end)	
Sync system	Internal/External (V-Lock)	
Minimum illumination	Less than 0.01 lx at 1/60s (F1.4, 50 IRE)	Less than 0.01 lx at 1/50s (F1.4, 50 IRE)
S/N ratio	More than 50 dB	
Horizontal resolution	520 TV lines	
Electronic shutter	1/60 to 1/10000 s, 16 steps	1/50 to 1/10000 s, 16 steps
Gain	Auto/Manual (-3 to 28 dB, 2 dB steps)	
AE control	Auto, Manual, Priority mode, Bright, EV compensation, Backlight compensation	
EV compensation	-10.5 to +10.5 dB (1.5 dB steps)	
Backlight compensation	On/Off	
Privacy zone masking	On/Off	
On screen display	Title, Privacy Zone Block	
Flicker cancel	Auto	—
Focusing system	Auto (Sensitivity: H, L), One-Push AF, Manual, Infinity, Interval AF, Zoom Trigger AF	
Picture effects	Nega art	
Camera operation switch	Zoom tele, Zoom wide	
Video output	VS: 1.0 Vp-p (sync negative)	
Camera control interface	VISCA Protocol (TTL signal level)	
Storage temperature	-20°C to 60°C (-4°F to 140°F)	
Operating temperature	0°C to 50°C (32°F to 122°F)	
Power consumption	6 to 12 V DC/1.5 W (typical) (motors inactive), Less than 2.2 W (typical) (motors active)	
Mass	Approx. 230 g (8.1 oz)	
Dimensions	50 x 57.5 x 88.5 mm (2 x 2 3/8 x 3 1/2 inches)	

* When used continuously for more than 24 hours, it is recommended to initialise the lens system every 24 hours to extend the life of the lens.
The 'Initialise Lens' command takes a little less than 3 seconds to initialise the focus and zoom.

Dimensions Unit: mm



Pin assignment

CN901

Connector: ELCO 00 6200 509 13000

Pin No.	Name	Level
1	RxD	CMOS 5.0 V (low: max. 0.8 V, high: min. 2.0 V)
2	TxD	CMOS 5.0 V (low: max. 0.1 V, high: min. 4.4 V)
3	GND (for RxD & TxD)	
4	DC IN	9.0 V ± 3.0 V
5	GND (for DC IN)	
6	VS OUT	1.0 V ± 0.2 V
7	GND (for VBS OUT)	
8	V LOCK PULSE	External VD-Lock Pulse (EX.FV: Negative, 3.0 Vp-p 50% duty)
9	GND (VL PULSE)	

Sony Contacts

ISS for Central Zone (Austria, Eastern Europe, Germany, Netherlands, German-speaking Switzerland)	+49 221 537 3668
ISS for Nordic Zone (Baltics, Denmark, Finland, Norway, Sweden)	+45 43 557 067
ISS for Other Zone (UK, Ireland, Greece, Israel, South Africa)	+44 1932 816 315
ISS for South Zone (Belgium, France, Portugal, Spain, French-speaking Switzerland)	+33 1 55 90 40 74
ISS for Italy	+39 (0) 6 334 372 27