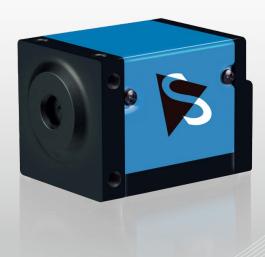


# **Integrated Optics**

### The Imaging Source 13 MP AutoFocus Camera

- Integrated lenses for max. image quality
- On-board image enhancement
- Very attractive pricing



Model*	Interface	Resolution	Frame Rate	Focal length	Sensor Size	Digital Zoom	Focus
DFK AFU130-L53	USB 3.0	4128 x 3096 1920 x 1080	1 fps 30 fps	5.3 mm	1/2.5" CMOS	16x	auto

<sup>\*</sup> DFK = color

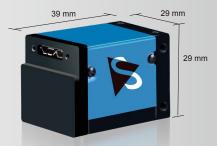
Based on Sony's Exmor CMOS technology the 13 MP Autofocus camera provides excellent image and color quality. An almost distortion free 5.3 mm lens (35mm equivalent) combined with a fast Autofocus unit makes the camera suitable for a wide range of application. Full HD (1920 x 1080) video can be streamed at 30 fps. In demanding light situations the HDR (high dynamic range) feature makes image content visible that other cameras can not provide. Furthermore, image sharpness, image stability and noise reduction can be controlled by the included end-user software and SDK. The camera, which also offers automatic on-board color correction, ships in compact, robust and lightweight casing and measures only 29 x 29 x 39 mm. It can, therefore, be easily integrated into the tightest enclosures.

#### Included:

- Camera, tripod mount
- Drivers compatible to WDM, DirectShow, DirectX<sup>®</sup>,
  TWAIN, ActivVisionTools, HALCON, VfW and LabVIEW<sup>®</sup>
  for Windows 7/8, Windows Vista, and Windows XP
- IC Capture camera control and aquisition software for Windows 7/8, Windows Vista, and Windows XP (32 and 64 bit versions)
- IC Imaging Control Software Development Kit (SDK) including a .NET component, an ActiveX component, and a C++ class library for Windows

#### Features:

- Integrated lens
- Autofocus
- Digital zoom
- On-board image enhancement
- HDR
- Various resolutions and frame rates



#### **Accessories:**

- USB 3.0 cables with fixing screws



## **Application Example: High Dynamic Range**



In scenes with both very bright and very dark areas, a typical machine vision camera would output images, where the dark areas would be extremely dark, making it difficult to distinguish features and shapes.

For example, if a person is standing in front of a bright window, the camera would either expose the person correctly, but render the scene outside as blown out, or expose the bright scene outside properly, leaving the person underexposed and dark, due to the strong back light situation. High dynamic range (HDR) addresses this issue by applying techniques, such as using different exposure times for each object in the scene, to enable objects in both bright and dark areas to be correctly exposed simultaneously. As a result, cameras with HDR are often used in medical and surveillance applications.