

Colposcope Centrel Z4 TECHNICAL DESCRIPTION

Colposcope Centrel Z4 allows you to get an excellent image through the use of modern LED technology and a zoom optical system. The combination of a built-in highperformance LED, apochromatic optics and precise fitting of all parts provide unrivaled image quality.

• The stereoscopic body tilting up 30° down 30°. The binocular head is 45° inclined.

• Wide-field 10X/21 eyepieces with diopter correction +8 -5 D for wearing glasses; height adjustable and protected by rubber eyecups. The intraocular distance is adjustable in the range of 54 - 76 mm. Diameter of the field of view 21 mm.

• Lens F300 mm. 56 mm diameter lens with multi-layer anti-reflective treatment, which guarantees greater brightness and ensures a superior image quality. Working distance 300 mm.



• Manual fine focus micrometric adjustment with bilateral control: double knob incorporated in the handle of the

optic head on both the right and left side, for quick and simple positioning and greater practicality and ease of use for right and left handed users. The manual focusing allows an extremely accurate focusing in the range of up to 25 mm.

• Stand with pantograph arm, on five wheels of \emptyset 6,5 cm with brakes.

Height adjustment from 780 mm to 1130 mm and 350° arm rotation angle; equipped with anti-winding safety rotation blocks of the cables both on the optical body and on the pantograph arm.

Knob to balance the weight of the head with any accessories.

Pantograph articulated arm, self-balancing; with servo-assisted movement and maintenance-free oil piston, for simple positioning and wide maneuverability.

Surface resistant to chemical processing.

Device to reduce the size of the colposcope at rest.

• Magnifications system: variable magnification with 1: 6,5 ratio continuous zoom or 9-steps mechanism, selectable by the operator (0.62-0.8-1.0-1.25-1.6-2.0-2.5-3.2-4.0).

Correspondence among actual magnification, multiplication factor shown in the control knob and diameter of the visual field:

With Eyepieces 10 X										
actual magnification	2,9	3,8	4,7	5,8	7,6	9,5	11,5	15,2	18,9	
multiplication factor	0,62	0,8	1,0	1,25	1,6	2,0	2,5	3,2	4,0	
diameter of the visual field (mm)	93	68	55	44	34	28	22	17	14	

With Eyepieces 15 X									
actual magnification	4,3	5,7	7,0	8,7	11,4	14,2	17,2	22,8	27,8
multiplication factor	0,62	0,8	1,0	1,25	1,6	2,0	2,5	3,2	4,0
diameter of the visual field (mm)	62	45	36	29	22	18	14	11	9,2

• Sliding built-in green filter, which can be easily inserted directly from the handle of the optic body. It allows increasing the contrast of the image for a better view of the capillary structure.

• Variable LED light source integrated in the trolley of the colposcope; equivalent to 170 W halogen, adjustable by the operator. Knob for continuous adjustment from 0 to maximum intensity.

Light system with distal LED diode built in the optic head, which does not require optical fiber, nor lamp, so the maintenance costs are eliminated. Colour temperature of the light beam 4000 ° K, 35.000 lux, for real colour reproduction. Light device life 50.000 h min. Fanless: the light system does not generate heat or noise, as it does not require a fan for cooling.

Accessories of the colposcope:

• DMC130 Centrel camera. FULL HD with 5/4 format for colposcopic images. 1/3" CMOS, color, with USB connection to preserve the maximum image quality during the transfer of files acquired. Ideal for photo/video colposcopy as it is equipped with a single connection cable to the colposcope for video signal



and the power supply; it ensures maximum ergonomics in the operation, also using tools such as forceps, loops, etc. Thanks to Digital Signal Processing (DSP) technology, it offers high sensitivity guarantee excellent image quality.

• 22" LED, FULL HD, flat monitor IPS type with integrated mini PC Windows 11, installed on a special swivel/tilting arm incorporated in the colposcope structure. With HDMI and VGA ports.

• Wireless keyboard English layout, on a special shelf incorporated in the colposcope support.

• Wireless foot pedal for acquiring images and videos that does not involve the use of hands during operation.

• Software Colpox is a specific software for colposcopy, expressly created for medical reporting, with treatment of text, images and HD movies; database with name, surname, age, fiscal data, etc. Individual images can be extrapolated from the videos to be associated with the report; possibility of associating 1-2 -3 - 4 or 6 images to the report; possibility of superimposing symbols/arrows/boxes with text notes on the image.

• Low voltage power supply built into the colposcope for the accessories. The videocolposcopy system has a single connection cable to the mains.

General information:

• Frequency of the safety check: it is recommended an annual review for safety check and an electrical verification every two years. Check the instructions inside the manual.

• Production: Italian.