

The Imaging Source "21" Series of CCD cameras are the perfect solution for many industrial automation, quality assurance, security, surveillance, and medical applications. Utilizing monochrome and color 1/4" Sony ICX098 sensors, this VGA format camera is available both in housed and board level versions with a choice of protocols including USB 2.0, Firewire 400, and Gigabit Ethernet.

The 21 Series further features a variety of input, output, strobe, and trigger options via an external Hirose port or a direct 12-pin board header. With speeds up to 60 fps and a trigger delay of less than 5 microseconds, the 21 Series of cameras from The Imaging Source are a low cost, yet highly versatile imaging solution.

#### Included:

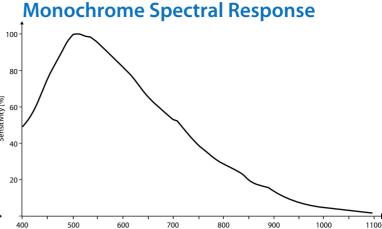
- Camera, CS to C mount Spacer, and Tripod Mount
- Drivers for WDM, DirectX®, TWAIN, ActivVisionTools, HALCON, VfW, LabVIEW®, and MIL for Windows XP and Windows Vista and Windows 7
- IC Capture camera control and aquisition software for Windows XP through Windows 7 (32 and 64 bit versions supported)
- IC Imaging Control: SDK (Software Development Kit) including a .NET component, an ActiveX, and a C++ Class library for Windows

Software developers and system engineers prefer The Imaging Source cameras for their ease of integration and comprehensive SDK.

- Industrial Automation and Quality Control
- Security and Situational Awareness
- Multimedia and Entertainment
- Astronomy and Life Sciences
- Metrology
- Logistics



# **Color Spectral Response** 100 600 900 1000 1100 700 800 Wavelength [nm]



Wavelength [nm]

# **Specifications**

-	
Sensor	ICX098BQ (Color)
	ICX098BL (Mono)
Pixel Size	5.6 x 5.6 Microns
Maximum Resolution	640 x 480 Pixels
Imaging Area	4.6mm x 3.97mm
Optical Format	1/4 Inch
Frame Rate	Max 60 FPS
Shutter Type	Global
IR Cut Filter	Optional
<b>Current Consumption</b>	500 mA at 5 VDC
Operating Temperature	-5 ℃ to 45 ℃
Dynamic Range	8 Bit

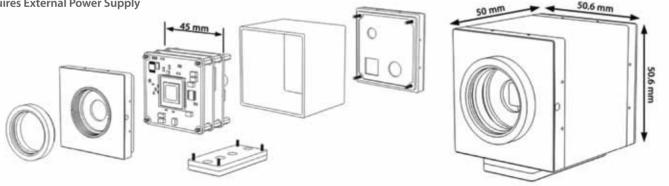
### **Accessories**

- CS to M12 Adapter
- · C, CS, and M12 Lenses
- USB Cable (1.8m, 3m, 4.5m)
- 1394 FireWire Cable (1.8m, 3m, 5m, 10m)
- Gig E Power Supply (120V, 220V)
- BNC Trigger Cable (1.5 m, 3m, 3m)
- 12 Pin Hirose Break-out Cable (1.5m)

# **Options**

Color (x=F)	DxK 21AU04	DxK 21BU04	DxK 21BU04.H	DxK 21AG04.I*
Monochrome (x=M)	DxK 21AF04	DxK 21BF04	DxK 21BF04.H	
	DxK 21AG04*		DxK 21BG04.H*	
Trigger		Х	Х	
Input/Output		Х	Х	
Auto Iris				Х
C and CS Mount	Х	Х	X	Х
<b>Board Level Available</b>	X	Х	X	Х

\* Requires External Power Supply





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Headquarters: The Imaging Source Europe GmbH North & South America: The Imaging Source, LLC 6926 Shannon Willow Rd, S 400, Charlotte, NC 28226 Phone: +1 704-370-0110



The Imaging Source "31" Series of CCD cameras are the perfect solution for many industrial automation, quality assurance, security, surveillance, and medical applications. Utilizing monochrome and color 1/3" Sony ICX204 sensors, this SVGA format camera is available both in housed and board level versions with a choice of protocols including USB 2.0, Firewire 400, and Gigabit Ethernet.

The 31 Series further features a variety of input, output, strobe, and trigger options via an external Hirose port or a direct 12-pin board header. With speeds up to 30 fps and a trigger delay of less than 5 microseconds, the 31 Series of cameras from The Imaging Source are a low cost, yet highly versatile imaging solution.

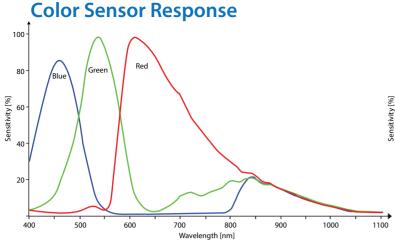
#### Included:

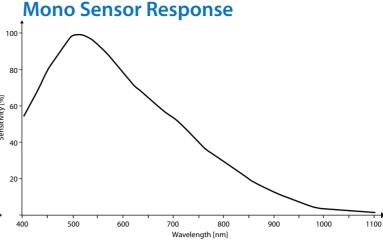
- Camera, CS to C mount Spacer, and Tripod Mount
- Drivers for WDM, DirectX®, TWAIN, ActivVisionTools, HALCON, VfW, LabVIEW®, and MIL for Windows XP and Windows Vista and Windows 7
- IC Capture camera control and aquisition software for Windows XP through Windows 7 (32 and 64 bit versions supported)
- IC Imaging Control: SDK (Software Development Kit) including a .NET component, an ActiveX, and a C++ Class library for Windows

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- Multimedia and Entertainment
- Astronomy and Life Sciences
- Metrology
- Logistics







# **Specifications**

Sensor	ICX204AK (Color)
	ICX204AL (Mono)
Pixel Size	4.65 x 4.65 Microns
Maximum Resolution	1024 x 768 Pixels
Imaging Area	5.80mm x 4.92mm
Optical Format	1/3 Inch
Frame Rate	Max 30 FPS
Shutter Type	Global
IR Cut Filter	Optional
<b>Current Consumption</b>	500 mA at 5 VDC
Operating Temperature	-5 °C to 45 °C
Dynamic Range	8 Bit

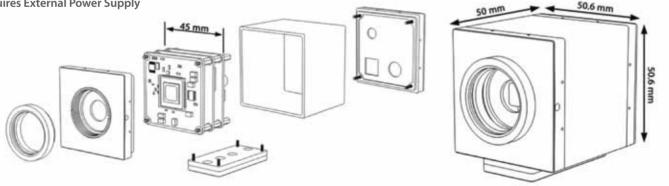
### **Accessories**

- CS to M12 Adapter
- · C, CS, and M12 Lenses
- USB Cable (1.8m, 3m, 4.5m)
- 1394 FireWire Cable (1.8m, 3m, 5m, 10m)
- Gig E Power Supply (120V, 220V)
- BNC Trigger Cable (1.5 m, 3m, 3m)
- 12 Pin Hirose Break-out Cable (1.5m)

# **Options**

Color (x=F)	DxK 31AU03	DxK 31BU03	DxK 31BU03.H	DxK 31AG03.I*
Monochrome (x=M)	DxK 31AF03	DxK 31BF03	DxK 31BF03.H	
	DxK 31AG03*		DxK 31BG03.H*	
Trigger		Х	Х	
Input/Output		Х	Х	
Auto Iris				Х
C and CS Mount	Х	X	X	Х
<b>Board Level Available</b>	Х	X	Х	Х

\* Requires External Power Supply





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The Imaging Source "41" Series of CCD cameras are the perfect solution for many industrial automation, quality assurance, security, surveillance, and medical applications. Utilizing monochrome and color 1/2" Sony ICX205 sensors, this XGA format camera is available with the choice of protocols including USB 2.0, Firewire 400, and Gigabit Ethernet.

The 41 Series further features a variety of input, output, strobe, and trigger options via an external Hirose port or a direct 12-pin board header. With speeds up to 15 fps and a trigger delay of less than 5 microseconds, the 41 Series of cameras from The Imaging Source are a low cost, yet highly versatile imaging solution.

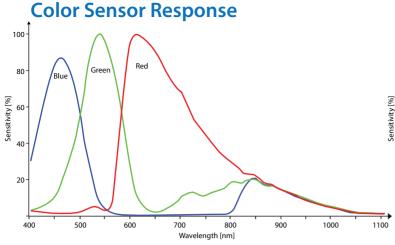
#### Included:

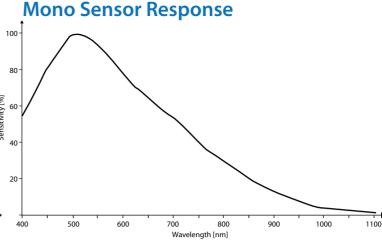
- Camera, CS to C mount Spacer, and Tripod Mount
- Drivers for WDM, DirectX®, TWAIN, ActivVisionTools, HALCON, VfW, LabVIEW®, and MIL for Windows XP and Windows Vista and Windows 7
- IC Capture camera control and aquisition software for Windows XP through Windows 7 (32 and 64 bit versions supported)
- IC Imaging Control: SDK (Software Development Kit) including a .NET component, an ActiveX, and a C++ Class library for Windows

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- Metrology
- Logistics







# **Specifications**

Sensor	ICX205AK (Color)
	ICX205AL (Mono)
Pixel Size	4.65 x 4.65 Microns
Maximum Resolution	1280 x 960 Pixels
Imaging Area	7.60mm x 6.20mm
Optical Format	1/2 Inch
Frame Rate	Max 15 FPS
Shutter Type	Global
IR Cut Filter	Optional
Current Consumption	500 mA at 5 VDC
Operating Temperature	-5 °C to 45 °C
Dynamic Range	8 Bit

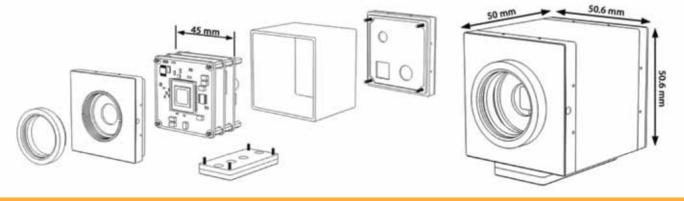
### **Accessories**

- CS to M12 Adapter
- · C, CS, and M12 Lenses
- USB Cable (1.8m, 3m, 4.5m)
- 1394 FireWire Cable (1.8m, 3m, 5m, 10m)
- Gig E Power Supply (120V, 220V)
- BNC Trigger Cable (1.5 m, 3m, 3m)
- 12 Pin Hirose Break-out Cable (1.5m)

### **Options**

Color (x=F)	DxK 41AU02	DxK 41BU02	DxK 41BU02.H	DxK 41AG02.I*
Monochrome (x=M)	DxK 41AF02	DxK 41BF02	DxK 41BF02.H	DAIL THEOLIS
	DxK 41AG02*		DxK 41BG02.H*	
Trigger		Х	Х	
Input/Output		Х	Х	
Auto Iris				Х
C and CS Mount	X	X	X	Х

<sup>\*</sup> Requires External Power Supply





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The Imaging Source "51" Series of CCD cameras are the perfect solution for many industrial automation, quality assurance, security, surveillance, and medical applications. Utilizing monochrome and color 1/2" Sony ICX274 Super HAD sensors, this 2 MegaPixel format camera is available with the choice of protocols including USB 2.0, and Gigabit Ethernet.

The 51 Series further features a variety of input, output, strobe, and trigger options via an external Hirose port or a direct 12-pin board header. With speeds up to 12 fps and a trigger delay of less than 5 microseconds, the 51 Series of cameras from The Imaging Source are a low cost, yet highly versatile high format imaging solution.

#### Included:

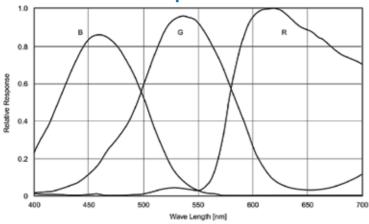
- Camera, CS to C mount Spacer, and Tripod Mount
- Drivers for WDM, DirectX®, TWAIN, ActivVisionTools, HALCON, VfW, LabVIEW®, and MIL for Windows XP and Windows Vista and Windows 7
- IC Capture camera control and aquisition software for Windows XP through Windows 7 (32 and 64 bit versions supported)
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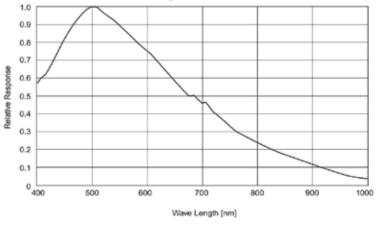
- Industrial Automation and Quality Control
- Security and Situational Awareness
- Multimedia and Entertainment
- Astronomy and Life Sciences
- Metrology
- Logistics



### **Color Sensor Response**



### **Mono Sensor Response**



# **Specifications**

Sensor	ICX274AQ (Color)
	ICX274AL (Mono)
Pixel Size	4.4 x 4.4 Microns
Maximum Resolution	1600 x 1200 Pixels
Imaging Area	8.50mm x 6.80mm
<b>Optical Format</b>	1/1.8 Inch
Frame Rate	Max 12 FPS
Shutter Type	Global
IR Cut Filter	Optional
<b>Curent Consumption</b>	500 mA at 5 VDC
Operating Temperature	-5 °C to 45 °C

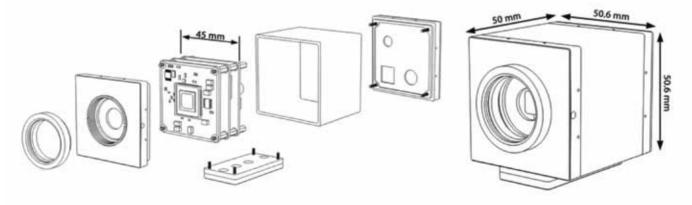
### Accessories

- CS to M12 Adapter
- C, CS, and M12 Lenses
- USB Cable (1.8m, 3m, 4.5m)
- Gig E Power Supply (120V, 220V)
- BNC Trigger Cable (1.5 m, 3m, 3m)
- 12 Pin Hirose Break-out Cable (1.5m)

### **Options**

Color (x=F)	DxK 51AU02	DxK 51BU02	DxK 51BU02.H	DxK 51AG02.I*
Monochrome (x=M)	DxK 51AG02*		DxK 51BG02.H*	
Trigger		Х	Х	
Input/Output		Х	Х	
Auto Iris				Х
C and CS Mount	Х	Х	Х	Х

<sup>\*</sup> Requires External Power Supply





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