HIPP Endoskop Service GmbH

>> your requirements are our aims.

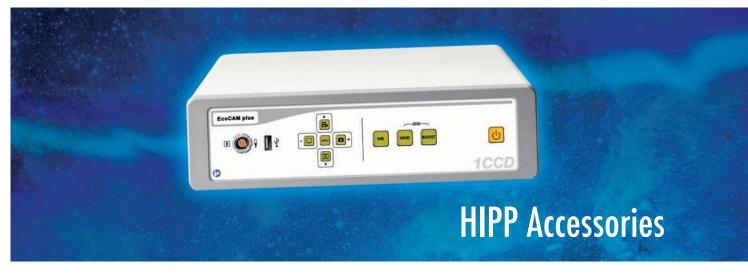


Image Processing





HIPP Borescopes

>> for industrial application.



Our vision – giving the gift of time to our customers

The optimum orientation towards our customers with their needs and requirements constitutes a constant challenge for us to make a small but valuable contribution in facilitating their daily routine. Due to a service portfolio tailored to suit the specific needs of the market and compatibility with other well-known borescope manufacturers, HIPP has evolved into one of the leading companies in the field of industrial endoscopy. We might not be a leader in terms of company size or volumes of systems installed, but certainly we are a leader in manufacturing a well-selected product range of customized borescopes.

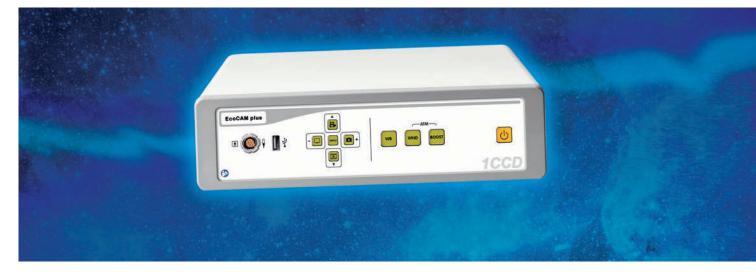
HIPP Endoskop Service GmbH was founded in July 1996 by Alexander and Frank Hipp. As integrated service providers and manufacturers we stand for traditional value structures. Our activities have always been focussed on the development, maintenance and manufacture of all types of industrial borescopes. Thanks to our extensive know-how along with the strong personal commitment of all our employees, creativity, team spirit as well as the stability and permanence of a family-owned business we guarantee the highest level of quality – "Made in Germany".

HIPP Service - customer orientation is our benchmark

Of course, customer care and after-sales service are our first priority. Spare parts supply is guaranteed for 10 years. Short repair times in the event of damage (14 days) as well as quick and uncomplicated processing are part of our standards.

HIPP Accessories

>> image processing.



State-of-the-art HIPP Camera Systems for optimum image processing

Image processing



Camera Systems

Monitors



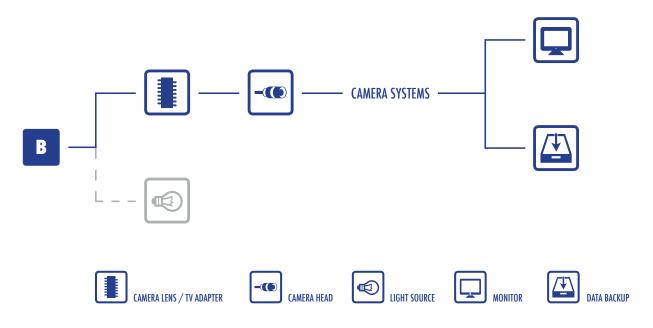
HIPP Accessories

>> modular system.



Modular System

The HIPP Accessory is compatible with various camera systems and light sources.



HIPP TV Lenses / Adapter

>> camera adaptation.





Product Profile

- Allows the adaptation of a camera to all borescopes with DIN eyepiece funnel
- C-mount thread
- Focusable

User-friendliness through maximum benefit

- Practical snap closure
- Different focal lengths available
- Reflection reduction

TV Adapter

Item	Focal length [mm]	Item-No.
TV Adapter	14	HT-0014-TV-ZU
TV Adapter	18	HT-0018-TV-ZU
TV Adapter	20	HT-0020-TV-ZU
TV Adapter	22	HT-0022-TV-ZU
TV Adapter	25	HT-0025-TV-ZU
TV Adapter	28	HT-0028-TV-ZU
TV Adapter	32	HT-0032-TV-ZU
TV Adapter	35	HT-0035-TV-ZU
Zoom/TV Adapter	18-35	HT-ZOOM-TV-ZU



HIPP Camera ECO CAM 1-CCD

>> digital video camera.



Product Profile

- Easy handling (no software required)
- Brightening and white balance
- Image resolution 752 x 582 pixels
- High-quality workmanship "Made in Germany"
- Control functions: white balance, window, gain, anti-moire
- Robust construction

Camera Head



Weight: Dimensions: 80 g
d= 29 mm; l= 55 mm



HIPP Camera ECO CAM 1-CCD

>> digital video camera.

Technical Specifications

Dimensions (WxHxD): Weight: Image sensor: Resolution: Function: Delivery:	 355 x 103 x 253 mm 4.4 kg 1/3" CCD 752 x 582 Pixel white balance CCU (Camera Control), camera head with 3 m cable, power cord, Y/C cable, BNC cable, instructions
Camera head:	 aspect ratio 4:3 retractable (with the attached cap)
System:	 power supply: 100/240 VAC, 50-60 Hz fuses: 2 x, 5 x 20 mm, delay: 3.15 AH (I=1500A) power consumption: 20W TV resolution: >470 lines sensitivity: <1 lux (1/1.4) shutter speed: PAL (NTSC): 1/50 (1/60) to 1/100.000 sec
Video-out connection:	 2 x video 2 x S-video 1 x Y-Pb.Pr (component) 1 x SDI 1 x USB 2.0
Standard:	 safety-class: I application part: type BF IEC 601-1, EN 60601-1; certifikate 93/42/EEC: I
Video system:	PAL (or NTSC on request)

Digital Video Camera

Item	Item-No.
Eco Cam 1-CCD	10-2011-00



HIPP Camera ECO CAM PLUS 1-CCD

>> digital video camera.



Product Profile

- Easy handling (no software required)
- Brightening and white balance
- Image resolution 752 x 582 pixels
- High-quality workmanship "Made in Germany"
- Control functions: white balance, window, gain, anti-moire
- Image and video storage, zoom function
- Robust construction

Camera Head

Camera head with programmable push buttons (zoom, freeze)



Weight: Dimensions: 105 g
d= 34 mm; l= 73 mm



HIPP Camera ECO CAM PLUS 1-CCD

>> digital video camera.

Technical Specifications

Dimensions (WxHxD): Weight: Image sensor: Camera head: Functions:	 355 x 103 x 253 mm 4.4 kg 1/3" CCD - mit 752 x 582 Pixel with 3 control buttons white balance screen display digital zoom
	image and video storage via USB
	HDMI output
Delivery:	 CCU (Camera Control), camera head with 3 m cable, power cord, Y/C cable, BNC cable, instructions
Camera head:	• aspect ratio 4:3
	 retractable (with the attached cap)
System:	 power supply: 100/240 VAC, 50-60 Hz
	• fuses: 2 x, 5 x 20 mm, delay: 3.15 AH (I=1500A)
	 power consumption: 20 VA
	 resolution: PAL 752 x 582/ NTSC 768 x 494
	 TV resolution: > 470 lines
	• sensitivity: $< 1 \ln (1/1.4)$
	 shutter speed: PAL (NTSC): 1/50 (1/60) to 1/100.000 sec
Video-out connection:	 2x video; 2x S-video; 1x Y-Pb-Pr (component); 1x SDI; 1x USB 2.0
Standard:	• safety-class: I
	• application part: Type BF
	• IEC 601-1, EN 60601-1; certifikate 93/42/EEC: I
Video system:	 PAL (or NTSC on request)

Digital Video Camera

Item	Item-No.
Eco Cam Plus 1-CCD	10-1259-00



HIPP FULL-HD Camera 1-MOS

>> digital video camera.



Product Profile

- Easy handling (no software required)
- Brightening and white balance
- Image resolution 1920 x 1080 pixels Full HD
- High-quality workmanship "Made in Germany"
- Control functions: white balance, window, gain, anti-moire
- Image and video storage, zoom function, freeze function

Camera Head

Camera head with programmable push buttons (zoom, freeze)

• 105 g



Weight: Dimensions:



HIPP FULL-HD Camera 1-MOS

>> digital video camera.

Technical Specifications

Dimensions (WxHxD): • 355 x 103 x 253 mm • 4.5 kg Weight: 1/3" MOS Image sensor: Camera head: • with 3 control buttons **Resolution:** • FULL HD 1920 x 1080 pixel **Functions:** • white balance screen display • 3 user settings storable • 2.5 x digital zoom • Freeze-function character generator • Image and video storage via USB (optional) **Delivery**: • camera head with 3 control buttons, power cable, Y / C cable, BNC cable, HDMI-DVI cable, HDMI cable, RGB cable, instructions Camera head: • aspect ratio 16:9 • retractable (with the attached cap) • power supply: 100/240 VAC, 50-60 Hz System: fuses: 2 x, 5 x 20 mm, delay: 3.15 AH (I=1500A) • power consumption: 20 VA • TV resolution: > 1000 lines • sensitivity: $< 3 \ln (1/1.4)$ • shutter speed: 1/50 (1/60) to 1/100.000 sec Video-out connection: • 1x HDMI / DVI 1x Y-Pb-Pr (component) • 1x Video (PAL / NTSC) 1x S-Video (PAL / NTSC) • 2x HD SDI (optional) • LAN (optional) Standard: safety-class: I • application part: Typ BF certifikate: 93/42/EEC: I • EN ISO 13485 | 93/42/EEC | IEC 601-1, EN 60601-1C **Digital Video Camera**

 Item
 Item-No.

 Full HD 1-MOS
 10-0207-00



HIPP Industry Monitor HX22

>> monitor.



Product Profile



- 22" FHD monitor
- LED backlight with FHD 1920 x 1080 resolution
- Built-in speakers (1.5 W x 2)
- Sturdy metal housing

Technical Specifications

Item	Туре	LED-backlight TFT LCD (VA Panel)
	Dimension	22″
	Max. resolution	FHD 1920 x 1080
	Pixel pitch	0.248 mm
	Brightness	250 cd/m ² (common)
	Contrast ratio	3.000 : 1 (common)
	Perspective (H/V)	170°/160° (common)
	Color display	16.7 M
	Reaction time	3 ms

HIPP Industry Monitor HX22

>> monitor.

Frequency	H.Freq	15 kHz - 83 kHz
	V.Freq	50 Hz - 85 Hz
Input	VGA	15-Pin D-Sub
	DVI	24-Pin DVI-D
	HDMI	HDMI x 1
	SDI	BNC x 1
	CVBS	BNC x 1
Output	SDI	BNC x 1
	CVBS	BNC x 1
Sound	Input	1 x stereo for PC (audio jack, 3.5 ⁻), RCA L+R for Video
	Speaker	2W x 2
SDI Format	3G-SDI (SMPTE 424M)	1080p@50/60fps
	HD-SDI (SMPTE 292M)	1080p@24/25/30fps, 1080i@50/60fps, 720p@24/25/30/50/60fp
	SD-SDI (SMPTE 259M)	480i (PAL)/ 576i (NTSC)
SDI Audio	integrated sound	up to 8 channels, 24 bit, 48 kHz
Power	Power supply	external
	Performance requirement	DC 12 V
	Consumption	< 25 W (On), < 0.5 W (Stand-by), < 0.5 W (Off)
Operating	Temperature	0° C ~ 40° C
conditions	Humidity	10 % ~ 90 % (no condensation)
Assembly	VESA FPMPMI	Ja (100 x 100 mm & 75 x 75 mm)
Dimensions	W x H x D	513 x 369 x 155 mm, (20.2" x 14.5" x 6.1")
Weight		6.9 kg (15.2 lbs)
Certificates		CB, CE, RoHs, WEEE, REACH
Delivery	CD-ROM (instructions)	Power cable, power adapter, 15-pin D-sub cable, audio cable

Industry-Monitor

Item	Item-No.
Monitor	HT-RX22-TV-ZU



HIPP Industry Monitor X-15P

>> monitor.



Product Profile



- 15" XGA monitor
- LED backlight with XGA 1024 x 768 resolution
- Built-in speakers (1.5 W x 2)
- Sturdy metal housing

Technical Specifications

ltem	Туре	LED-backlight TFT LCD
	Dimension	15.0″
	Max. resolution	XGG 1024 x 768
	Pixel pitch	0.279 mm
	Brightness	350 cd/m² (common) 700 : 1 (common)
	Contrast ratio	700 : 1 (common)
	Perspective (H/V)	170°/160° (common)
	Color display	16.7M
	Reaction time	4 ms (GTG)

HIPP Industry Monitor X-15P

>> monitor.

Frequency	H.Freq	24 kHz - sdf 81 kHz
	V.Freq	50 Hz - 75 Hz
Input	Analogue	15-Pin D-Sub
	Digital	24-Pin DVI-D
	CVBS	RCA
	S-Video	4-Pin Mini DIN
Sound	Input	1 x Stereo for PC (audio jack, 3.5 Ø)
		1 x Stereo for CVBS or S-Video (RCA)
	Speaker	1.5 W x 2
Power	Power supply	external
	Performance requirement	DC 12 V
	Consumption	< 17 W (On), < 0.5 W (Stand-by), < 0.5 W (Off)
NeoV™	Thickness	3.0 mm (0.18")
Optical glass	Reflection rate	< 2 %
	Coating hardness	> 8 H
Plug & Play	VESA	DCC 2B, DCC/CI
Operating	Temperature	0° C ~ 40° C
conditions	Humidity	10 % ~ 90 %
Assembly	VESA FPMPMI	Ja (100 x 100 mm & 75 x 75 mm)
Tilt		0° ~ + 20°
Dimensions	W x H x D	380 x 359 x 155 mm, (15.0" x 14.1" x 6.1")
Weight		4.7 kg (10.4 lbs)
Certificates		CB, FCC, CE,WEEE, RoHs, WEEE, REACH
Delivery	CD-ROM (instructions)	Power cable, power adapter, 15-pin D-sub cable, audio cable

Industry Monitor

Item	Item-No.
Monitor	HT-X15P-TV-ZU



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Image Processing



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