





Camera Selection Guide

CAMERA SERIES	DCC1545/1645	DCC1240	DCU223	DCU224	LC100
					
Pixel Resolution	1280 x 1024		1024 x 768	1280 x 1024	2048
Sensor Type	CMOS		CCD		CCD
Full Frame Rate (Max)	25 fps		30 fps	15 fps	900 fps
Shutter Mode	Rolling	Rolling, Global	Global		Global
Trigger Input	No	Yes	Yes		Yes
See Page	1593	1594	1595		1596 – 1598

High-Resolution CMOS Cameras

Features

- 1280 x 1024 Pixel Resolution (SXGA)
- B&W and Color Cameras Offered
- Full Frame Rate of 25 fps
- Rolling Shutter
- Internal and External SM1 Thread to C-Mount Adapter Rings Included
- 1/4"-20 UNC Camera Mount
- USB 2.0 High-Speed Connection

The DCC1545M and DCC1645C are High-Resolution CMOS Cameras with 1280 x 1024 pixel resolution and a maximum full frame rate of 25 fps. If a higher frame rate is needed, the pixels can be subsampled to significantly increase this rate. The DCC1545M is a black and white camera, and the DCC1645C is a color camera with an IR filter in front of the sensor. Both have a 1/4"-20 tap that is compatible with our numerous thread mounting adapters found on page 332.

These cameras, which are an economical alternative to our DCU series of cameras featured on page 1595, are ideal for applications where a trigger input is not necessary. Please see the Camera Selection Guide above for a quick comparison of our camera series.

These CMOS cameras have a CS-Mount for use with objectives and come with adapter rings offering external SM1, internal SM1, or internal C-Mount threading options. Utilizing the SM1 (1.035"-40) adapters, the cameras can be incorporated into our lens tube and cage systems. With the C-Mount (1.00"-32) adapter, the camera can be used with our MVL Series lenses offered on pages 964 - 967. A wide variety of mounted filters are also available in SM1 housings.

Standard drivers such as Direct Show (WDM), ActiveX®, and TWAIN are provided as well as interfaces for popular machine vision software. Over 20 demonstration programs (including source code) are supplied with these cameras. Windows and Linux drivers in addition to an SDK (C++, C#, VB, and LabVIEW support) are available.



DCC1545M

ITEM #	DCC1545M	DCC1645C
Pixel Resolution	1280 x 1024	
Optical Sensor Class	1/2", Black and White	1/3", Color
Sensor Model (Mikron)	MT9M001	MT9M131
Sensor Size	6.66 mm x 5.32 mm	4.61 mm x 3.69 mm
Pixel Size	5.2 µm x 5.2 µm	3.6 µm x 3.6 µm
Exposure Mode	Electronic Rolling Shutter	
Read Out Mode	Progressive Scan	
Full Frame Rate (Max)	25 fps	
Subsampling	Horizontal, Vertical	
Subsampling Frame Rate (Max)	511 fps (8x)	248 fps (4x)
ROI (Partial Scan)	Horizontal, Vertical	
Max ROI Frame (320 x 240 px)	231 fps	262 fps
Pixel Clock Frequency (Min/Max)	5/40 MHz	
Gain	13x (Master)	3x/3.1x (Master/RGB)
Hardware Trigger	N/A	
Objective Connector	CS (C-Mount and SM1 Adapters Included)	
Window	Glass Filter	IR Filter
Computer Interface	USB 2.0	
Power Supply	<1.0 W via USB	
Operating Temperature	0 - 50 °C (32 - 122 °F)	
Security Labels	CE, FCC, Class A	
Dimensions	48.6 mm x 44.0 mm x 25.7 mm (1.9" x 1.7" x 1.0")	
Weight	32 g (0.07 lbs)	

ITEM #	\$	£	€	RMB	DESCRIPTION
DCC1545M	\$ 345.00	£ 248.40	€ 300,15	¥ 2,749.65	USB 2.0 CMOS Camera, Black & White
DCC1645C	\$ 345.00	£ 248.40	€ 300,15	¥ 2,749.65	USB 2.0 CMOS Camera, Color