

Kamplex r17a - Portable Audiometry



GENERAL SPECIFICATIONS

DIMENSIONS AND WEIGHT

- L x W x H: 180x135x41mm
- Net weight: 450g
- Body material: self-extinguishing ABS

TEST TYPES

- Pure tone test, speech test (performed with on-board recorded speech material), autothreshold, Kamplex play audiometry and SUN test (speech under noise)

DISPLAY

- 7" TFT resistive touch screen display
- 800 by 480 resolution at 133px per inch (ppi) 262K colours

USER INTERFACE

- Intuitive icon system

REPORTS

- Data transfer to PC with Kamplex management data suite installed

DATA TRANSFER TO PC

- Bluetooth 2.1

USB PORT

- No.1 USB host type A (pen drive connection for software upgrade)
- No.1 mini USB slave A (for patient response connection)

WINDOWS® COMPATIBLE SOFTWARE

- Kamplex MDS Management Data Suite

MAIN SYSTEM COMPONENTS

- Operative system: Microsoft® Windows® Embedded Compact
- CPU: ARM® core @ 312MHz low power (0,8W typ.)

POWER

POWER SUPPLY

- Built-in 3,6V/3,1 Ah rechargeable lithium-ion battery
- External medical power supply/charger:
- Input 100 - 240V ac / 0,3A - 50/60 Hz; Output +5V dc / 2A

CONSUMPTION (WITH RECHARGEABLE BATTERY)

- Up to 3 hours of testing on speech test modality
- Charge time with external medical power supply: up to 80% in 2 hours

ENVIRONMENTAL

TEMPERATURE

- Storage: -20° C up to +50° C
- Operating: +15° C up to +35° C
- Humidity: up to 90% (non condensing)
- Ambient pressure: from 700hPa up to 1060hPa

AUDIOMETRY OPERATING SPECIFICATIONS

RANGE

- Frequency range (AC):
125 - 8000 Hz (r17a-AC; r17a-BC)
125 - 12500 Hz (r17a-HDA)
- Frequency range (BC):
250 - 6000 Hz (r17a-BC; r17a-HDA)

ACCURACY

- Frequency < 0,5%
- Distortion < 1%
- Crosstalk >70dB
- Attenuator linearity 1dB per 5dB step, max 3db whole range
- Range stimuli level -10 up to 110dB HL

TYPE OF SIGNALS

- Pure tone: sine wave 125 to 8 kHz signal (to 12,5KHz for r17a-HDA)
- Warble: +/- 5% frequency sine wave modulated, modulation: sine wave 5 Hz
- Narrow band noise: 24dB/oct filtered noise
- Speech noise: 1kHz 12dB/oct filtered noise
- White noise
- Speech material recorded on internal SD card
- On/Off rise – fall time 40msec

OUTPUT TRANSDUCERS

- ACR, ACL: 10 ohm DD45 matched pair earphone (alternatively HDA280 Sennheiser, ER3A/5A Eartone)
- BC: B71W Radioear

STIMULUS PRESENTATION MODALITY

- Presentation: Normal
- Modality: Steady, Pulsed (rate 2 Hz)
- dB step variation: 1dB, 2dB, 5dB

COMPLIANCE / REGULATORY STANDARDS

STIMULUS PRESENTATION MODALITY

Designed, tested and manufactured to meet the European and international standards:

- MDD 93/42/EEC and update 2007/47/CEE: Class IIa (as referred to in Annex IX, rule 10 of said MDD 93/42 EEC)
- Safety: IEC 60601-1, 3rd edition, Class II Type BF, EMC: IEC 60601-1-2
- Audiometer: EN 60645-1 and ANSI S3.6: Type 3 (r17a-HDA; r17a-TDH), Type 4 (r17a-AC) EN 60645-2 (only for the functions regarding the speech test; the device is not an A or B model)

STANDARD ACCESSORIES

- DD45 or HDA280 headphones
- B71W bone conductor (only r17a-TDH and r17a-HDA)
- Built-in talk over microphone for patient communication
- Patient response push button (only r17a-TDH and r17a-HDA)
- Multilingual quick user's handbook
- Kamplex MDS software
- Medical power supply (110Vac – 220Vac)
- Carrying bag
- Charging cradle
- Pen drive (with multilingual quick user's handbook)

OPTIONALS

- External USB keyboard
- EAR3-A/5A Insert headphones
- USB external camera
- RE-play Audiometry for children
- Wall mount kit
- Patient response push button (for AC)

QUALITY SYSTEM

Manufactured, designed, developed and marketed under an ISO 13485, ISO 9001 certified quality system. Medical CE marks and FDA approval.