

Preliminary

## Color Camera Block with 4K/60p output Both Day and Night

**4K** STARVIS 2

The FCB-ER9500 features Sony's STARVIS™ 2 image sensor, for outstanding image quality in extreme low light environments as well as in the brightest lit conditions.

With the 25x optical zoom, capture incredible detail in 4K high-resolution, 60 frame per second video, from wide-angle to the telephoto end.

Easily expand your line-up with 4K, 4M, and full HD models, all designed in the same light weight, compact body, helping to lower system development costs.



HDMI\*  
25x Optical Zoom

- 4K/60p output
- 1/1.8-type Image Sensor
- High Sensitivity
- Super Image Stabilizer
- WDR
- HDMI\*
- ICR ON COLOR
- Spot Focus/AE/AWB

Smooth, high-definition image with 4K/60p output

Improved clarity and detail in low-light conditions with 4K 1/1.8-type high sensitivity image sensor.

Reliable inner-zoom system with 4K 25x optical zoom

### Security



With 25x optical zoom, the FCB-ER9500 provides an image without deterioration in image quality even at the telephoto end. Get clear images in low-light, or in the brightest conditions, helping to better secure high-risk spaces, enhance public safety and enterprise security.

### Remote



With high resolution video, the FCB-ER9500 provides students or co-workers with a sense of presence as if they were in the classroom helping to overcome the barriers of remote instruction, as well as improved hybrid collaboration.

### Inspection



Identify even the slightest abnormalities with high resolution images and zoom capability. The FCB-9500 provides detailed observation in remote areas, on the tallest structures, and underwater, typically not easily accessible in a safe and efficient manner.

### Medical Monitoring



As a surgical camera, the FCB-ER9500 can capture an image of an affected area clearly and shoot movement during surgery smoothly and naturally. It contributes to confirmation of a surgical field and recording of surgery.

\* Video is output in the TMDS signal format used by HDMI.

# Specifications

## FCB-ER9500

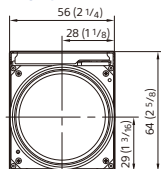
Basic Specifications		
Image Sensor (Number of effective pixels)	1/1.8-type STARVIS™2 CMOS Sensor (Approx. 8.40M pixels)	
Output Image Size (H × V)	3840 × 2160, 1920 × 1080, 1280 × 720	
Signal System	2160p/60, 2160p/59.94, 2160p/50, 2160p/30, 2160p/29.97, 2160p/25, 1080p/60, 1080p/59.94, 1080p/50, 1080p/30, 1080p/29.97, 1080p/25, 1080i/60, 1080i/59.94, 1080i/50, 720p/60, 720p/59.94, 720p/50, 720p/30, 720p/29.97, 720p/25	
Minimum Illumination (50%, High Sensitivity Mode ON)	TBD	
Minimum Illumination (50%, High Sensitivity Mode OFF)	TBD	
Recommended Illumination	100 lx to 100,000 lx	
Image S/N	50 dB (Weight On)	
Gain	Auto/Manual (0 dB to 50.0 dB), 0 to 28 steps	
Shutter Speed	1/1 to 1/10000 s, 22 steps	
Sync System	Internal	
Exposure Control	0 dB to ± 10.5 dB, 15 steps	
Backlight Compensation	Yes	
Gamma	Standard / Straight gamma	
Aperture Control	16 steps	
White Balance	Auto, ATW, Indoor, Outdoor, One Push WB, Manual WB, Outdoor Auto, Sodium Vapor Lamp (Fix/Auto/Outdoor Auto), Spot AWB	
AE (Auto Exposure Mode)	Full Auto, Manual, Priority mode (shutter/iris), EV compensation, Spot AE, Slow AE	
Zoom	25x Optical Zoom, 30x StableZoom*1, 12x Digital Zoom	
Lens (wide to tele)	25x Optical Zoom Lens f = 6.5 mm to 162.5 mm, F1.6 to 4.8	
Zoom Mode	Standard Mode / Variable Mode / Direct Mode	
Zoom Movement Speed	TBD	
	TBD	
	TBD	
Focusing System	Auto Focus (Normal AF, Interval AF, Zoom Trigger), AF Sensitivity (normal, low), Manual (Standard, Variable, Direct), One Push Trigger, Full Scan One Push Trigger, Near Limit, ICR-on Correction, Spot Focus	
Focus Movement Time	TBD	
Horizontal Viewing Angle	TBD	
Minimum Object Distance (wide end to tele end)	100 mm to 1200 mm	
Camera Features		
Auto ICR	Yes: ON (B&W / Color)	
Wide Dynamic Range (Wide-D)	Yes	
Visibility Enhancer	Yes	
Defog	Yes (low/mid/high)	
Noise Reduction	Yes (3D + 2D / Independent setting (3D, 2D))	
Image Stabilization	Yes: Super image stabilizer (Super / Super+)	
Spot Light Avoidance	Yes	
Motion Detection	Yes	
Privacy Zone Masking	Yes	
Alarm	Yes	
Slow AE Response	Yes	
Picture Effects	Monochrome	
Picture Freeze	Yes	
Electronic-Flip (E-FLIP)	Yes	
Mirror Image	Yes	
Slow Shutter	Yes	
Temperature Readout	Yes	
Title Display	Yes (20 characters / line, max. 11 lines)	
Camera Mode Display	Yes (English)	
Interface		
Video Output	Digital : Y/Pb/Pr 4:2:2 (HDMI*2) Y:8bit, C:8bit, RGB 4:4:4 (HDMI*2) R:8bit G:8bit B:8bit	
Camera Control Interface	VISCA protocol (CMOS 3.3V Level, 5.5V tolerance); Baud Rate : 9.6 kbps, 19.2 kbps, 38.4 kbps, 115.2 kbps, Stop bit: 1 bit	
General		
Power Requirements	7.0 V to 12.0 V DC	
Power Consumption	TBD	
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/m <sup>3</sup> )	
Storage Humidity	20% to 95% (Absolute humidity: 36 g/m <sup>3</sup> )	
Dimensions (W × H × D)	56 × 64 × 125 mm (2 1/4 × 2 5/8 × 5 in.)	
Mass	TBD	

\*1 StableZoom increases the magnification by combining optical zoom and digital zoom.

\*2 Video is output in the TMDS signal format used by HDMI.

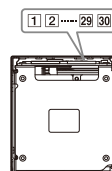
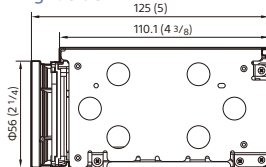
## Dimensions · Connector

Front



Unit: mm (inches)

Right side



Digital output connector

Digital output connector  
KEL Co. USL00-30L-C