

Digital CMOS Camera

Kalypso 023-USB



Kappa CMOS Cameras, „Kalypso“ - Strong Performance at a Low Price!

Kalypso 023-USB is the first CMOS camera series by Kappa. The round camera Kalypso with Aptina sensor provides strong performance at a low price. Its strong points are the special Kappa features like the rugged construction and the high signal quality. The operating temperature is between -20°C and +80°C. The 1/3" cameras with global shutter come equipped with an USB 2.0 interface and offer 10-bit digitization depth at a resolution of 752 x 480 pixel (WVGA). With linear sensor characteristics the cameras

achieve more than 55 dB, in the High Dynamic Range Mode they achieve more than 80 dB. Kalypso is used for industrial and non-industrial image processing applications. Even with dynamic scenes, under difficult light conditions and rough ambient conditions the Kalypso cameras deliver reliable performance and high image quality. An ultra-compact construction (50 mm diameter and 29 mm width) allows them to be used for machine vision in extremely confined spaces, also in customer-specific design.

CMOS 1/3" camera

USB 2.0

Color | Monochrome

10 bit digitization depth

752 x 480 pixel (WVGA)

Global Shutter

50 fps

High Dynamic Mode

Software KCC Kalypso

CMOS

- High sensitivity
- Compact design
- Low power consumption device
- Excels at backlit shots and countering blooming

Kalypso 023-USB

Technical Data

Sensor	1/3", monochrome or color, (Aptina MT9V023)
Pixel size (H x V)	6.0 µm x 6.0 µm
Light-sensitive area (H x V)	4.51 mm x 2.88 mm
Number of pixel (H x V)	752 x 480, effective, WVGA
Dynamic	> 55 dB (linear) > 80 dB (high dynamic range)
Sensitivity	< 0.1 lx (monochrome), <5 lx (color)
Gain	manual/automatic x1 up to x 4
Exposure	manual/automatic (50 µs up to 30 ms)
Refresh rate	full frame: 50 fps
Pixel clock	24 MHz
System	10 bit
Depth of data	monochrome 8 bit or 10 bit RGB 24 bit raw 10 bit
Shutter	TrueSNAP Global Shutter
Interface	USB 2.0
Connection	standard Mini-USB B-connector
Lens mount	C-Mount
Dimensions	50 mm diameter x 29 mm (excl. C-Mount)
Operating temperature	-20°C up to +80°C
Storage and transport temperature	-40°C up to +80°C
Power supply	5 V DC, 250 mA via USB
Software	KCC Kalypso: Windows Software the controlling the camera and storing images , PlugIn for Kappa ImageBase
System requirements	PC with USB 2.0 interface Windows 2000 SP4 Update Rollup 1 Windows XP SP2 Windows Vista SP1

We are constantly checking the accuracy of the technical data. We are prepared to provide more detailed information on request.
Technical data are subject to change without notice!