

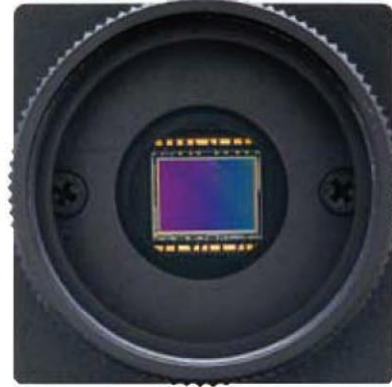
FOculus – Always a new perspective

Technical Data - T-series CCD image sensor

Tiny CCD Features

The Tiny-Series is the smallest camera of the FOculus Family. The robust housing with dimensions of 29 x 29 x 39mm is especially designed to meet the requirements of rough industrial environment.

The FOculus Tiny CCD series consists of 5 monochrome and 5 color models with SONY sensors and resolutions from VGA to UXGA and frame rates at full resolution from 16 to 60fps. Besides all standard features of an industrial camera the FOculus tiny cameras also offer some special features like auto white balance and a special overlapping shutter mode.



Tiny CCD



	FO124TB	FO124TC	FO134TB	FO134TC	FO323TB	FO323TC	FO432TB	FO432TC	FO531TB	FO531TC
Image Sensor	1/3" IT CCD ICX424AL/AQ		1/2" IT CCD ICX414AL/AQ		1/3" IT CCD ICX204AL/AK		1/2" IT CCD ICX267AL/AQ		1/1.8" IT CCD ICX274AL/AQ	
Effective Pixel	659 (H) x 494 (V) VGA		659 (H) x 494 (V) VGA		1034 (H) x 779 (V) XGA		1388 (H) x 1040 (V) SXGA		1628 (H) x 1236 (V) UXGA	
Data Path	8bit or 12bit BW/Raw RGB + YUV422									
Pixel Size	7.40 x 7.40 μm		9.90 x 9.90 μm		4.65 x 4.65 μm		4.65 x 4.65 μm		4.40 x 4.40 μm	
Frame Rate	60 fps 86 fps (format7)		60 fps 86 fps (format7)		30 fps 36 fps (format7)		15 fps 20 fps (format7)		15 fps 16 fps (format7)	
Scanning System	Progressive Scan									
Binning	Pixel Binning B/W & FO531TC									
Synchronization	Internal									
Trigger	Edge		Rising Edge or Falling Edge							
	Mode		Mode 0 ~ 5; 14, 15							
	Source		External Trigger or Software Trigger							
Strobe Output	Active High, Support Normal Mode or Trigger Mode									
SIO(RS-232)	IIDC V. 1.31 version : Pass through or NET Command									
Digital Interface/Transfer Rate	IEEE1394.1 port(6pin) / 400Mbps									
Gain Control	Manual: 0 ~ 25 dB; Auto Gain				Manual: 0~27db Auto Gain		Manual: 0~25db Auto Gain		Manual: 0 ~ 27 dB; Auto Gain	
Shutter Speed	Manual: 1 μs ~ 3600s / Auto Shutter									
Gamma	0.4 ~ 2.5									
S/N Ratio	56 dB or better									
Advanced Features	ROI; One Shot & Multi Shot; Multi Camera Auto Sync; High Speed Up Trigger Framerate, LUT, Frame Save									
Lens Mount	C- / CS-mount									
External Dimension	29 (W) x 29 (H) x 39 (D)mm									
Operating Temp.	- 5°C to + 45°C									
Regulations	FCC, CE, RoHS									
Camera Specifications	IIDC 1394-based Digital Camera Specification v1.31									