

Tauri-HD 02150 SDI

NEWThe Smallest High Definition
CCD CameraHigh Definition
with 1920 x 1080 pixel

very small size

14-bit digitization

64 dB dynamic range

HD-SDI with 1080p/25
optional 1080p/30

RS 485/RS 232 control

The new high definition color camera „Tauri-HD 02150 SDI“ from Kappa delivers brilliant images in the 16:9 format. A Kodak 2/3" CCD, 14-bit signal processing and 64 dB dynamic range constitute the technical basis for uncompressed images in real time that meet highest standards. The currently smallest high definition CCD camera on the market convinces not only with its performance, but also with an attractive price.

Despite of its small and compact design (44 x 44 x 53 mm / 1,73" x 1,73" x 2,09") this camera leaves nothing to be desired with regard to "industrial television". The HD-SDI interface provides full HD resolution in the HD-Format 1080p/25 (optional 1080p/30).

Signal processing functions can be adjusted via RS 485 or RS 232.

The Tauri-HD is predestined for broadcasting in the area of special effects, sports events and especially 3D productions and commercials. Other areas of application are, e.g., HD monitoring for demanding tasks and lecture hall equipment. The camera is well suited as vehicle and aircraft camera in robots, manipulators and helicopters.

The typical Kappa quality characteristics hardness and durability insure reliability for tough applications.

Tauri-HD 02150 SDI

Technical data

Sensor-specific data

CCD Sensor	2/3" interline transfer CCD progressive scan with micro lenses (Kodak KAI 02150)
Pixel size (H x V)	5.5 µm x 5.5 µm
Light-sensitive area (H x V)	10.56 mm x 5.94 mm (16:9)
Number of pixels (H x V)	1920 x 1080 active, 2004 x 1144 total
Spectral sensitivity (without IR filter)	350 nm – 1050 nm
Full well capacity	20 000 e ⁻
A/D-conversion factor	1,2 e ⁻ / increment
Filter	RGB Bayer filter / IR filter
Dynamic range	64 dB (measured in a dark image, at 40 ms exposure and 0 dB gain)

Interface specific data

Interface HD/SD	HD-SDI, high definition digital video (HDTV), SMPTE-274M and SMPTE-292M 8 or 10 bit YUV 4:2:2, 1920 x 1080 p/25 (optional 1920 x 1080 p/30)
Communication interface	RS 485, RS 232
Exposure	1/25 to 1/100 000 s (1/30 – 1/100 000 s)

Signal Processing

System	14-bit digital
Gain	Manual/automatic (AGC): 0 to 20 dB
Color processing	14 Bit color DSP
Gamma	0.3 to 2.2, loadable
Diagnostics	Integrated self-test
Line generator	2 reticles: position, color and size adjustable
Measurement window	Position and size adjustable
Mirror	Horizontal image mirror
Synchronization	Internal/external, Tri Level Sync

General technical data

Interfaces	BNC (HD-SDI), HR10 (power, communication, sync)
Switches	White balance (fixed, auto, set)
Lens mount	C-mount, focal plane adjustable (optional PL-Mount)
Filter	Infrared filter, removable
Temperature	Operating temperature -25°C to +65°C, storage temperature -30°C to +70°C
Power supply	9 - 36 V DC, ~5 W
Dimensions/weight	44 x 44 x 53 mm (1.75" x 1.75" x 2.1"), 150g (5,29 oz.)
Standard equipment	Camera, camera system cable, power supply unit, CD (KDC-A)

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