



*My best choice*

# SmartOPTIC

COLPOSCOPES



**Smart**OPTIC

# THE **HIGH-END COLPOSCOPES** AT THE PRICE OF THE MIDDLE ONE

Colposcope SmartOPTIC  
made possible **to early** detect  
precancerous lesions



Just few minutes with SmartOPTIC  
**will inspire you with confidence!**

We are proud to introduce a SmartOPTIC medical  
colposcope dedicated for demanding users.

Solutions applied in this colposcope provide easy  
mobility and great comfort of work.



## SmartOPTIC - choice of demanding professionals

With superior optical quality, SmartOPTIC offers high optical resolution, accuracy and focal range - all that makes SmartOPTIC an indispensable tool in modern medical practice.

# WHEN HIGH EXPERTISE AND ACCURACY COUNT...

## Weight Balance System

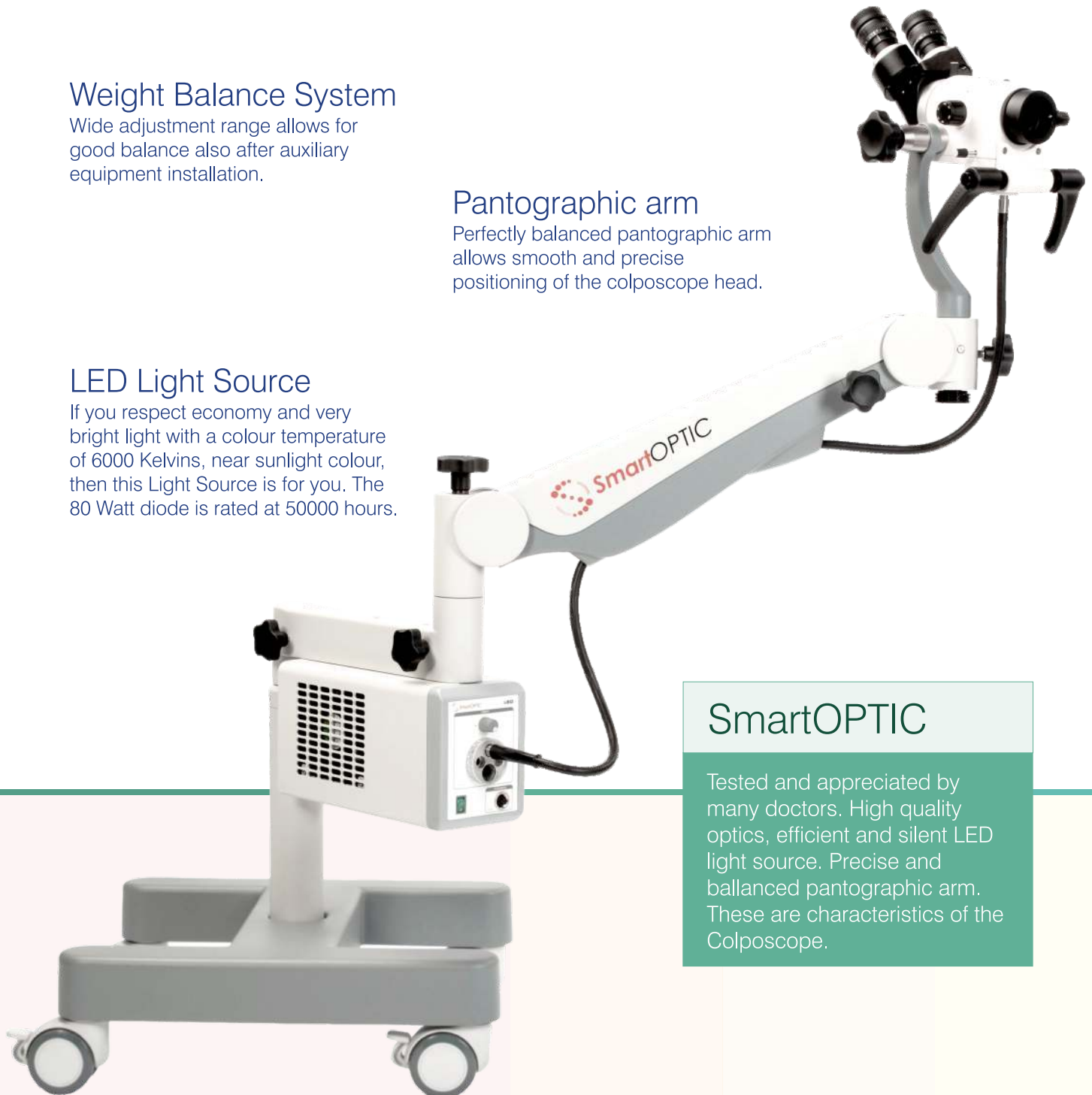
Wide adjustment range allows for good balance also after auxiliary equipment installation.

## Pantographic arm

Perfectly balanced pantographic arm allows smooth and precise positioning of the colposcope head.

## LED Light Source

If you respect economy and very bright light with a colour temperature of 6000 Kelvins, near sunlight colour, then this Light Source is for you. The 80 Watt diode is rated at 50000 hours.



## SmartOPTIC

Tested and appreciated by many doctors. High quality optics, efficient and silent LED light source. Precise and balanced pantographic arm. These are characteristics of the Colposcope.

## SmartOPTIC Eco

Lightweight, small size colposcope is a perfect solution in diagnostic procedures. Can be disassembled and reassembled without special technical skills. It is equipped with a telescopic mast and LED light source.

### High class optics

Optic with five steps of magnification. High quality without compromise no matter which model of the colposcope.

### LED Mini light source

Compact light source with LEDs 80W gives high quality light with a temperature of 6000K. Maintenance-free operation for up to 50,000 hours. Single fibre optic output.

### Telescopic mast

Vertical positioning of the head can be regulated by the telescopic mast. It helps to work with these Colposcopes even in small offices.





# HEAD... THE MAIN PART OF THE COLPOSCOPE

## Inclinable binocular\*

The binocular inclination angle 195° allows an easy adjustment to the most suitable working position.

\*It's an option.

Standard one is inclined 45°. And straight 90° and inclinable 0-195° are the optional.



## Colposcope body

All the optical parts: binocular, magnification changer and lens are located on the colposcope body.

## Magnification switch

Handy knobs located on both sides of the colposcope body gives you the ability to select one of five magnification factors.

See magnification table on page 11.

## Objective Lens

Standard focal length of the objective lens is 300 mm. It gives the most convenient working distance in most cases and preserves fine focus depth.

However, you can choose another objective lens: 200, 250 or 400 mm.

## Eye cups

They allow diopter adjustment but are also suitable for doctors working with glasses.

## Fine focus

Final precise sharpness regulation

## Slope regulation

Allow to slope head of the colposcope up or down.

## Filter

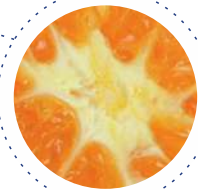
Integrated green filter when turn on is useful when blood is on working field.

## Handles

The handles on both sides of the colposcope body allow to adjust the colposcope a convenient working position. Angle of each of the handles can be adjusted easily by pressing the axially located button.



# THE MORE YOU CAN SEE, THE MORE YOU CAN DO



The modular approach in design gives you the ability to upgrade your SmartOptic colposcope at any time.

We understand how important it is to have the possibility for adjusting the colposcope to your current and future needs. With the SmartOPTIC modular philosophy it is possible whenever you need it.

You can attach the additional equipment to the colposcope with incredible ease. No extra skills are necessary to enhance your SmartOPTIC or SmartOPTIC Ergo colposcope.



## Monitor mount

Monitor stand with adjustable ball-joint can make your treatment visible for your assistant or patient. Result? Patient education and improved team work with your staff.



## Dedicated PROCAM digital camera

Ultra compact design with dedicated beam splitter. Auto white balance.  
View frame delimitation.  
Image capture button.



## Vision track with digital camera

Basic video recording and high - resolution still images for documentation, archive and educational purposes.

Customized adaptors for SLRs and most of compact cameras available on request.



## Sony NEX 5

Digital camera recommended for SmartOPTIC colposcopes.

Light-weighted, powerful camera with HD recording, 14MP sensor, Live View output and resonable price.



## Vision track with camcorder

High resolution preview and recording with your personal video camera recorder e.g. SONY Handycam.



### Functional

Camera integrated with the colposcope allows collecting documentation to which you can return even after a long time.

### Universal

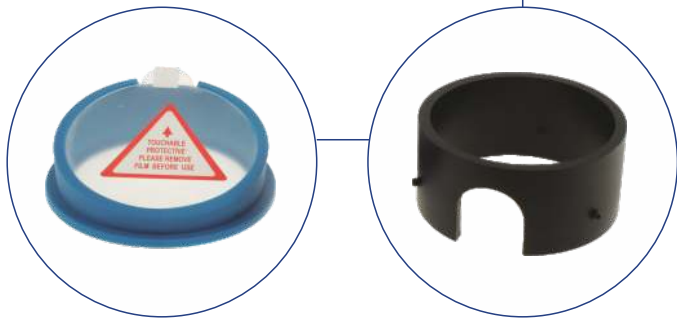
Camera systems which we propose operate well no matter which model of colposcope you choose. They can be used in SmartOPTIC and SmartOPTIC Eco.

# SMART ACCESSORIES

## VARIETY OF ENHANCEMENTS

### Lens cap

Protecting the objective lens especially while grinding.

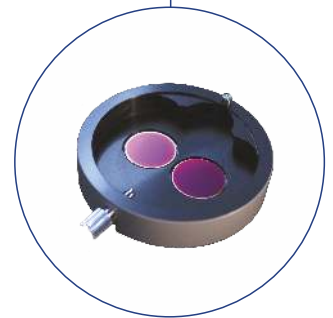


### Filters

**Green-** filter to work with patients' blood.

**Laser filter** for safe work with laser devices.

**Polarizing filter** - easy identification of tissue changes.



### Autoclavable handle covers

Preventing the infections, making your work safer for you and your patients. Covers meet high hygienic standards.



### Lenses

You can choose among variety of lenses depending on your work specification: f-200, f-250, f-300, f-400



### Arm extension

Provides an additional reach of 28 cm.

Increases the colposcope's flexibility and maneuverability in tight spaces.

## MAGNIFICATION TABLE

**Note:** The values presented in the above table are based on basic colposcope configuration. They may vary from customised configuration with additional optical components.

Objective Lens:		200				250				300				400			
	binocular:	fixed f135	inclinable f170	fixed f135	inclinable f170	fixed f135	inclinable f170	fixed f135	inclinable f170	fixed f135	inclinable f170	fixed f135	inclinable f170	fixed f135	inclinable f170	fixed f135	inclinable f170
eyepiece	knob position	magnification		field of view		magnification		field of view		magnification		field of view		magnification		field of view	
10x/16mm	1 (0.4x)	2,70	3,40	59,26	47,06	2,16	2,72	74,07	58,82	1,80	2,27	88,89	70,48	1,35	1,70	118,52	94,12
	2 (0.6x)	4,05	5,10	39,51	31,37	3,24	4,08	49,38	39,22	2,70	3,40	59,26	47,06	2,02	2,55	79,21	62,75
	3 (1x)	6,75	8,50	23,70	18,82	5,40	6,80	29,63	23,53	4,50	5,66	35,56	28,27	3,37	4,25	47,48	37,65
	4 (1.6x)	10,80	13,60	14,81	11,76	8,64	10,88	18,52	14,71	7,20	9,06	22,22	17,66	5,40	6,80	29,63	23,53
	5 (2.5x)	16,88	21,25	9,48	7,53	13,50	17,00	11,85	9,41	11,25	14,17	14,22	11,29	8,42	10,63	19,01	15,06
12.5x/16mm	1 (0.4x)	3,37	4,25	59,35	47,06	2,70	3,40	74,07	58,82	2,25	2,83	88,89	70,67	1,69	2,13	118,34	93,90
	2 (0.6x)	5,06	6,38	39,53	31,35	4,05	5,10	49,38	39,22	3,38	4,25	59,17	47,06	2,53	3,20	79,05	62,50
	3 (1x)	8,44	10,63	23,70	18,81	6,75	8,50	29,63	23,53	5,63	7,08	35,52	28,25	4,20	5,30	47,62	37,74
	4 (1.6x)	13,50	17,00	14,81	11,76	10,80	13,60	18,52	14,71	9,00	11,32	22,22	17,67	6,74	8,50	29,67	23,53
	5 (2.5x)	21,08	26,58	9,49	7,52	16,88	21,25	11,85	9,41	14,08	17,71	14,20	11,29	10,54	13,33	18,97	15,00

## BASE CONFIGURATION

	SmartOPTIC	SmartOPTIC Eco
<b>steps of magnification:</b>	5	5
<b>binocular:</b>	inclined 45	inclined 45
<b>objective lens:</b>	300 mm	300 mm
<b>filter:</b>	green	green
<b>arm:</b>	pantographjc	telescopic
<b>light source:</b>	LED	LED Mini
<b>weight:</b>	45 kg ?	25 kg ?
<b>shape of base:</b>	H-shaped	Star-shaped



## SYSTEM COMPONENTS

### Binoculars:

- with fixed angle 45° ▪ with fixed angle 90°
- with adjustable angle 0-195° ▪ all of diopter adjustment

### Lens:

- working distance 200 mm ▪ 250 mm ▪ 300mm ▪ 400mm

### Lighting system:

- halogen light source 3000K 37klux
- LED light source 6000K 50klux ▪ Xenon light source 6000K 105 klux ▪ high performance fiber optic cable

### Filters:

- green ▪ orange ▪ to work with laser ▪ polarizing

### Mounting options:

- mobile floor stand ▪ wall mount ▪ table mount

### Colposcope arm:

- standard 60 cm ▪ extended 90 cm
- 28 cm additional arm extension

### Vision track:

- dedicated digital camera with beamsplitter ▪ single beamsplitter
- double beamsplitter ▪ binocular extender with double beamsplitter ▪ camera DSLR adapter ▪ camera camcorder adapter ▪ camera Sony NEX adapter ▪ camera CCD adapter
- monitor mount

### Additional modular accessories:

- binocular rotation ring ▪ monitor mount ▪ shelf for printer
- autoclavable handle covers ▪ lens cap

We are always ready to meet our clients expectations by learning their needs and presenting the opportunities that SmartOPTIC has to offer. Our consultants will help you to choose the best option so you could perform your work as you have always desired.

# SmartOPTIC FAMILY

Dent



Ent



Gyn



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**SELIGA**  
MICROSCOPES



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**PROCAM HD 3D**

**3D SPLITTER**

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VIDEO OUTPUT- 2D	1920x1080p60 (HDMI)
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VIDEO OUTPUT- 3D	1920x1080p30 (HDMI)
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VIDEO GENERATION	2 x 1920x1080p30
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3D MODE	Side by Side
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OPERATING CONDITIONS	35 - 75 % relative humidity
	700 - 1060 hPa
	-30 +50 °C (-22 – 122°F)

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STORAGE AND TRANSPORT CONDITIONS	35 - 75 % relative humidity
	700 - 1060 hPa

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