Pearl CMOS Series

The PEARL series is a revolutionary camera in terms of the form factor by integrating all the features into a near inch cube form factor. This is the size where no further reduction is possible due to the size of the C Mount. Unlike other competitors re-sizing cameras by removing features, the PEARL series incorporates all the features and even more features are added.

PERAL's Ultra Compact form factor has been once again implemented incorporating low cost high performance CMOS image sensors thus providing further flexibility in selecting cameras for every vision application.

Specification		IMC-30FC	IMB-16FC	IMC-13FC	IMB-13FC
Image Sensor		1/2" MT9T031	1/2" MT9M001	1/3" MT9V022177ATC	1/3" MT9V022177ATM
Picture Size		2048(H) x 1536(V)	1280(H) x 1024(V)	752(H) x 480(V)	752(H) x 480(V)
Data Path		8 or 10 bit Raw RGB / YUV422	10 bit, Mono 8, Mono16	8 or 10 bit Raw RGB / YUV422	10 bit, Mono 8, Mono16
Pixel Size		3.20 x 3.20 μm	5.20 x 5.20 μm	6.00 x 6.00 μm	6.00 x 6.00 μm
Max FPS / Max Res.		10 fps	24 fps	60 fps	60 fps
Scanning System		Rolling Shutter	Rolling Shutter	Global Shutter	Global Shutter
Binning		2x2	not supported	not supported	2x2
Format7		Partial Scan (Unit : 4X4)			
Trigger	Edge	Rising Edge or Falling Edge TTL			
	Mode	0			
	Source	External Trigger or Software Trigger			
Strobe Output		Active Low or High, Support Normal Mode or Trigger Mode			
Memory Save/Load		16Channels(0:factory, 1~4:feature, 5~15:mode/feature)			
SIO(RS-232)		IIDC Ver.1.31 : Pass through or IM-TECH Command			
Digital Interface		IEEE 1394.a (6pin) 1 Port			
Gain Control		0 ~12 dB (Manual or Auto)			
Shutter Speed		63 μsec ~1sec	60 μsec ~500 ms	93 μsec ~100 ms	93 μsec~100 ms
S/N Ratio		43 dB	45 dB	45 dB	45 dB
Control Function		Brightness, Sharpness, Gamma, Auto-Shutter, Pan/Tilt, (*U/B, V/R, Hue/G), *Auto White Balance			
Lens Mount		C / CS Mount			
External Dimension		29(W) x 29(H) x 39(D) mm / approx. 60 gram			

** Camera Specification and Features are subject to change without notice for improvement.   * for Color Models

Major Features

• CMOS Image Sensor

• Ultra Compact Form Factor (29 x 29 x 39 mm)

• Hardware YUV / Auto White Balance

• External Trigger support

• SIO Pass through and Strobe support

• Partial Scan and Binning support

• 4 Point LUT and User Defined LUT support

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