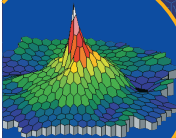


RETIsCan[®]

multifocal ERG/VER

Made in Germany

The electrophysiological test unit



First order and second order ERG/VER

in accordance with ISEV guidelines



ERG



VER



with correction possible for foveal control



upgradeable to standard
VER, ERG, EOG, Pattern ERG

CARE  GROUP
1994

 **ROLAND**
INSTRUMENTS
Electrophysiological Diagnostic Systems

DESCRIPTION

Electrophysiological test unit RETiscan®, multifocal photopic ERG from 19, 37, 61, 103, to 241 points of the retina and multifocal VER to 60 points of the cortex

Utilizing the unique short corrected m-sequence (patent pending) to generate a stimulus (flash, pattern and color) via a high class specially selected 21 colour monitor (60 Hz frame rate) on 30 angle visual field, the state-of-the-art RETiscan® offers an objective patient test to quantify the retinal response.

The stimulated area respond in accordance with the special algorithm and deliver an individual reproducible ERG signal for each segment (1 segment is 1 hexagon). Each cycle comprises a complete short length m-sequence and takes as little as 30 seconds for up to 60 stimulus segments and less than one minute for 100 or 241 segments. The final raw data result is derived from a free selectable number of cycles by averaging. Artefacts are detected within a selectable range and are discarded automatically. A pre set test run sequence may be interrupted for any reason, continued or the current cycle discarded.

Additionally the RETiscan® gives the opportunity to link it to different Rodenstock Scanning Laser Ophthalmoscope (SLO), red stimulus or Heidelberg Retina Angiograph (HRA), blue and green stimulus to give simultaneously a topographic and functional electrophysiological result of the visually controlled retinal area. Markers for a grid (waves from the ERG graph) are set automatically but may be placed manually for each ERG to check the recorded amplitude and latency.

The RETiscan® incorporate a high sensitive two channel amplifier with an outstanding signal to noise ratio.

The instrument is useful for monitoring the disease process of the local retina-at-cortex. It is now also possible to measure the mVEP on the visual cortex.

TECHNICAL DATA

- ▶ CRT stimulation unit
- High quality brand industrial PC-System
- 21" color-monitor, luminance 120 cd/m²
- high-contrast 98%
- frame frequency > 60/75 Hz
- resolution 576x
- stimulation-software
- ▶ operating unit
- ATX Pentium IV (2) / GHz/50GB HDD/2GB RAM/3,5" FDD
- CDROM for database backup
- monitor 15" TFT
- analog-digital-converter 12Bit
- printer HP desk jet
- keyboard, mouse
- Windows XP®
- RETiscan® mVEP and mERG software
- ▶ biological-amplifier 3-6 channel
- type BF check-voltage 1,5 V_r
- digital controlled amplifier
- input impedance 2 x 100 Mohm per input
- noise < 4µV (peak-peak max)
- common mode rejection < 110 dB
- high frequency filter 0,02 Hz to 1 kHz 12 dB/oct.
- low frequency 20 Hz to 30 kHz 12 dB/oct.
- gain approx. 800.000
- electrode impedance < 10k

OPTIONS

- it's possible to use as option a special tube (IR light and camera) to control the eye movement
- All in one upgradeable WINETIPart® soft- and hardware (ERG, VER, EOG, Pattern ERG, ISCEV standard)
- special options for animals

CE 0197



Electrophysiological Diagnostic Systems

Gaucha & Enger GmbH

Deitweg 46, 34400 Nilly, Sompberg Str. 9
D-44129 Wittenberg, Germany
Tel: +49 020 71 - 84 70 74 Fax: +49 020 71 - 4 46 73 24

Deitweg 1, 31061 Friedeb. Franz Str. 10
D-14175 Brandenburg, Germany
Tel: +49 30 4908 3281 - 3233 27

www.roland-consult.de e-mail: info@roland-consult.de

Groupware

CARE GROUP

Software



Info System Care Pk (IS)

Info System Care Pk (IS) is a software solution for the management of the patient's medical history and the patient's medical data. It is a software solution for the management of the patient's medical history and the patient's medical data. It is a software solution for the management of the patient's medical history and the patient's medical data.