



e-scope®

green efficiency



MERCOFRAMES OPTICAL CORP

5555 Nw 74 Ave. Miami, Fl. 33166
www.mercoframes.net
ale@mercoframes.net

 **Riester**

Impressions	03
Product characteristics	04
Technology	06
Functional description	07
Products	
e-scope® Otoscopes	08
e-scope® Ophthalmoscopes	09
Sets	10
Spares & accessories	11



green efficiency

e-scope®

OVERVIEW

e-scope®

IMPRESSIONS

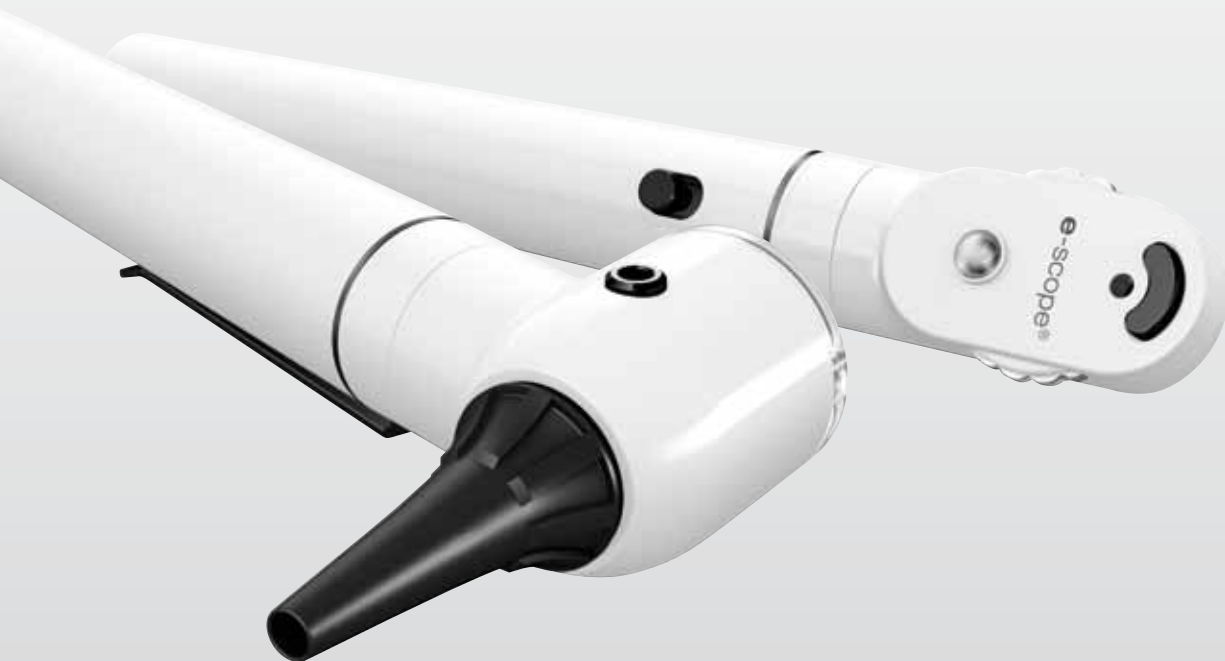


POCKET INSTRUMENTS 2.0 WHITE LIGHT, GREEN TECHNOLOGY

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.



e-scope®

PRODUCT CHARACTERISTICS

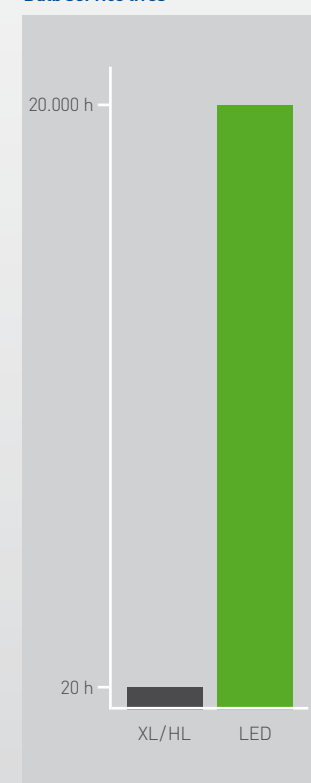
CENTREPIECES OF THE e-scope® PIONEERING ADVANTAGES



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

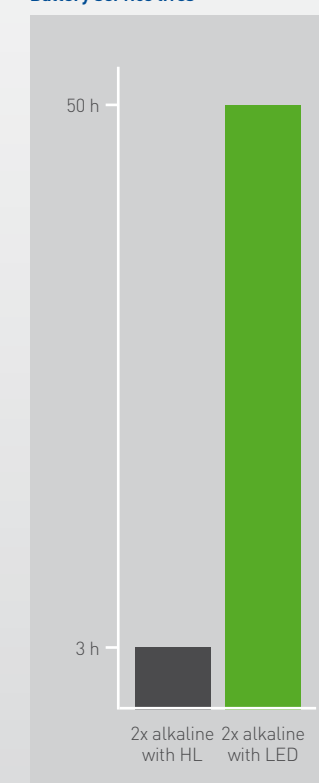


green efficiency

- 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



e-scope®

PRODUCT CHARACTERISTICS

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.



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.



e-scope®
PRODUCT RANGE



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

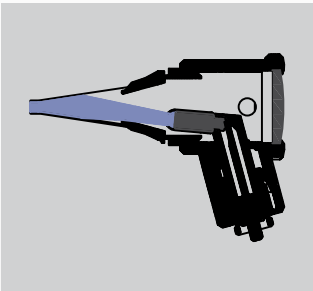
- Sealing precision optics pivotable to both sides with triple magnification for optimum view
- Sturdy ear speculum receptacle in hardwearing hygienic metal for e-scope®/ri-scope® L1/L2 speculum
- Compatible with ear speculae from other renowned manufacturers
- Suitable for performance of pneumatic tests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

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

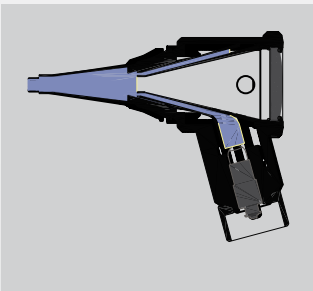
- Economically priced fibre optic version with 2.5V xenon (3200 K) or innovative 3.7 VLED illumination (5500 K)
- Fibre optics for optimum focusing and guiding of the light

e-scope® otoscope with direct illumination

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



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



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

Kelvin data for otoscopes and ophthalmoscopes

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



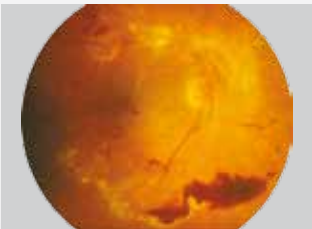
e-scope®
PRODUCT RANGE

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

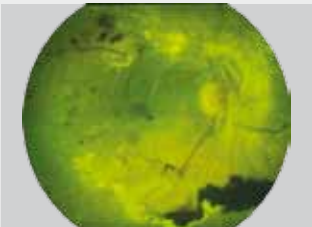
- With 2.7V vacuum or halogen illumination and with innovative 3.7V LED illumination for higher-contrast and more efficient diagnosis
- Dioptre disc with 18 corrective lenses (+/- 1, 2, 3, 4, 6, 8, 10, 15, 20 dioptres)
- Easy-to-use aperture wheel with six different apertures (fixation star, large circle,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



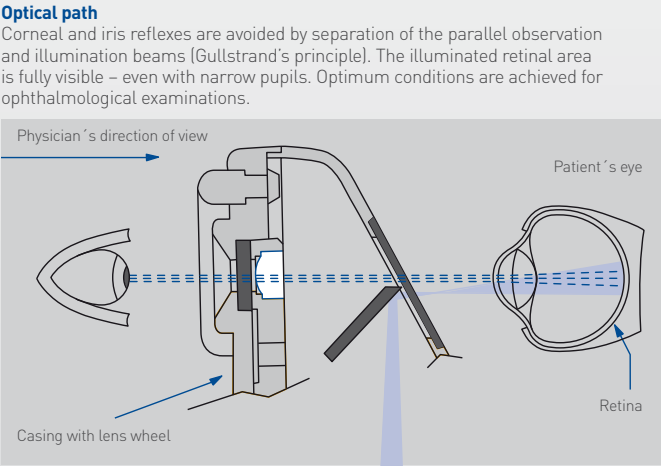
Healthy fundus



Pathological fundus



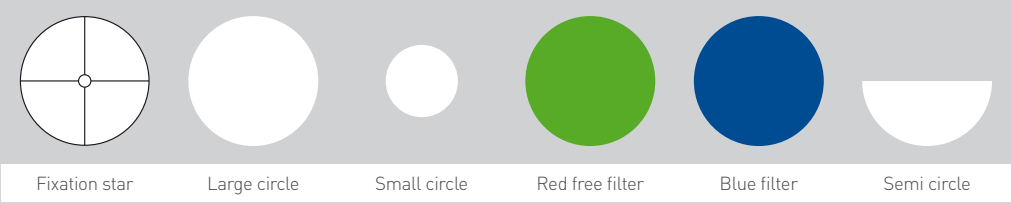
Fundus with red free filter



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



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 | <input type="checkbox"/> white | Art. No.: 2100-200 |
| | <input checked="" type="checkbox"/> black | Art. No.: 2101-200 |
| • HL 2.5V, in bag | <input type="checkbox"/> white | Art. No.: 2100-201 |
| | <input checked="" type="checkbox"/> black | Art. No.: 2101-201 |

e-scope® F.O. otoscope

- | | | |
|---------------------|---|--------------------|
| • XL 2.5V, in case | <input type="checkbox"/> white | Art. No.: 2110-202 |
| | <input checked="" type="checkbox"/> black | Art. No.: 2111-202 |
| • LED 3.7V, in case | <input type="checkbox"/> white | Art. No.: 2110-203 |
| | <input checked="" type="checkbox"/> black | Art. No.: 2111-203 |

e-scope® ophthalmoscope

- | | | |
|-----------------------|---|--------------------|
| • Vacuum 2.7V, in bag | <input type="checkbox"/> white | Art. No.: 2120-200 |
| | <input checked="" type="checkbox"/> black | Art. No.: 2121-200 |
| • HL 2.5V, in case | <input type="checkbox"/> white | Art. No.: 2122-201 |
| | <input checked="" type="checkbox"/> black | Art. No.: 2123-201 |
| • LED 3.7V, in case | <input type="checkbox"/> white | Art. No.: 2122-203 |
| | <input checked="" type="checkbox"/> black | Art. No.: 2123-203 |

e-scope® otoscope with direct illumination / ophthalmoscope

- | | | |
|-----------------------|---|--------------------|
| • Vacuum 2.7V, in bag | <input type="checkbox"/> white | Art. No.: 2130-200 |
| | <input checked="" type="checkbox"/> black | Art. No.: 2131-200 |

e-scope® F.O. otoscope / ophthalmoscope

- | | | |
|---------------------|---|--------------------|
| • XL 2.5V, in case | <input type="checkbox"/> white | Art. No.: 2130-202 |
| | <input checked="" type="checkbox"/> black | Art. No.: 2131-202 |
| • LED 3.7V, in case | <input type="checkbox"/> white | Art. No.: 2130-203 |
| | <input checked="" type="checkbox"/> black | Art. No.: 2131-203 |

SIMPLE HANDLING
SPARES AND ACCESSORIES FOR e-scope®



Reusable ear speculums

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

Disposable ear speculums

- | | | |
|---------|------------|---------------------|
| • 2mm | 100 items | Art. No.: 14061-532 |
| | 500 items | Art. No.: 14062-532 |
| | 1000 items | Art. No.: 14063-532 |
| • 2.5mm | 100 items | Art. No.: 14061-531 |
| | 500 items | Art. No.: 14062-531 |
| | 1000 items | Art. No.: 14063-531 |
| • 3mm | 100 items | Art. No.: 14061-533 |
| | 500 items | Art. No.: 14062-533 |
| | 1000 items | Art. No.: 14063-533 |
| • 4mm | 100 items | Art. No.: 14061-534 |
| | 500 items | Art. No.: 14062-534 |
| | 1000 items | Art. No.: 14063-534 |
| • 5mm | 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 2.5V, pack containing 6 items | Art. No.: 10600 |
| LED 3.7V | Art. No.: 14041 |
| • for e-scope® otoscope with direct illumination | |
| Vacuum 2.7V, pack containing 6 items | Art. No.: 10488 |
| HL 2.5V, pack containing 6 items | Art. No.: 10489 |
| • for e-scope® ophthalmoscope | |
| Vacuum 2.7V, pack containing 6 items | Art. No.: 14050 |
| HL 2.5V, pack containing 6 items | Art. No.: 10605 |
| LED 3.7V | Art. No.: 14051 |

