



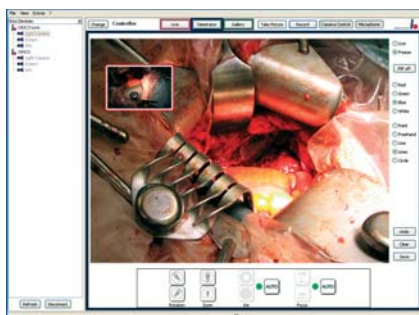
CAMERA AND COMMUNICATION SYSTEMS
FOR CHROMOPHARE® E-SERIES

ChromoVision®

A complete system or modules,
with BERCHTOLD you have the choice.

The new generation of ChromoVision® and ORICS® exhibit excellent picture capturing capabilities. This combined with an intuitive user interface allow the surgical team to concentrate on the patient rather than the equipment.

BERCHTOLD understands video and communication as a concept. The advanced ORICS® system is available as stand alone solution or integrated in the ChromoVision® 1 C camera control unit. This offers customers a great set of options and high degree of flexibility. Since surgical lights can be camera prepared, you can set up today your operating theatre for the future.



ChromoVision® 1 C: High-end 1 Chip CCD camera with multiple control options

- Engineered for universal application and superb picture quality meeting the latest industry standard in respect to optical zoom, resolution and functionality
- Low minimal working distance to use powerful optical zoom effectively
- Camera control unit with intuitive user interface and various manual and auto control options
- Available as external camera system mounted on a separate carrier arm
- Compatible with BERCHTOLD's ORICS® (Operating Room Information and Communication System)

ChromoVision® ECO: High-end 1 Chip CCD camera with manual zoom

- Very economical 1 Chip CCD camera solution
- Engineered for universal application and excellent picture quality
- Manual optical zoom control
- Available as external camera system mounted on a separate carrier arm
- Compatible with BERCHTOLD's ORICS®

	ChromoVision® ECO	ChromoVision® 1 C
Image sensor	1/4 type super HAD CCD	1/4 type super HAD CCD
Video Standard	PAL or NTSC	PAL or NTSC
Pixels	approx. 440,000 pixel	approx. 440,000 pixel
Resolution	460 lines (PAL), 470 (NTSC)	460 lines (PAL), 470 (NTSC)
Horizontal frequency	15.625 kHz (PAL) 14.580 kHz (NTSC)	15.625 kHz (PAL) 14.580 kHz (NTSC)
Image frequency	25 Hz (PAL) 30 Hz (NTSC)	25 Hz (PAL) 30 Hz (NTSC)
Min. working distance (wide end - tele end)	10 - 800 mm	10 - 800 mm
Min. illumination/sensitivity	1.0 Lux	1.0 Lux
Optical zoom factor	18x zoom	18x zoom
Digital zoom factor	4x (72x with optical zoom)	4x (72x with optical zoom)
Focal length (mm)	f = 4.1 - 73.8 mm	f = 4.1 - 73.8 mm
Auto shutter (AES)	1/50 - 1/10,000 s	1/50 - 1/10,000 s
Signal to noise ratio (S/N)	> 50 dB	> 67 dB*
White balance	automatic	automatic / manual
Focus	automatic	automatic / manual
Aperture / Iris adjustment	automatic	automatic / manual
Full camera head rotation**	no	yes
Signal output	Y/C Out, 1.0 Vp-p (sync negative)	Y/C Out, 1.0 Vp-p (sync negative)
Serial link interface	no	yes
Versions	inlight / external	inlight / external
Camera control	cardanic control/at lead head	mobile control unit
Cam. control power supply	via OR light	via OR light
Dimensions of control unit	not applicable	300 x 440 x 80 mm (L x W x H)
Weight of control unit	not applicable	5.2 kg
Power consumption	1.6 - 2.7 W / DC 6 - 12 V	1.6 - 2.7 W / DC 6 - 12 V

All technical data max +/- 10% tolerance
 * measured at control unit ** only for inlight camera versions

ChromoVision® in combination with ORICS® becomes a feature rich video communication system

- Easy-to-use stand-alone communication system
- ORICS® Client Software with features tailored to actual needs
- Full scalable networking capability, mpeg 2 or 4 real-time video streaming
- Telestrator function to support consultation, education and image based documentation
 (ORICS® is only available in selective markets)