



## **The FC-IE Series Industrial Cameras Specs**

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## ● The FC-IE series

The FC-IE series are designed for industrial users who require excellent image quality, high resolution, high speed output and fast-moving objects imaging. Advanced CMOS sensors are used and SNR is over 60dB, satisfying restrict requirements of industrial applications. Global shutter is available in the cameras, so mechanical shutter is not necessary when imaging of moving objects, and excellent image quality without distortion is obtained easily. The resolution of the FC-IE series is several times that of traditional analog cameras. Area of interest (AOI) scanning allows discretional image position and size under maximum and higher frame rates.

With their professional design, the FC-IE series are a perfect fit for a wide range of vision application like:

Semiconductor and component inspection, printing quality control, food and beverage inspection, PCB quality control, workpieces measurement, microcopy and medical imaging, microscoper, highway surveillance and many others.

Your benefits include:

- ★ Gshutter allows fast-moving objects imaging without a mechanical shutter;
- ★ External trigger allows synchronization with moving objects;
- ★ High speed output (IE130: 28fps@1280\*1024 IE036: 60fps@752\*480)
- ★ High resolution (IE036 with 0.4 mega pixels IE130 with 1.3 mega pixels)
- ★ Area of interest (AOI) scanning allows discretional image position and size under maximum and higher frame rates.
- ★ Digital output allows collection-board free low-cost solution;
- ★ Superior image quality of 54dB SNR improves your image processing results;
- ★ Bad pixel correcting algorithm integrated
- ★ FPN shift correcting algorithm integrated
- ★ Advanced interpolating Algorithm avoids artifacts;
- ★ Color calibrating available (only with in color cameras)
- ★ Chinese/English OS of Win98, Win2000 and WinXP supported;
- ★ VC, VB, BC, DELPHI supported SDK are fully documented and allows easy

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redeveloping;

★ Customization available;

## ● Technical Details

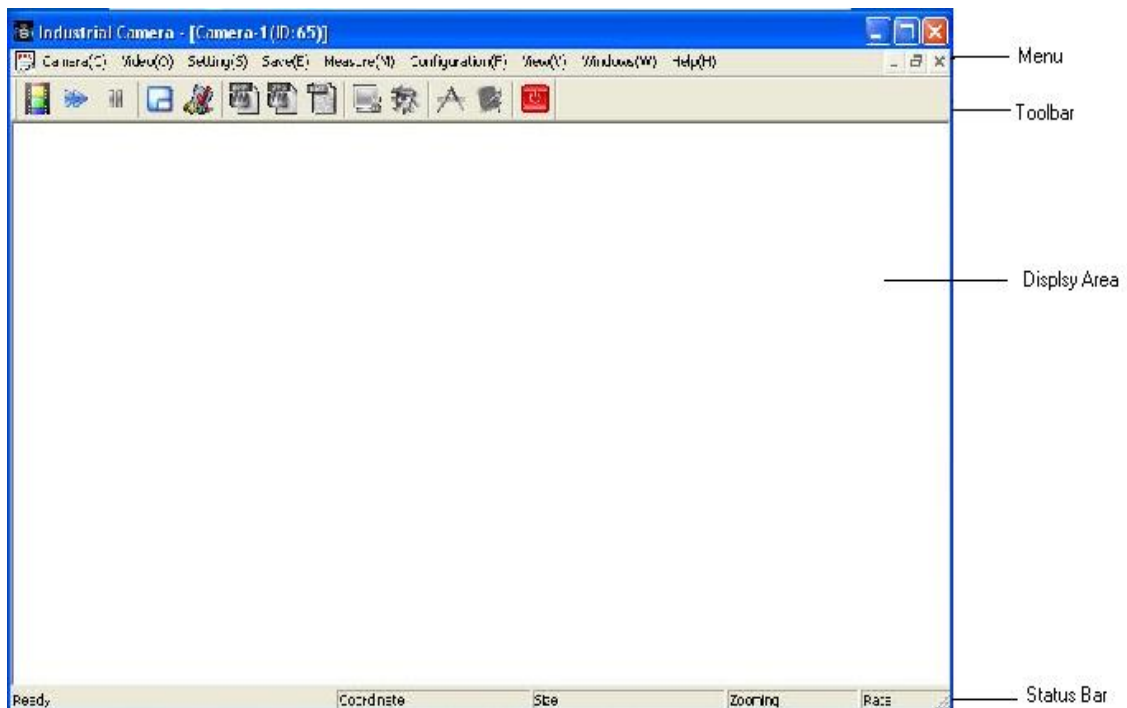
### Specifications

The FC-IE series	FC-IE036M	FC-IE036C	FC-IE130M	FC-IE130C
Sensor Type	CMOS			
Video Output Format	Mono 16: 10bit/pixel	Raw 16: 10bit/pixel (R,G or B)	Mono 16: 10bit/pixel	Raw 16: 10bit/pixel (R,G or B)
Mono/Color	Mono	Color	Mono	Color
Resolution	752×480	752×480	1280×1024	1280×1024
Sensor Optical size	1/3"	1/3"	2/3 "	2/3"
Frame Rate	60f/s @ 752×480	60f/s @ 752×480	30f/s @ 1280×1024	20f/s @ 1280×1024
SNR	60db	60db	62dB	62dB
Dynamic Range	60dB	60dB	62dB	62dB
Sensitivity	4.2 v/Lux-sec	2.8 v/Lux-sec	3.2 v/Lux-sec	1.8 v/Lux-sec
Exposure Time	64us – 15ms	64us – 15ms	45us – 100ms	45us – 100ms
Synchronization	Via External Trigger, via the USB cable or Free Run			
Exposure Time Control	Programmable via USB2.0 bus			
Gain Control	Programmable via USB2.0 bus			
Video Output Type	USB2.0			
Cable Length	3m with common cable; 20m with special cable			

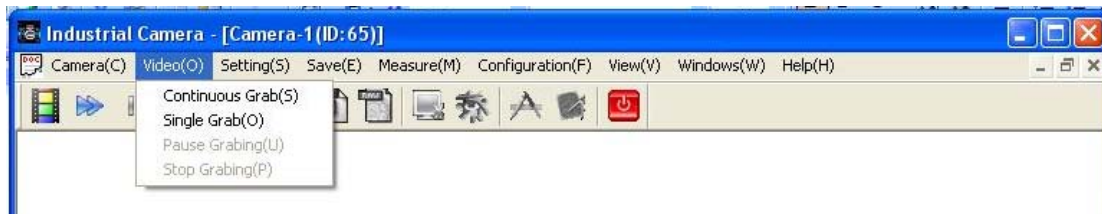
Lens Mount Type	C-mount or CS-mount	
Power Supply	provided via USB cable	12 VDC via power cable

- User Interface

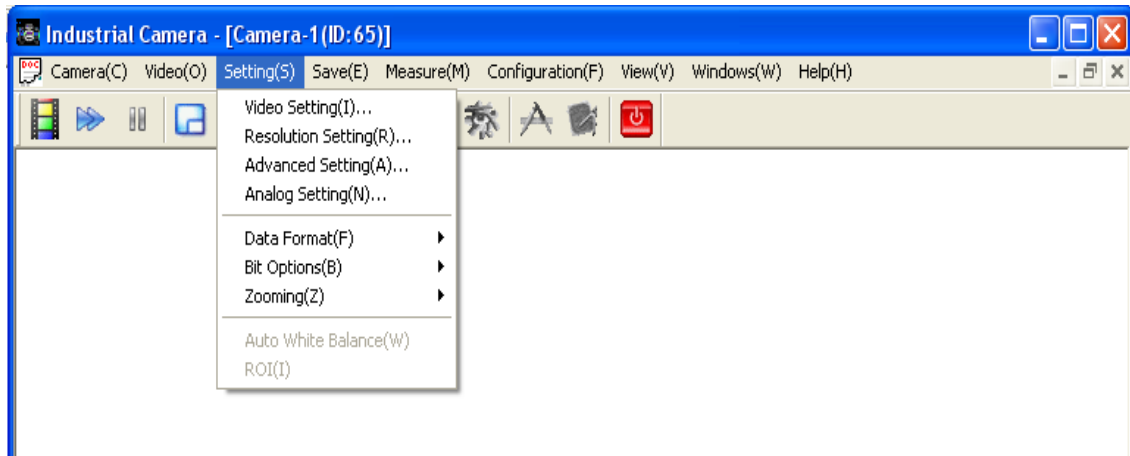
Together with the fully documented SDKs for redevelopment, we provide an excellent Demo program with almost all operations integrated. As soon as you get the cameras, you can experience the various functions and prominent performance in minutes.



Demo User Interface



Video Menu



Configurations Menu

- **Appearance**

The picture bellow is the view of the cameras.

The red light is the indicator for power supply inspection. If the camera is well, the red light will be always on when powered.

The green light is the working indicator. It will be glinting according to the frame rate when collecting images.



The FC-IE036 is powered via USB cables, so the power interface is not necessary to be connected. The FC-IE130 needs external 12VDC power supply.

USB B male interface is used in the cameras. A customized 3m USB cable is of the standard accessories insuring the best performance of the USB bus.

External trigger input and strobe lights output interfaces is available and are both optical couple

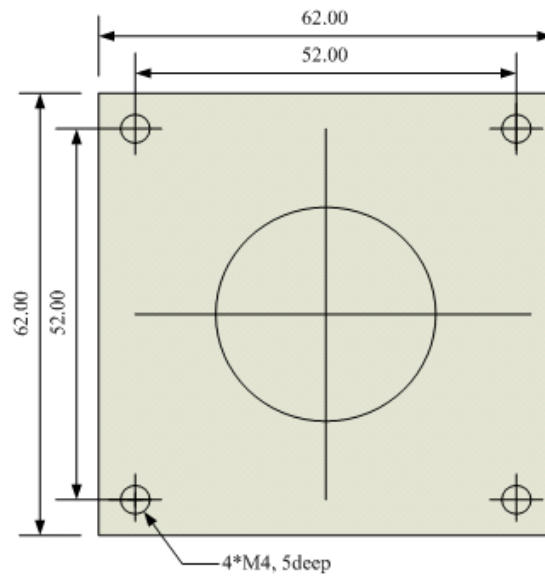
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insulated.

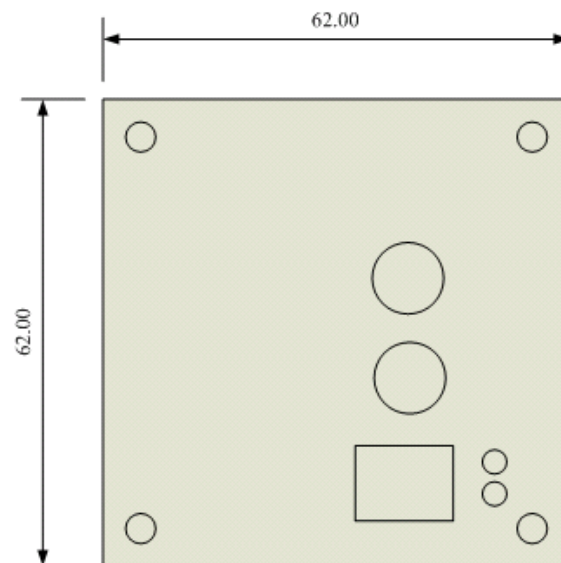
Power supply interface uses a two-core aerial plug and external trigger interface is a four-core aerial plug, both with self-lock function.

- Dimensions (in mm)

Front View



Rear View



Side View

