

Product Introduction

Introduction

TCH-5.0ICE is a 5-megapixel high-resolution scientific camera that uses a Sony ICX282AQ image sensor with 12-bit analog-to-digital conversion and excellent color reproduction. It supports USB2.0 high-speed transmission, achieves real-time preview at 10 frames per second, and has a semiconductor cooling function to maintain low noise under long exposure. It is suitable for a variety of application scenarios such as fluorescence imaging, and supports a variety of professional microscopic image processing software.



5 million high resolution professional CCD camera TCH-5.0ICE product advantages:

- TCH-5.0ICE is Tucson's latest high-resolution scientific camera. The camera uses a USB2.0 high-speed data interface and can achieve a real-time preview function of 10 frames per second, making focusing very convenient. The 12-bit data conversion enables the camera to perform well in both bright field and darkfield imaging. TCH-5.0ICE is particularly suitable for fluorescence imaging, and can achieve a good signal-to-noise ratio even under long exposure conditions.
- The first hardware in China to support Mediacybernetics' Image-Pro series of professional microscopy imaging software Image-Pro series software supported by TCH-5.0 cameras:
- Image-Pro Plus (IPP for short, a classic product of Media Corporation, used by thousands of professional users)
- Image-Pro Insight (software with dynamic depth of field extension and image stitching functions)
- TSCamera-Pro (a highly cost-effective camera control and image processing software)

Overview of 5MP High Resolution Professional CCD Camera :

5 megapixel high resolution with good detail performance Using USB2.0 data output, it can achieve real-time preview function of 10 frames per second Semiconductor cooling to -30°C below room temperature, allowing long exposure 12-bit analog-to-digital conversion, excellent color reproduction SDK available

Cooled Camera TCH-5

TCH-5.0

TCH-5.0ICE

Image sensor model	Sony ICX282AQ	Sony ICX282AQ
Color / Black and White	color	color
CCD/CMOS Size	2/3"	2/3"
Pixel size (µm)	34x3.4	34x3.4
Effective pixels	5.07 million	5.07 million
Maximum resolution (H*V)	2580x1944	2580x1944
Scan Mode	Interlaced Scan	Interlaced Scan
Shutter Mode	Electronic shutter	Electronic shutter
Frame rate	3fps (2580 x 1944 full resolution) 12fps(1280 x 932)	3fps (2580 x 1944 full resolution) 12fps(1280x932)
Color Depth	36bit	36bit
Analog-to-digital conversion	12 bit	12 bit
Exposure Control	Automatic/Manual	Automatic/Manual
Exposure range	0.1ms-20min.	0.1ms-20min.
White balance control	Automatic/Manual	Automatic / Manual
Dynamic Range	62dB	62dB
Operating temperature	0-60°C	0-60 ³ C
Operating humidity	45%-85%	45%-85%
Storage temperature	-20-70 °C	-20-70 °C
Refrigeration method	—	Semiconductor Refrigeration (ICE Model)
Refrigeration temperature	-10 °C	-10 °C
Operating System Support	Windows / Linux / Mac	Windows / Linux / Mac
Optical interface	C-Mount	C-Mount
Data Interface	USB2.0/480Mb/s	USB2.0/480Mb/s

