e-scope®

green efficiency

Riester

e-scope®

OVERVIEW

green efficiency

POCKET INSTRUMENTS 2.0

WHITE LIGHT, GREEN TECHNOLOGY

3.7V LED illumination and conventional alkaline batteries – an almost impossible combination up to now. Not just pie in the sky, but state of the art. The new e-scope® is the perfect blend of leading-edge LED technology, more efficient diagnosis and an environment-friendly energy source. Because the e-scope® breaks new ground with its world innovation, the IPC (Integrated Power Converter): younger, smarter and greener.

The innovative potential of the e-scope®

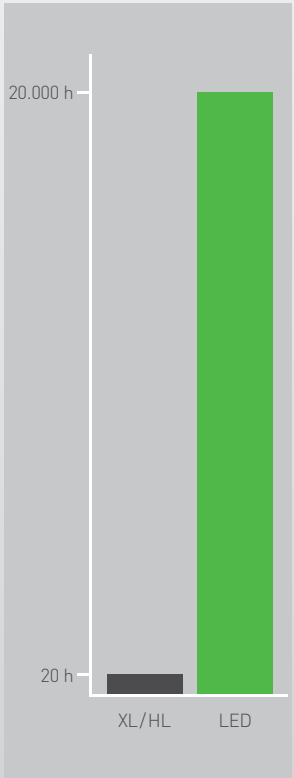
- LED technology for otoscopes and ophthalmoscopes with low-reflection, bright and white light. The pure white light (approx. 5,500 K) ensures colour-neutral illumination in addition to improved colour differentiation, thereby aiding more efficient diagnosis in comparison with halogen or xenon bulbs.

CENTREPIECES OF THE e-scope®
PIONEERING ADVANTAGES

LED illumination

For uniform illumination of the examination field with pure white light (5500 K). The LED illumination shows colours as they really are. Helpful for efficient diagnostics plus an almost unlimited service life.

Bulb service lives

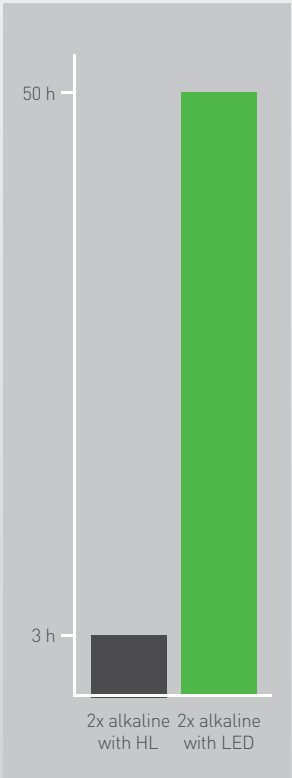


green efficiency

- Low maintenance costs thanks to long LED and battery service lives. Whilst the service life of a xenon light source is only approx. 20 hours, LED burns for at least 20,000 hours, i.e. over 2 years at a go – with e-scope®, even with two conventional AA batteries.
- Particularly high environment-friendliness, for the newly developed IPC in the e-scope® always converts the voltage of simple alkaline batteries into the optimum voltage required for LED operation, resulting in battery lives of around 50 operating hours.

Its optimum values in all these fields make the e-scope® a pioneering pocket instrument for flexible diagnosis.

Battery service lives



THE WORLD FIRST IN THE e-scope®
2 CM² OF SHEER INNOVATION

AA batteries deliver a maximum 3V. However, a 3.7V voltage means that considerably more efficient LEDs can be used. Incompatible technical prerequisites? Not anymore. With the IPC, Riester has succeeded in producing a development that revolutionises illumination of pocket instruments. Because the tiny IPC inside the e-scope® always converts the voltage of conventional AA-size batteries into the optimum voltage supply for LEDs, thereby allowing efficient operation of LED illumination with alkaline batteries. As a result, the IPC not only allows optimum light quality, but also provides economic and ecological benefits. The service life of a light-emitting diode is therefore up to 1,000 times longer than that of xenon illumination and the batteries used in the e-scope® are discharged considerably more thoroughly thanks to the IPC; consequently, they do not need to be disposed of and replaced as often.

Integrated
Power
Converter

e-scope®
SIMPLY MORE INTELLIGENT

Continuous improvement has always been Riester's claim. With the new e-scope®, a further step has been successfully taken towards optimum illumination, environment-friendliness and profitability.

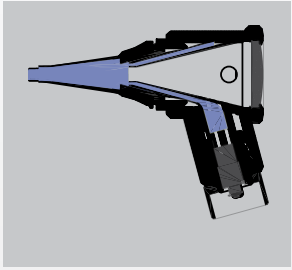
1. 3.7V LED, 2.5V xenon or vacuum illumination
2. Fibre optics
3. 3x magnifying pivoting lens
4. Reusable or disposable ear speculum
5. Pneumatic test connection
6. On/off switch
7. Battery compartment and ABS synthetic material casing

1. 3.7V LED, 2.5V xenon or vacuum illumination
2. Dioptre display
3. Dioptre adjustment wheel
4. Aperture wheel
5. Spectacle protection
6. Dust-protected casing

e-scope®
PRODUCT RANGE

e-scope® otoscopes are available with halogen or vacuum direct illumination, F.O. xenon or F.O. LED

- Sealing precision optics pivotable to both sides with triple magnification for optimum view
- Sturdy ear speculum receptacle in hardwearing hygienic metal for **e-scope®/ri-scope®** L1/L2 speculum
- Compatible with ear speculae from other renowned manufacturers
- Suitable for performance of pneumatic tests (supplied without connector and insufflator
- Available in a choice of black or white finish



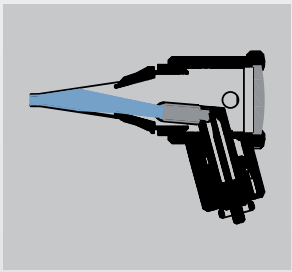
e-scope® otoscope F.O.
Fibre optics with 2.5 V xenon or 3.7 V LED illumination ensure an unimpeded, free view

e-scope® otoscope with fibre optics (F.O.)

- Economically priced fibre optic version with 2.5 V xenon (3200 K) or innovative 3.7 V LED illumination (5500 K)
- Fibre optics for optimum focusing and guiding of the light

e-scope® otoscope with direct illumination

- Inexpensive basic model with low-reflection direct illumination with a 2.7 V vacuum bulb (2500 K) or xenon illumination (3000 K)



e-scope® otoscope with direct illumination
Minimised-reflection, economically priced direct illumination with 2.5 V xenon or 2.7 V vacuum illumination

Kelvin data for otoscopes and ophthalmoscopes

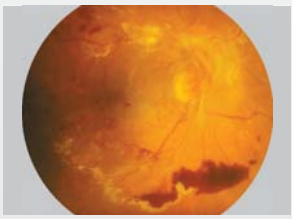
LED	Xenon	Halogen	Vacuum
5500 K	**3200 K**	**3000 K**	**2500 K**

e-scope®
PRODUCT RANGE

e-scope® ophthalmoscopes are available with vacuum, xenon or LED illumination.

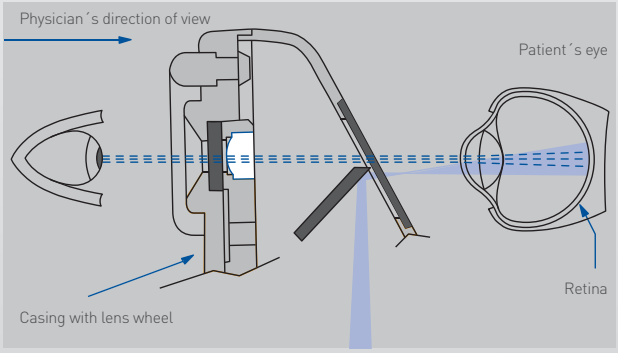
- With 2.7 V vacuum or 2,5 V xenon illumination and with innovative 3.7 V LED illumination for higher-contrast and more efficient diagnosis
- Dioptre disc with 18 corrective lenses (+/- 1, 2, 3, 4, 6, 8, 10, 15, 20 dioptres)
- Easy-to-use aperture wheel with six different apertures (fixation star, large circle, small circle, red free filter, blue filter, semi circle)
- High performance optics with aspherical condenser lens
- Spectacle protection
- Parallel optical path
- Dust-protected

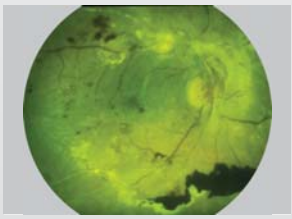
Healthy fundus



Pathological fundus

Optical path
Corneal and iris reflexes are avoided by separation of the parallel observation and illumination beams (Gullstrand's principle). The illuminated retinal area is fully visible – even with narrow pupils. Optimum conditions are achieved for ophthalmological examinations.





Fundus with red free filter

Dioptre disc
With 18 corrective lenses

D+ 1 | 2 | 3 | 4 | 6 | 8 | 10 | 15 | 20
D- 1 | 2 | 3 | 4 | 6 | 8 | 10 | 15 | 20

Apertures
With easy-to-use aperture wheel

Fixation star | Large circle | Small circle | Red free filter | Blue filter | Semi circle

ALWAYS ON HAND: POCKET-SIZE SETS

SMALL SETS FOR A HIGH LEVEL OF SAFETY

e-scope® otoscopes and ophthalmoscopes are available in an impact-resistant case or in a space-saving bag. They include special inserts in which the instruments can be perfectly stowed and offer adequate space for the battery handle and ear speculums.

e-scope® otoscope with direct illumination

• Vacuum 2.7V, in bag	☐ white	Art. No.: 2100-200
	■ black	Art. No.: 2101-200
• XL 2.5V, in bag	☐ white	Art. No.: 2100-201
	■ black	Art. No.: 2101-201

e-scope® F.O. otoscope

• XL 2.5V, in case	☐ white	Art. No.: 2110-202
	■ black	Art. No.: 2111-202
• LED 3.7V, in case	☐ white	Art. No.: 2110-203
	■ black	Art. No.: 2111-203

e-scope® ophthalmoscope

• Vacuum 2.7V, in bag	☐ white	Art. No.: 2120-200
	■ black	Art. No.: 2121-200
• XL 2.5V, in case	☐ white	Art. No.: 2122-201
	■ black	Art. No.: 2123-201
• LED 3.7V, in case	☐ white	Art. No.: 2122-203
	■ black	Art. No.: 2123-203

e-scope® otoscope with direct illumination / ophthalmoscope

• Vacuum 2.7V, in bag	☐ white	Art. No.: 2130-200
	■ black	Art. No.: 2131-200

e-scope® F.O. otoscope / ophthalmoscope

• XL 2.5V, in case	☐ white	Art. No.: 2130-202
	■ black	Art. No.: 2131-202
• LED 3.7V, in case	☐ white	Art. No.: 2130-203
	■ black	Art. No.: 2131-203

SIMPLE HANDLING

SPARES AND ACCESSORIES FOR e-scope®

Reusable ear speculums

• 2 mm	10 items	Art. No.: 10775
• 2.5 mm	10 items	Art. No.: 10779
• 3 mm	10 items	Art. No.: 10783
• 4 mm	10 items	Art. No.: 10789
• 5 mm	10 items	Art. No.: 10795

Disposable ear speculums

• 2 mm	100 items	Art. No.: 14061-532
	500 items	Art. No.: 14062-532
	1000 items	Art. No.: 14063-532
• 2.5 mm	100 items	Art. No.: 14061-531
	500 items	Art. No.: 14062-531
	1000 items	Art. No.: 14063-531
• 3 mm	100 items	Art. No.: 14061-533
	500 items	Art. No.: 14062-533
	1000 items	Art. No.: 14063-533
• 4 mm	100 items	Art. No.: 14061-534
	500 items	Art. No.: 14062-534
	1000 items	Art. No.: 14063-534
• 5 mm	100 items	Art. No.: 14061-535
	500 items	Art. No.: 14062-535
	1000 items	Art. No.: 14063-535

Pneumatic test accessories

- Insufflator — Art. No.: 10960
- Metal connector for the pneumatic test — Art. No.: 10961

Replacement bulbs

- **for e-scope® F.O. otoscope**
  XL 2.5 V, pack containing 6 items — Art. No.: 10600
  LED 3.7 V — Art. No.: 14041
- **for e-scope® otoscope with direct illumination**
  Vacuum 2.7 V, pack containing 6 items — Art. No.: 10488
  XL 2.5 V, pack containing 6 items — Art. No.: 10489
- **for e-scope® ophthalmoscope**
  Vacuum 2.7 V, pack containing 6 items — Art. No.: 14050
  XL 2.5 V, pack containing 6 items — Art. No.: 10605
  LED 3.7 V — Art. No.: 14051

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