PlusOptix_Folder_A09uA12_gruen_GB_Neu0815_210108403_PlusOptix_Flyer_4000 26.08.15 16:45 Seite 1

Technology of measurement

plusoptiX A09 (stationary)

plusoptiX A12C (mobile)

reddot award 2014
winner

plusoptiX A12R (mobile)

Optional:

- +3,00 dpt glasses with super antireflection coating for accommodation test, incl. leather case
- Carrying case for plusoptiX A12C or A12R

For further information concerning references, studies and doctors in Germany, Austria, Switzerland, Belgium and Luxembourg, working with a plusoptiX device, please refer to our homepage. www.plusoptix.eu

The measuring principle is based on eccentric photo-retinoscopy. Infrared light is projected through the pupils onto the retina. Depending on the refractive error, the reflected light forms a specific brightness pattern within the pupil. The spherical refraction is calculated based on this crescent pattern. To determine cylinder and axis, the same measurement is repeated in three meridians. The measurement with infrared light is completely innocuous. Infrared light is also contained in daylight and not visible.

MEASUREMENT	A09	A12C	A12R
Sphere*)	-7,0/+5,0 dpt in 0,25 dpt steps		
Cylinder*)	-7,0/+5,0 dpt in 0,25 dpt steps		
Axis	1-180° in 1° steps		
Pupil size	4,0 - 8,0 mm in 0,1 mm steps		
Acquisition time	dynamic, in average 0,8 sec.	dynamic, in average 0,5 sec.	
Measuring distance	1 meter (+/- 5 cm)		
Fixation target	Warble sound		
TECHNICAL DATA			
Monitor resolution	1024 x 768 Pixel Ratio 4:3	5,7" touch screen	4,3" touch screen
Interfaces	4 x USB, 1 x VGA, 1 x RJ-45	2 x USB, WLAN	SD-Card –
Voltage	100 – 120 V / 220 – 240 VAC		
Frequency	50 – 60 Hz		
Battery operation	no	6 x AA	
Certified	EN 60601, CE and FDA		

*) Binocular and monocular, spherical equivalent

plusoptiX
eye·vision·technology

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Made in Germany
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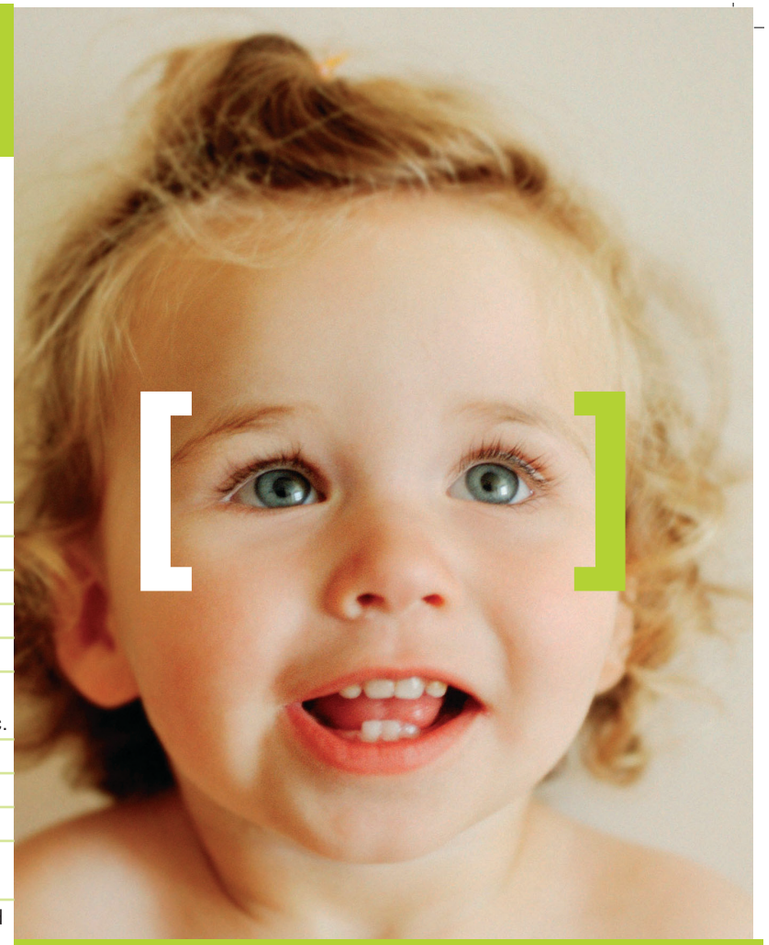

Paediatric Autorefractor

Binocular refraction measurement

- Designed for infants, children and uncooperative patients
- From one meter away in less than one second

Application

Plusoptix has developed hand-held autorefractors especially for infants, children and uncooperative patients.

The plusoptiX A09 has been designed to be used stationary in the doctor's office. The plusoptiX A12C and A12R are battery operated devices and can easily be used in multiple exam rooms.

Each device measures both eyes simultaneously and provides reliable measurement values of refraction, pupil diameter, interpupillary distance and symmetry of corneal reflexes. With the binocular measurement anisometropia and anisocoria can be detected immediately.

Used in un-dilated pupils, measurements of hyperopia, myopia, astigmatism and anisometropia provide valuable data for a quick vision examination. Results can additionally be used as a starting point for retinoscopy or to confirm retinoscopic results.

plusoptiX A09 - Pediatric Autorefractor
for stationary use in one exam room

Unique features

The measurement from one meter distance is reliable and delegable. Even children with nystagmus and uncooperative patients can be measured in less than one second. It is possible to measure over glasses and contact lenses.

If a retinoscopy in cycloplegia is required, it proceeds faster because of the existing measurement values, especially cylinder and axis. Furthermore, you have a result to compare with.

The entry examination of infants and children in your practice will be substantially simplified with a plusoptiX device.

Because of the fully automated function of all plusoptiX devices, the measurement can easily be performed by an assistant.

plusoptiX A12C - Mobile Pediatric Autorefractor
for mobile use in multiple exam rooms

Measurement results

- Refraction (Sphere, Cylinder and Axis)
- Symmetry of corneal reflexes
- Pupil diameter and pupil distance

MEASUREMENT VALUES	A09	A12C	A12R
Transfer to practice network	LAN	WLAN	–
Patient database	✓	✓	–
Measurement report	Optional	–	–
Screenshot/Measurement results	✓	✓	✓
Adhesive label for patient record	✓	✓	✓

Measurement report for parents