

NYSTAGMUS SPECTACLES - DR. FRENZEL

• 31204 NYSTAGMUS SPECTACLES - DR. FRENZEL

Easy to use in the search of spontaneous or provoked nystagmus. Fixed, biconvex lens + 18.0 diopters. Nystagmus spectacles should be connected only with < 4.2V transformer as from safety norms 93/42/EEC, see "GIMA6" at page 128. Made in Germany.

• 31206 BATTERY NYSTAGMUS SPECTACLES

This model allows wireless working and is not bound to power supply. The Nystagmus Spectacle is provided with power through the adjustable battery placed above the spectacle and requires three 1.5 Volt batteries, size C LR14/AM-2 (baby cells). Illumination can be adjusted through a turn of the switch.

• 31130 AC/DC TRANSFORMER - see at page128.

• 31208 NYSTAGMUS LAMP - spare

4 Volt 0.230 Ampere, 1 Watt threading diam. 3.5 x 0.35 mm



TRANSFORMER NOT REQUIRED

VIDEONYSTAGMOSCOPE SYSTEM

• 31210 VIDEO-NYSTAGMOSCOPE SYSTEM - Spectacles and 1 camera

It facilitates to view and register the Nystagmus, reached through standard vestibular tests (both position and instrumental proof). This system allows to view on the monitor images of patient eyes during tests and also allows to make Visual Suppression Test (VST) through one red led ignition inside the mask to allow fixation. This useful and practical diagnostic system, thanks to its small dimension and reduced weight becomes fundamental for vestibular practise. Innovative technology used in the system allows to get images of quality that make the professional activity easy.

Power 220V (12V DC).

• 31211 ADDITIONAL CAMERA for 31210 To see both eyes on monitor at same time.

• 31212 MONITOR for 31210 - black/white 14" monitor - 1000 TV lines - 220 V



PORTABLE AUDIOMETER

• 33601 PA5 AUDIOMETER

• 33602 TDH39 AUDIOMETRIC HEAD PHONE

The pediatric audiometer PA5 is a free field audiometer for testing children's hearing. With children old enough to cooperate, it is possible to connect a single TDH39 head phone to the PA5 and obtain audiometric thresholds. With a headphone attached, the PA5 automatically adjusts to the correct calibration for the TDH39. Main features:

- Warble tones and narrow band noise
- White noise for easy detection
- Triangle light simulation
- COR, APR, and VRA test
- Silent presentation button
- Automatic battery switch and indicator



TECHNICAL SPECIFICATIONS

Frequencies: 500, 1000, 2000, 3000, 4000 Hz.
 Stimuli: Warble tone, NB and WN
 Intensities: Distance 50 cm: 20/30-80dB HL in 10dB steps, for Warble Tone and WN.
 10/20-70dB for NB
 Distance 16 cm: increases intensity by 10 dB.
 Weight: 360 g
 Dimensions: LxWxH: 25x7x5cm
 Power supply: 3AA batteries (included)

OTOREAD™ - PORTABLE OAE WITH PRINTER

• 33607 OTOREAD SCREENER TE

• 33608 OTOREAD COMBO DP+TE

DPOAE AND TEOAE

The OtoRead™ is a fast, automatic handheld OAE instrument for testing newborn babies, children and adults. A fast and quiet thermal printer is included with the OtoRead™. A simple interface from the cradle to the printer will transfer all of the test data within seconds.

| TECHNICAL SPECIFICATIONS | |
|-----------------------------|--|
| Measurement type | OtoAcoustic Emissions. |
| Frequency range DPOAE | 1.5, 2, 2.5, 3, 3.5, 4, 5, 6, 8, 10, 12 kHz. |
| Frequency range TEOAE | 0.7, 1, 1.4, 1.5, 2, 2.5, 2.8, 3.5, 4 kHz. |
| Stimulus intensity | 40 to 70 dB SPL (DPOAE). 83 dB SPL (TEOAE). |
| Maximum output (Protection) | 90 dB SPL. (This level is well within OSHA permissible limits of 90 dBA for 8 hours). |
| Microphone system noise | -20 dB SPL @ 2 kHz (1 Hz bandwidth). -13 dB SPL @ 1 kHz (1 Hz bandwidth). |
| Battery life | Approximately 300 tests. |
| Display | LCD-display 4 line x 10 character. |
| Weight | 300 g/ 10.6 oz. including batteries. |
| Internal software languages | English, German, French, Spanish, Russian. |

| TE | |
|--|---|
| Screeener (1 fixed protocol) | 6 bands 1.5-4 kHz |
| DP+TE | |
| Combo (2 fixed +2 customizable protocols for DP and TE - a total of 4 protocols) | 6 bands 1.5-12 kHz 6 bands 700-4 kHz |



100-240 V, 50-60 Hz power supply

16 languages manual:
GB, DE, F, S, GR, I, P, DK, FI, E, PL, EE, N, RO, LT, NL,



Full printout of both ears in 7 seconds

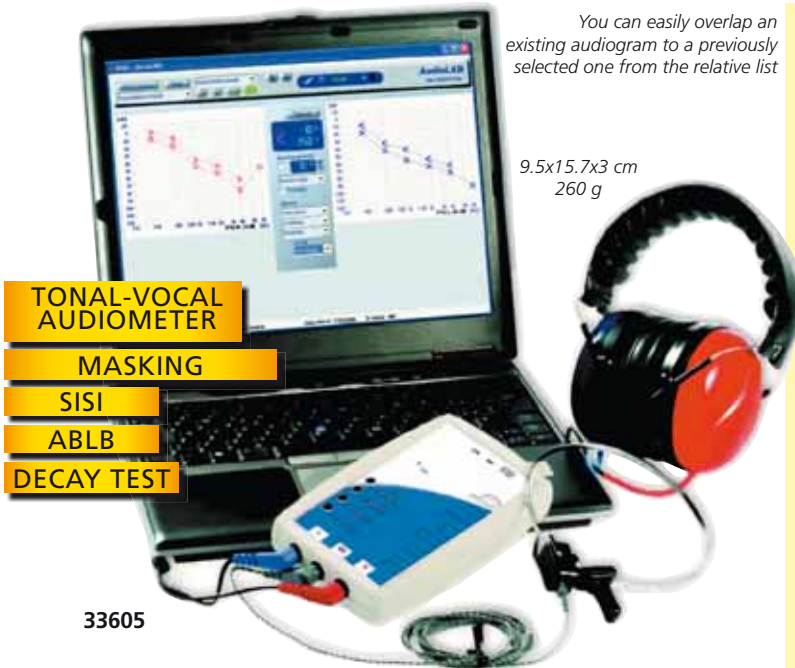


Weight: 300 g

STANDARD ACCESSORIES

Handheld unit (OtoRead™) including probe cord and Cradle
 Printer including power supply and power cable, Printer Cable, Carrying Bag, Probe cord for extension (100 cm/39 inches), 2 Thermal printer paper rolls
 Box of 146 eartips (10 sizes; 3, 4, 6, 7, 8, 9, 10, 11, 12, 13 mm), 4 probe tips
 4 AA/UW3/R6 Alkaline Batteries, Operation / CE manual

CLINICAL DIGITAL 2 CHANNELS PC AUDIOMETER



You can easily overlap an existing audiogram to a previously selected one from the relative list

9.5x15.7x3 cm
260 g

- TONAL-VOCAL AUDIOMETER**
- MASKING**
- SISI**
- ABLB**
- DECAY TEST**

33605

- **33605 AUDIOLAB AUDIOMETER**
All the technologies of a digital 2 channels clinical audiometer in only 250 g. You can perform audiometry test directly on your PC display, save on your database and print when necessary. PC not included. Made in Italy.
- **33604 AUDIOLAB "ML" AUDIOMETER**
Same as code 33605 but without SISI, ABLB BEKESY and DECAY and VOCAL TEST functions. This device is addressed to occupational doctors and general practitioners.

TECHNICAL SPECIFICATIONS

Clinical audiometer two channels (EN 60645-1)
Type 1 A-E (EN 60645-1 - EN 60645-2) - Type 2 A-E (ANSI S 3.6)
Number of channels: 2, identical and independent
Output AC R - AC L - AC R+L - BC R-L - FF R - FF L - FF R+L
Masking contralateral with AC, BC, FF
Pure tone freq. AC: 125 - 8.000 Hz, BC: 250 - 8.000 Hz, FF: 125 - 8.000 Hz
Intensity range (1.000 Hz) - 10 + 120 dB HI

| Transducer | PURE TONE 1,000 Hz | | | |
|------------|--------------------|------|-----|-----|
| | TDH49 | ER3A | B71 | FF |
| Db HL | 120 | 115 | 75 | 100 |
| NBM | 95 | 95 | - | 95 |

| Transducer | TDH49 | ER3A | B71 | FF |
|------------|-------|------|-----|----|
| | Db HL | 100 | 100 | - |
| NBM | 95 | 95 | - | 95 |

- Speech Audiometry**
- Vocal material** • List of the words installed into internal flash memory
 - CH1 - CH2 independent inputs, CD1, CD2 two separate VU-Meters,masking noise SM and WM.
- Signal mode** • Normal ON - Normal OFF
 - Continuous - pulsed
 - Warble - frequency modulated ± 5% rate 5 Hz
 - ABLB, SISI with increment 1-2-3-4-5 dB, DECAY TEST, BEKESY (only 33605)
 - PAT RESPONSE
 - TALK - BACK
 - TALK - FORWARD
 - Digital output for control Peep-Show
- Accuracy**
 - Resolution 16 Bit
 - Precision ± 50 ppm
 - Stability ± 100 ppm
 - Distorsion < 1%
 - Ratio signal/noise > 100dB
 - Power supply: USB port
- PC system requirements** Microsoft Windows XP, Vista
- Made in Italy

STANDARD ACCESSORIES

- Head phone TDH 49
- Radio EAR B.71 bone vibrator
- Pat response
- USB cable
- CD with software
- Operating manual

HANDHELD IMPEDANCE AUDIOMETER/TYMPANOMETER

- **33645 MT10 IMPEDANCE AUDIOMETER**
- **33646 MTP10 IMPEDANCE AUDIOMETER - with printer**
- **33647 PAPER ROLL - 80 mm thermal paper**
- **33648 SPARE EARTIPS Ø 6/7/15/18 mm - piece**
- **33672 EARTIPS Ø 9mm - box of 100**
- **33673 EARTIPS Ø 10mm - box of 100**
- **33674 EARTIPS Ø 11mm - box of 100**
- **33675 EARTIPS Ø 13mm - box of 100**

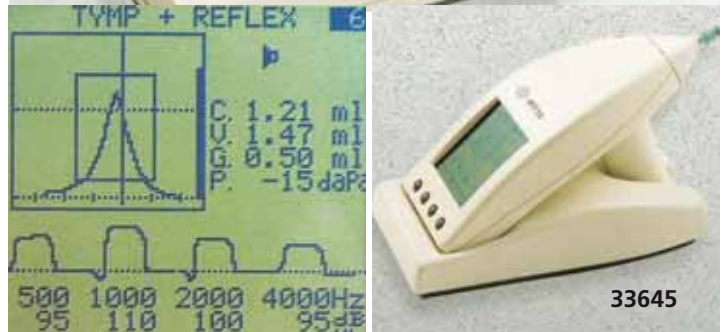
MT10 is an automatic, portable impedance audiometer for both screening and clinical applications

- Main features:**
- automatic Tympanometry test
 - pass/fail limits on screen
 - 4 acoustic reflex tests per ear
 - actual reflex response is recorded
 - reflexes tested at correct pressure
 - automatic reflex search
 - audiometric screening
 - memory for 20 patients
 - calculates gradient
 - many printing options
 - rechargeable batteries
 - large high resolution display

| TECHNICAL SPECIFICATIONS | |
|------------------------------|--|
| Tests | Normal: +200 to -300daPa Extended: +300 to -600daPa |
| - Tympanometry | |
| - Acoustic Reflex Test | 4 reflexes per ear Automatic Intensity Search or Fixed Stimulus Intensity Intensities: up to 110 dBHL (100 dBHL at 3-4 kHz) Frequencies: 0.5 kHz, 1 kHz, 2 kHz, 3 kHz, 4 kHz. Actual reflex recorded and displayed |
| - Screening Audiometry | Intensity: 10 dBHL to 50 dBHL Frequency: 0.5 kHz, 1 kHz, 2 kHz, 3 kHz, 4 kHz. |
| Probe Tone | Frequency: 226 Hz ± 3% Amplitude: 85 dB SPL ± 3 dB |
| Pressure | Direction of Sweep: positive to negative Pump Speed: 250 - 350 daPa/sec. Resetting Time: 0 Seconds. Pressure Accuracy: +/- 10% or 10daPa |
| Internal Memory | Tympanometry, 4 reflex recordings and Audiogram for Left as well as Right ear. 20 patients' full testing scheme. Selective patient storing. |
| Power supply | 3 High quality rechargeable NiMH batteries included. |
| Weight and Dimensions | MT 10 Weight: 500 g MT 10 Dimensions: 10x25x13 cm |



16 languages manual:
GB, DE, FR, SE, GR, IT, PT,
DK, FI, ES, PL, EE, N,
RO, LT, NL, HU, NO, IS



Acoustic reflex test

STANDARD ACCESSORIES

- Base station with built-in thermal printer, charging and "interface to PC (only code 33646)
- 3 rolls of thermal paper
- power supply
- 3 NiMH rechargeable batteries
- set of eartips
- multilanguage operation manual (in 16 languages)
- service manual

PORTABLE AUDIOMETERS

33612

- 33610 AUDIOMETER AS5-A - air conduction
- 33612 AUDIOMETER AS5-AOM - air+bone+masking
- 33620 TEST RESULTS PAD
- 33621 INSULATION DEVICE for air conduction phone (insulation 3-4 db)
- 33622 AIR CONDUCTION PHONE TDH39 - spare
- 27139 CARRYING BAG - nylon

Gima audiometers have a microprocessor allowing simple and quick measure audition levels. All the operations can be made by a membrane keyboard and visualized on an alphanumeric LCD display of 16 characters.

FREQUENCY AND SOUND PRESSURE LEVELS

| Frequency | 250 | 500 | 1000 | 2000 | 3000 | 4000 | 6000 | 8000 | Hz |
|----------------------|------------------------|-----|------|------|------|------|------|------|-------|
| Max. pure tone ac | 90 | 105 | 105 | 105 | 105 | 105 | 90 | 80 | dB HL |
| Max. pure tone bc | 40 | 50 | 50 | 50 | 50 | 50 | - | - | dB HL |
| Min. pure tone ac/bc | -10 | -10 | -10 | -10 | -10 | -10 | -10 | -10 | dB HL |
| Level increments | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | dB HL |
| Frequency accuracy | ±3% at all frequencies | | | | | | | | |
| Levels accuracy | ±3 dB | | | | | | | | |
| | ISO 389, UNE 74-020-78 | | | | | | | | |



AUDIOMETERS FEATURES

| | 33610 AS5-A | 33612 AS5-AOM |
|------------------|-------------|---------------|
| Air conduction | • | • |
| TDH39 phones | • | • |
| Continuous tone | • | • |
| Pulse tone | • | • |
| Signal indicator | • | • |
| Masking noise | • | • |
| Bone conduction | • | • |
| Bone vibrator | • | • |
| Patient response | • | • |
| LCD display | • | • |

TECHNICAL SPECIFICATIONS

Channels: one
 Masking noise (33612 only): White noise
 Level range = 30 to 80 dB SPL
 Levels increments = 5 dB
 Power supply: 220 V 50/60 Hz, 15 W
 Dimensions: 342x246x95 mm Weight: 2,5 Kg
 Norm: UNE 20-613, IEC 601.1 Made in Europe

STANDARD ACCESSORIES

- 1. Air conduction phones TDH-39
- 1. Bone conduction phone (only for 33612)
- 1. Patient response switch
- 1. Test results pad (100 sheet)
- 1. Pen (red, blue)
- User manual (English and Italian, Spanish on request)

CLINICAL 2 CHANNEL AUDIOMETER

Dimension: 390x260x105 mm
 Weight: 2.4 kg without accessories

LCD alphanumeric backlight 2x16

CE 0318



Programme to personalise the audiometer according to the needs of the user

- 33623 SIBELSOUND 400-A AUDIOMETER - air conduction
- 33624 SIBELSOUND 400-AOM AUDIOMETER - air + bone + masking
- 33626 SIBELSOUND 400-SUPRA AUDIOMETER - air + bone + mask + suprathreshold tests + software
- 33628 INTERCOM KIT (headphone + microphone)
- 33621 INSULATION DEVICE for air conduction phone
- 33629 AUDIOMETRY SOFTWARE W50

The SIBELSOUND 400 is a two-channel digital audiometer based on DSP processing. This audiometer is designed for quick and easy audiometric exploration of hearing thresholds and screening tests, such as suprathreshold pure tone tests (FOWLER-ABLB, TONE DECAY, WEBER, LOSCHER, ...).

- Air conduction (TDH 39): 125 - 8,000 Hz or HF: 8,000 - 20,000 Hz with optional HDA 200
- Levels: AC (-10 to 120 dB HL) / BC (-10 to 70 dB HL) / speech (-10 to 100 dB HL) free field (-10 to 80 dB HL)
- Masking levels (manual or synchronized): NBN AC (-10 to 100 dB HL) NBN BC (-10 to 70 dB HL) white & speech (-10 to 100 dB SPL)
- Tone: continous, pulse, antenate, amplitude modulation.
- Level increases: 5 (A-AOM), 1 or 5 (SUPRA)

- Frequency precision: ±1%/ level precision ±2% db SPL

- Automatic calculation of hearing loss and diagnosis (COUNCIL, IM, SS MEXICO, ELI, SAL, KLOCKHOFF, MOH, OTHERS ...)

- Direct USB connection to PC to W50 audiometry software for viewing, storage, transmission, analysis and introduction of audiometric tests in a Microsoft Windows® environment.

FREQUENCIES AND LEVELS

| STANDARD FREQUENCY | 125 | 250 | 500 | 750 | 1,000 | 1,500 | 2,000 | 3,000 | 4,000 | 6,000 | 8,000 | 8,372 | Hz |
|--------------------------|------------------------------|------|--------|--------|--------|--------|--------|--------|--------|-------|-------|--------|--------|
| MUSICAL FREQUENCY | 131 | 262 | 523 | - | 1,047 | - | 2,093 | - | 4,186 | - | 8,372 | - | Hz |
| Air conduction (THD 39) | 80 | 100 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 110 | 110 | - | dB HL |
| Bone conduction (B 71) | - | 50 | 60 | 60 | 70 | 70 | 70 | 70 | 70 | - | - | - | dB HL |
| Free field | - | 70 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | - | - | dB HL |
| MASKING NOISE | | | | | | | | | | | | | |
| Narrow bandwidth AC | 60 | 80 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 90 | - | dB HL |
| Narrow bandwidth BC | - | 50 | 60 | 60 | 70 | 70 | 70 | 70 | 70 | - | - | - | dB HL |
| White AC | - | - | - | - | 100 | 100 | 100 | 100 | 100 | - | - | - | dB SPL |
| Speech | - | - | - | - | 100 | 100 | 100 | 100 | 100 | - | - | - | dB SPL |
| LOGO-AUDIOMETRY | | | | | | | | | | | | | |
| Air conduction | 100 | | | | | | | | | | | dB SPL | |
| Free field | 80 dB at 1m from the patient | | | | | | | | | | | dB SPL | |
| HIGH FREQUENCY | 8000 | 9000 | 10,000 | 11,200 | 12,500 | 14,000 | 16,000 | 18,000 | 20,000 | | | | Hz |
| Air conduction (HDA 200) | 90 | 90 | 90 | 90 | 50 | 50 | 50 | 50 | 50 | | | | dB HL |
| Minimum levels | | | | | | | | | | | | | |
| All options | -10 | -10 | -10 | -10 | -10 | -10 | -10 | -10 | -10 | -10 | -10 | -10 | dB HL |
| HIGH FREQUENCY | -20 | -20 | -20 | -20 | -20 | -20 | -20 | -20 | -20 | -20 | -20 | -20 | dB HL |

Communication system:

- Print directly to a USB printer
- With W50 audiometry software: Transfer information from the unit's internal database to a PC
- Communicate with a PC in real time
- Export patient tests to other management systems (EMR)
- Update the unit's internal firmware



SIBELSOUND 400 FEATURES

| | A | AOM | SUPRA |
|---|---|-----|-------|
| Air conduction TDH 39 | • | • | • |
| Bone conduction B71 | • | • | • |
| Masking by narrow band noise & white noise | • | • | • |
| Sisi test | | | • |
| Supraliminal tests | | | • |
| Speechaudiometry + Intercom module | | | • |
| Musical frequencies | | | • |
| Data base 1000 tests | | • | • |
| W50 audiometry software | | • | • |
| User manual English, Italian (available on request French or Spanish) | • | • | • |

CLINICAL 2 CHANNEL AUDIOMETER



- **33630 AC 50 PROFESSIONAL AUDIOMETER air + bone conduction** Permits speech audiometry, hearing loss calculations and all types of audiometric tests, both screening and liminar-supraliminar, including diagnostic tests like: PURE TONE, SISI, VOCAL DISCRIMINATION, ABLB, LÜSCHER, WARBLE, STENGER and others. It can be connected to a printer which will produce the audiogram and hearing-loss assessment and to a PC, through an RS-232 C channel, to store and manipulate audiometric tests. AC50 comes complete with air and bone cuffs, patient response with switch, intercom kit (33633) and user manual.
- **33633 INTERCOM KIT (headphone+microphone) - spare**
- **33631 SOFTWARE**



TECHNICAL SPECIFICATIONS

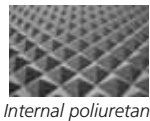
Channels: two
 Transducers: THD 39, B-71 or B-72
 Tone presentation: Continuous - Pulse - Frequency Modulation - Amplitude Modulation - ABLB - SISI
 Tone switching: Normal-Inverted tone switch - With key without noises
 Standards: • Safety: IEC 601.1, EN 60601.1
 • Audiometry: IEC 645.1, IEC 645.2 UNE20-641
 • Calibration: ISO 389, ISO 7566, UNE 74-020
 Outputs: Channel RS232 C - For HP - PCL or IBM Graphics printer
 Internal Memory: Capable of storing 50 patients
 Power supply: 220V 50/60 Hz (other options)
 Size: 470x250x95 mm
 Weight: 4.5 Kg

| FREQUENCY | 125 | 250 | 500 | 750 | 1000 | 1500 | 2000 | 3000 | 4000 | 6000 | 8000 | Hz |
|---------------------------|---------------------|-----|-----|-----|------|------|------|------|------|------|------|-------|
| MAX LEVELS | | | | | | | | | | | | |
| Pure tone Air Conduction | 80 | 100 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 110 | 100 | dB HL |
| Pure tone Bone Conduction | - | 50 | 60 | 60 | 70 | 70 | 70 | 70 | 70 | - | - | dB HL |
| Free field | - | 70 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 80 | - | dB HL |
| MASKING NOISE | | | | | | | | | | | | |
| Narrow-band noise AC | 60 | 80 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 90 | dB HL |
| Narrow-band noise BC | - | 40 | 50 | 50 | 60 | 60 | 60 | 60 | 60 | - | - | dB HL |
| Speech noise AC | | | | | | 100 | | | | | | dB HL |
| Speech noise BC | | | | | | 70 | | | | | | dB HL |
| SPEECH/AUDIOMETRY | | | | | | | | | | | | |
| Air Conduction | | | | | | | 100 | | | | | dB HL |
| Free field | | | | | | | 70 | | | | | dB HL |
| Min. levels | -10 | -10 | -10 | -10 | -10 | -10 | -10 | -10 | -10 | -10 | -10 | dB HL |
| Levels increments | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | dB HL |
| Frequency accuracy | 2% at all frequency | | | | | | | | | | | |
| Levels accuracy | ±2 dB | | | | | | | | | | | |

AUDIOMETRIC BOOTHS



28 dB



Internal poliuretano

33650 + 33651



32 dB



45 dB

- **33650 PRO 25 - 91X91X193 cm**
 - **33651 TABLE 79X50 cm**
- Portable, compact, model, easy to install in few minutes without screws. Made in plastic laminate, with internal autoextinguishing, polyurethane, insulating panels. Module for cable connection.

| ACOUSTIC INSULATION | | | | | | | |
|---------------------|------|------|------|------|------|------|--|
| Hertz | 125 | 250 | 500 | 1000 | 2000 | 4000 | |
| PRO 25 dB | 18,0 | 16,0 | 26,7 | 30,8 | 28,8 | 30,9 | |
| PRO 30 dB | 23,4 | 24,1 | 27,8 | 34,5 | 31,3 | 36,4 | |
| PRO 45 dB | 20,0 | 33,5 | 36,3 | 42,5 | 42,1 | 50,4 | |

- **33654 PRO 30 - 106X106X218 cm**
 - **33655 PRO 30 - 209X106X218 cm**
 - **33656 PRO 30 - 209X209X218 cm**
 - **33657 PRO 30 - size on request available any size from 1x1 to 3x3**
 - **33651 TABLE 79X50 cm**
- Range with different sizes, with high noise reduction and internal ventilation system. Made in aluminium and laminate with internal fire-proof, polieuretano insulating panels. Available with 60 or 90 cm doors. Module for cable connection. Made in Italy.

- **33660 PRO 45 - 216X216X220 cm**
 - **33661 PRO 45 - 318x216x220 cm**
 - **33662 PRO 45 - size on request available any size from 1x1 to 6x6**
 - **33651 TABLE 79X50 cm**
 - **33652 RAMPS couple for disabled people**
- Top of the range, with vast selection of sizes, up to 6x6 m, with excellent noise reduction (-45 dB) and internal ventilation system. Made in aluminium and laminate with fire-proof polyurethane insulating panels. Available with large door 90 cm and module for cable connection. Made in Italy.

| | TECHNICAL SPECIFICATIONS | | | | | |
|--------------------------------|--|--------------|--------------|--------------|-------------------------------------|--------------|
| | 33650 | 33654 | 33655 | 33656 | 33660 | 33661 |
| External size (cm): | 91x91x193h | 106x106x218h | 209x106x218h | 209x209x218h | 216x216x220h | 318x216x220h |
| Internal size (cm): | 85x85x186h | 94x94x202h | 197x94x202h | 197x197x202h | 195x195x200h | 297x195x200h |
| Door size cm: | 55x168h | 60x200h | 90x200h | 90x200h | 85x186h | 85x186h |
| opening: | Left/Right | Right* | | Right* | Right* | |
| Windows size cm: | 58,5x58,5 | 58,5x58,5 | | 42,5x62,5 | | |
| material: | 2 - crystal insulating safety glass | | | | 4 - crystal insulating safety glass | |
| Wall thickness cm: | 5 | 7,5 | 7,5 | 7,5 | 11,6 | 11,6 |
| Weight (kg): | 150 | 230 | 364 | 540 | 850 | 1117 |
| Ventilation: | no | yes | yes | yes | yes | yes |
| Tested noise reduction dB: | 28 | 32 | 32 | 32 | 45 | 45 |
| Internal illumination power V: | 220 | 220 | 220 | 220 | 220 | 220 |
| Norms: | Class Medical Devices European Directive 93/42 CEE | | | | | |



Cable connection module

- ### STANDARD ACCESSORIES
- Module for silent audiometer cable connection
 - Internal illumination
 - Ventilation system (PRO 30, PRO 45 only)
 - Wooden box for transport
 - Manual: English, Italian

*Left opening available on request

SONOST 3000 - ULTRASOUND BONE DENSITOMETER

• **33996 SONOST - 3000 with software Waterless Ultrasound Bone Densitometer (BMD).** Sonost 3000 is a portable, economic solution for evaluating the risk of osteoporotic fracture.

Its high accuracy assists in the first diagnosis of osteoporosis monitoring bone changes.

It provides fast, convenient and easy-to-use informations on bone quality and fracture risk.

Main features:

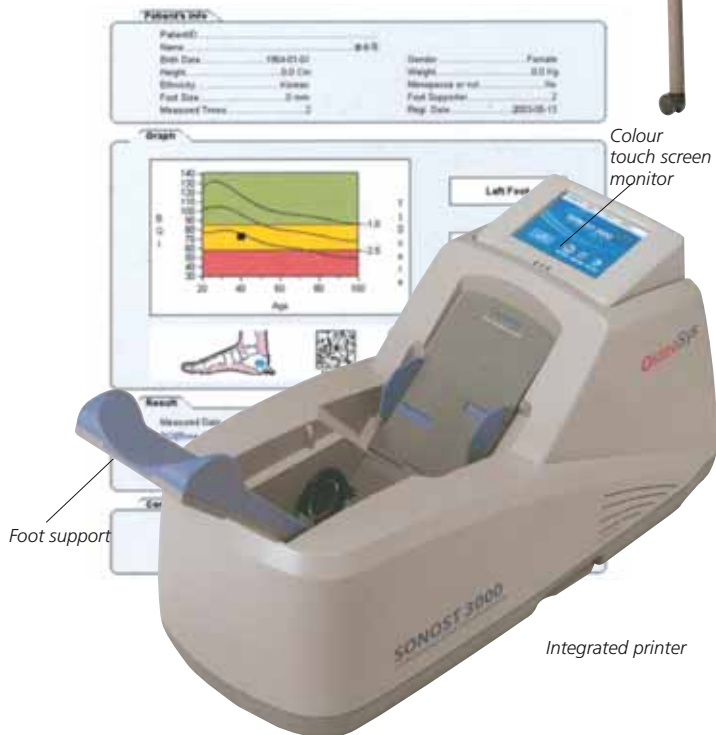
- Superior precision
- Full dry and stand alone system
- Fast measurement (only 15 seconds)
- Auto positioning probe
- Permanent coupling pad
- Over 10,000 memories



Easy to use
Multilanguage
software
(ENG-FRA-SPA-
GER-ITA)

No radiation hazard

Integrated printer



Colour touch screen monitor

Foot support

Integrated printer

TECHNICAL SPECIFICATIONS

| | | | |
|--------------------|---|-------------|-------------|
| Measurement site: | Calcaneus (Heel bone) | | |
| Scan Time: | 15 seconds | | |
| Measurement: | Estimated heel BMD and Bone Quality Index (BQI) Obtained from measured Broad band Ultrasound Attenuation (BUA) and Speed of Sound (SOS) | | |
| Estimated Index: | SOS (C.V.%) | BUA (C.V.%) | BQI (C.V.%) |
| In Vivo: | 0.2 | 1.5 | 1.5 |
| Transducer: | 25 mm - 100 mm | | |
| Separation range: | Automatic adjustment | | |
| Storage capacity: | 10,000 patient information | | |
| Coupling method: | coupling gel (water not used) | | |
| Display: | 6.4 inch TFT LCD (65536 colour) | | |
| User Interface: | Touch screen | | |
| | USB for connection to mouse or keyboard | | |
| Printer: | Thermal Printer | | |
| Operating voltage: | AC 100W-240W - 50/60Hz - 130W | | |
| Dimension: | 30x62x39 cm | | |
| Weight: | 12 Kg | | |

DOCTOR'S OFFICE TOOLS - PROMOTIONAL GADGETS

• 50000 OPTICAL MINI MOUSE

Ergonomic compact mouse with USB interface, 30% smaller than traditional mice, ideal for use with portable PC.



Compatible with Win 95, 98, 2000, ME, XP, NT.

Size: 6.4x2x0.8 cm

- 50050 USB MEMORY - 512 MB
- 50051 USB MEMORY - 1 GB

USB external memory flash drive. Compatible with Win, Mac OS, Linux. Supplied with installation CD-Rom, 1 m USB cable and neck strap. Material: plastic and aluminium.



• 50300 4 in 1 LASER POINTER PEN

Multifunction metal pen with laser pointer, black ballpoint pen and plastic PDA stylus. Supplied with 3 extra button cell batteries and additional ink refill. Packing: Metal gift box. Battery: included



• 50010 OPTICAL MOUSE

Ergonomic reliable optical mouse with USB interface available with standard cable or wireless. Compatible with Win 95, 98, 2000, XP, NT.



• 50150 MP3 PLAYER - 1 GB

MP3 and WMA files player with radio. USB 2.0 connection. 96x26 dot matrix display with blue back-light, icon interface, multi-language OSD. Easy download by 'drag & drop'. Song title will be displayed (patented MPEG system) with 5 standard equalizer set up (Normal, Rock, Jazz, Classic, Pop). More than 10 hours no-stop music. Battery: 1 x AAA included



• 50030 MOUSE PAD USB

Large mouse pad with integrated USB 1-1 HUB with 4 USB sockets, to connect more devices to PC at the same time (mouse, printers, cameras...). Directly fits into PC by a 150 mm cable. Compatible with Win 95, 98, 2000, ME, XP, NT. Size 28x23x6 cm.



• 50080 INTERNET USB PHONE

It makes possible to have telephone calls using Internet connection (Voip). Compatible with Skype, SJ-Phone, X-Lite, MSN, Net2Phone softwares. Inner sound card 16 Bit. Plug & Play, charged by USB connection to PC. Battery: included. Size: 12x4.8x3 cm



PEAK FLOW METERS: DIGITAL AND MECHANICAL



- 33434 PIKO-1 - digital peak flow meter
- 33444 PIKO-6 - digital peak flow meter
- 33436 PC DOWNLOAD DEVICE + software
- 33437 MOUTHPIECES - box of 10 pcs

PIKO-1™ is the world's first pocket sized electronic peak flow and FEV₁ meter. The new PIKO-6™ in addition to FEV₁, measures FEV₆ and FEV₁/FEV₆. Sophisticated features include automatic test quality alerts and electronic data storage of 96 tests. Data can be reviewed via a single operating button, eliminating the errors associated with paper diaries. Prices compare to mechanical peak flow meters. **PIKoNET software.** All tests can be easily downloaded for tracking and trending. Results can be saved in pdf format.

TECHNICAL SPECIFICATION

| | |
|---------------------------------------|---|
| PEF: | Range 15 - 999 L/min (1 L/min resolution) |
| FEV ₁ , FEV ₆ : | Range 0.15 - 9.99 Litre (0.01 Litre resolution) |
| Accuracy: | PEF: ±5% or 20 L/min (whichever is greater) FEV ₁ : ±3.5% or 0.1 Litre (whichever is greater) FEV ₆ : ±4% or 0.1 Litre (whichever is greater) |
| Sensor: | Pressure/flow sensor technology (patented) |
| Non-volatile Memory: | 96 patient test scores |
| Colour zone: | 3 colour zone (green, yellow, red) |
| Reference values: | User settable |
| Quality factor: | Warning & indicator for cough or abnormal blow |
| Communication: | Bi-directional IR port (RS232 format) |
| Dimensions-Weight: | 75x35x20 mm - 35 g |



- 33431 POCKET PEAK - standard 60-800 l/min - cream
- 33433 POCKET PEAK - low 50-400 l/min - yellow

The Pocketpeak Peak Flow Meter is designed to provide simple and reliable home asthma management. Lightweight and easy to use, it provides accurate and reliable measurements time and time again. It is easy to clean and features a universal mouthpiece. The EU/ATS Scale Pocket peaks will not only comply with the new European Standards but also with ATS (American Thoracic Society) Standards. Standards range pocket peak will cover 60-800 litres/min, low range will cover 50/400 litres/min. Package includes multilingual directions for use and peak flow diary, all packed in a cardboard box. Made in USA. Size 86 x 81 x 30 mm. Weight 45 g. Standards: EN 13826:2003

- 33432 UNIVERSAL MOUTHPIECES - re-usable
- 33410 DISPOSABLE MOUTHPIECES - box of 500

LUNG EXERCISE DEVICE



- 33442 RESPIPROGRAM

Device to exercise the respiration through inspiration. The respiratory-exerciser Respirogram helps the patient to recover the normal respiration after a chest or abdominal surgery. The device is composed of: 1 base, 3 small balls different in dimension and colours, 1 transparent central part, divided into 3 rooms, 1 tube and mouthpiece. Each unit packed in single box. Made in Italy. User manual: English, Italian.

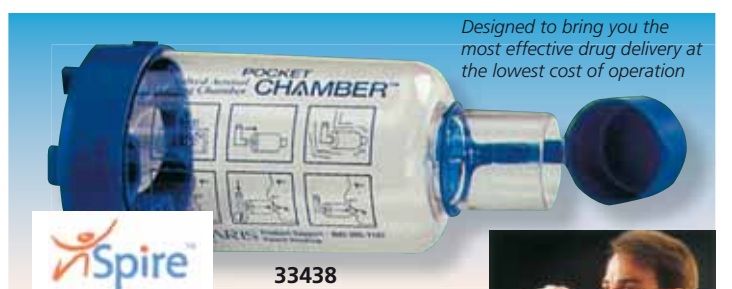
- 33445 TRI-BALL® - respiratory exerciser

The respiratory-exerciser Tri-Ball® helps the patient to recover the normal respiration after a chest or abdominal surgery. User manual in English, French, German, Italian, Spanish.

33445



AEROSOL HOLDING CHAMBER



- 33438 POCKET CHAMBER

Now you can manage your asthma conveniently and effectively with a truly pocket-sized device, proven as effective as MDI chambers nearly twice its size. The Pocket Chamber delivers a high concentration of respirable aerosol, to help provide relief from asthma symptoms while capturing large particles and reducing unwanted side-effects.

- Whistle alerts patients if inspiratory rate is exceeded
- Effective, affordable alternative to expensive aerosol delivery
- Flexible port accepts virtually any MDI's mouthpiece

TECHNICAL SPECIFICATION

| | |
|--|--------------------|
| Size: 108 x 47.5 mm | Volume: 110 ml |
| Mouthpiece: 22mm OD | Weight: 33 g |
| Materials: All Latex Free Silicone | Warranty: One year |
| User Manual: in English, Spanish, French, German, Italian, Dutch, Portuguese, Turkish and Greek. | Made in USA |

SPIROBANK II - PORTABLE SPIROMETER WITH SPO₂ OPTION

- **33511 SPIROBANK II + WINSPIROPRO SOFTWARE**
Spirometer with 6,000 spirometry test memory capacity, with possibility to insert patient name, Bluetooth® connection to HP printer
- Internal temperature sensor for automatic BTPS conversion
- High resolution/high visibility graphic display
- Patient identification by name or ID code
- Automatically records the best 3 trials
- USB cable, carrying case and software included
- **33513 SPIROBANK II + SOFTWARE + OXYMETER**
same as above with Oximeter with 1,000 hours (40 days) oximetry recording, for measuring and saving into PC of:
- Short or long term (overnight) SpO₂ and Pulse Rate measurements
- ODI, NOD, T90%, T89%; T88% and T87% calculation
- Sleep apnea detection with desaturation events recording
- Walk Test (6MWT) with SpO₂ and Pulse Rate analysis
- 24 hours holter test
- SpO₂ range: 0-99%, Pulse Rate range: 30-254 BPM
- **33525 ANTIBACTERIAL FILTER - box of 50 disposable**
- **33507 DISPOSABLE TURBINE - box of 100**

Winspiropro software functions:

- On-line PC connection with icon interface
- Real time Flow/Volume and Volume/time curves
- Bronchial challenge with FEV1 dose-response
- Paediatric incentive animations
- Integration with EPR systems
- Lung age estimation
- Data and graphs export also via E-mail



FDA Approved

128x64 pixel display

Weight 180 g

Size 60x145x30 mm

33513

PC connection via USB or RS232



PC system requirements:
Windows 2000, ME, XP,
Seven, Vista

TECHNICAL SPECIFICATIONS

Measured parameters:

FVC, FEV1, FEV1/FVC%, FEV6, FEV1/FEV6%, FEV3, FEV3/FVC%, PEF, FEF25%, FEF50%, FEF75%, FEF25-75%, FET, Vext, FIVC, FIV1, FIV1/FIVC%, PIF, *FVC, *FEV1, *PEF, VC, IVC, IC, ERV, FEV1/VC%, VT, VE, Rvf, ti, te, ti/t-tot, VT/ti, MVV (* Best value)

No calibration required

PRE-POST bronchodilator comparison

Spirometry interpretation with test quality assurance

Flow sensor: bi-directional digital turbine

Flow range: ± 16 L/s

Volume accuracy: ± 3% or 50 mL

Flow accuracy: ± 5% or 200 mL/s

Dynamic resistance at 12 L/s: <0.5 cmH₂O L/s

Connectivity and data transmission: USB, Bluetooth®, wireless internal modem for acoustic coupling to telephone (telemedicine applications),

Power Supply: 4 x 1.5 V, AAA battery

SPIROBANK WITH SOFTWARE



Size: 162x49x32 mm
only 180 g including battery



ATS
STANDARD

FDA Approved

Graphic display
(128x48 pixels) with
friendly icons



- **33509 SPIROBANK - single use turbine**
(for use with disposable turbine 33507 and 33508)
Complete and rapid pocket spirometer for the General Practitioner to carry out spirometry testing anywhere.
No calibration required, use disposable turbine with mouthpiece.
- Measures the most important spirometric parameters including **FVC, FEV1, FEV1%, PEF, FEF25-75, FET**
- Automatic interpretation with traffic light indication
- Best test selected and saved in memory
- Measured parameters compared to predicted values
- Provided with USB cable and simple software Winspiro-Express for data download and printing only
- Selectable display language
(English, Spanish, French, German, Italian)
- SPIROBANK is supplied in a carrying bag with spare mouthpieces.
- **33410 MOUTHPIECES int. Ø 2.8 x ext. Ø 3, h 6.5 cm**
- **33507 DISPOSABLE TURBINE - box of 100**
- **33412 ADAPTER for PAEDIATRIC MOUTHPIECES**
- **33411 PAEDIATRIC MOUTHPIECES**

TECHNICAL SPECIFICATION

Power supply: 9V DC PP3 battery

Flow range: + 16 l/s

Flow accuracy: ± 5% or 200 ml/s whichever is greater

Max volume: 10 l - Volume accuracy: ± 3% or 50 ml whichever is greater

Made in Italy

SPIROBANK G WITH SOFTWARE



WITH BLUETOOTH



Graphic display
(128x48 pixels) with user friendly icons

33518



FDA Approved

- **33518 SPIROBANK G + WINSPIROPRO software**
- Stand alone spirometer with PC online operation
- 6000 spirometry in memory
- High legibility graphic display
- FVC, VC, IVC, MVV, PRE-POST BD
- Advanced spirometry test interpretation
- Lung age estimation
- Direct printer connection via Bluetooth®
- Ready for Telemedicine applications
- Internal temperature sensor for automatic BTPS
- Upgradable internal software via internet
- Standard package includes USB cable, pouch, noseclip, battery and software.

TECHNICAL SPECIFICATION

Measured parameters: FVC, FEV1, FEV1/FVC%, FEV3, FEV3/FVC%, FEV6, FEV1/FEV6%, PEF, FEF25%, FEF50%, FEF75%, FEF25-75%, FET, Vext, Lung Age, FIVC, FIV1, FIV1/FIVC%, PIF, VC, IVC, IC, ERV, FEV1/VC%, VT, VE, Rf, ti, te, ti/t-tot, VT/ti, MVV

Temperature sensor: semiconductor (0-45 °C)

Flow sensor: bi-directional digital turbine

Max volume: 10 l

Flow range: ± 16 l/s

Volume accuracy: ± 3% or 50 ml, whichever is greater

Flow accuracy: ± 5% or 200 ml/s, whichever is greater

Dynamic resistance at 12 l/s: <0.5 cm H₂O/l/s

Power supply: 9V DC (PP3 battery)

Weight: 180 g (with battery)

Dimensions: 162x49x32 mm

Made in Italy

WinspiroPRO PC system requirements

- Microsoft Windows: Vista, 2000, XP, Me, Seven

- Screen resolution: 1024x768

- Hard disk space: 160 MB

SPIRODOC - SPIROMETER AND OXIMETER

- 33532 SPIRODOC SPIROMETER + SOFTWARE WINSPIRO PRO
- 33533 SPIRODOC OXIMETER + SOFTWARE WINSPIRO PRO
- 33534 SPIRODOC SPIROMETER + OXIMETER + SOFTWARE

Spirodoc a pocket respiratory laboratory.

Spirodoc can be set-up for different intended uses:

- Advanced parameter setting for pulmonologists
- Simplified general practitioner functioning with essential report for screening purposes

- One-key device activation for home-care patient monitoring
Easy to handle touchscreen display with intuitive icons.
Rechargeable high capacity lithium battery.

Actigraph and step-counter accelerometer to determine patient position during sleep analysis and distance walked estimation for a 6 min. walk test. Massive user-friendly database patient memory with powerful search, visualization and printing functions. Innovative detachable flowmeter ensures a sturdy and durable connection. External connectivity via Bluetooth® or USB cable to PC or via Bluetooth to printer.

Spirometry features:

FVC, VC, IVC, MVV, PRE-POST BD.

Automatically records all trials. Internal temperature sensor for automatic BTPS conversion. Advanced spirometry test interpretation.

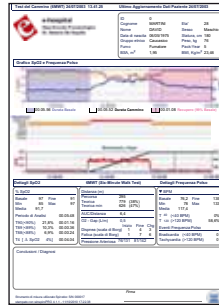
Pulse oximetry features:

Simple and clear SpO₂ and Pulse measurement with pletismographic curve. Sleep disorder detection with events recording. Six minute walk test with desaturation area index. Parameters directly shown on the display (min, ma., mean SpO₂ and Pulse Rate, Δ Index, T90, T89, T88, T5, ODI, NOD, Desaturation Area etc.).

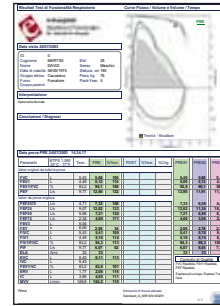
PC requirements: Windows XP, Vista, Seven. Ram 128MB or more.



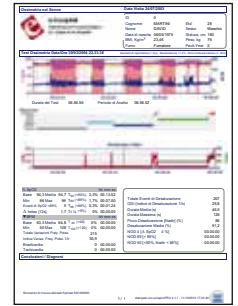
33534
SPIROMETER + OXIMETER
IN ONE UNIT



Three phase report of 6 minutes walk test: baseline, walk, recovery



Spirometry report



Nocturnal oximetry report with desaturation analysis

DISPOSABLE TURBINE FOR MIR SPIROMETERS

- 33507 DISPOSABLE TURBINE - box of 100
- 33508 DISPOSABLE TURBINE WITH INTEGRATED MOUTHPIECE - box of 50

For single patient use. Low cost and high accuracy. Individually packed to guarantee maximum hygiene.

Easy to replace, no calibration needed. Compatible with GIMA codes: 33509, 33510, 33511, 33518, 33519, 33520, 33521, 33522 and 33530.



33508

MOUTHPIECES FOR MOST SPIROMETERS BRANDS



| GIMA MOUTHPIECES | | | | | | |
|------------------|------------------|-----------------|-------------------------------|---|--|--|
| GIMA code | Package | Material | Sizes - cm Ø int x ext x h | To be used with codes | Compatible with | |
| 33410 | box of 500 | paper | 2.8x3x6.5 adult | 33431, 33433, 33471, 33509-11, 33513, 33518-22, 33530 | Micromedical Vitalograph, Mir Ferraris (Koko legend) Cardiette (Pneumos 300) | |
| 33897 | dispenser of 100 | | | | | |
| 33411 | box of 250 | paper | 2.0x2.2x6 paediatric | 33431, 33433, 33471, 33509-11, 33513, 33518-22, 33530 | Micromedical Vitalograph Mir | |
| 33412 | - | Plastic adapter | | 33411 | - | |
| 33506 | box of 100 | paper | 2.6x2.8x6.5 | 33484, 33485, 33486 33487, 33480 | Sibel | |
| 33494 | box of 100 | paper | 1.9x2.1x7 | 33486, 33487 | Sibel | |
| 33890 | dispenser of 100 | paper | 2.5x2.7x7 | - | Fukuda | |
| 33892 | dispenser of 100 | paper | 2.8x3.05x7 | - | Cosmed (Pony model) | |
| 33898 | box of 500 | paper | 2.8x3.05x7 | - | Cosmed (Pony model) | |
| 33432 | - | plastic | 1.7x2.1x5 2.7x3x5 | 33431, 33433 | Ferraris | |

Paper mouthpieces (disposable) and plastic mouthpieces (re-usable) suitable for most brands of spirometers and peak flow, as Cosmed, Fukuda, Ferraris, Micromedical, Mir, Multispiro,

Sibel, Vitalograph, ... All paper mouthpieces are singly packed in individual transparent scale pouch

FILTERS AND NOSECLIP

- 33501 BACTERIAL VIRAL FILTER FOR GIMASPIR

- reusable**

- 33504 MEMBRANE FOR BACTERIAL FILTER - disposable

- box of 50

- 33474 NOSE CLIP



Up to 720 l/min

33474

33501+33504

SPIROMETRY PAPERS

- 33492 MIR SPIROLAB PAPER - roll 112mm x 25m

Suitable also for SIBEL DATOSPIR 120 B, C, D, DATOSPIR Touch and GIMASPIR 120 models B, C, D.

- 33893 COSMED PONY PAPER - roll 57mm x 10m - box of 5 rolls

- 33894 COSMED PONY FX PAPER - roll 112 mm x 13m - box of 5 rolls

- 33491 THERMAL PAPER - roll 58 mm

Suitable for SIBEL DATOSPIR 120 A and GIMASPIR 120-A.

* Need adapter for use with Gimaspir 120A, 120B

SPIROLAB III - DIAGNOSTIC SPIROMETER WITH SPO₂ OPTION



LCD Colour display
240x320 pixel,
size 90x120 mm



Printer

- FDA Approved
- ATS Certified
- ERS Standard

Only 1.9 kg for truly portability

33522



Winspiropro software included

Quality spirometry, precise measurement
The proven MIR digital turbine flow sensor requires **no calibration** and complies with ATS 24/26 waveforms.
Certified by Dr. Crapo at LDS Hospital, Salt Lake City - Utah

- 33521 SPIROLAB III - diagnostic spirometer with high resolution colour display, built-in printer and PC WINSPIROPRO software
- 33522 SPIROLAB III same as 33521 with SpO₂ functions

A really complete spirometry system:

- FVC, VC with breathing pattern plus MVV tests with real time curves
- Over 30 parameters with **automatic interpretation** and test quality control
- PRE/POST bronchial response protocol with FV loop comparison
- Up to 8 blows curve on one screen
- Internal database for about 6,000 complete tests
- Predicted values with various authors
- Rechargeable battery plus mains power 220 V, 50-60 Hz (110V on request)
- User-friendly keyboard with dedicated function keys plus alphanumeric data entry
- Internal temperature sensor for automatic BTPS conversion
- Free upgradable internal software from web, maintaining previously stored data
- Selectable multilanguage internal software (English, Italian, French, German), possibility to download through internet Spanish, Portuguese, Turkish and other languages
- Finger Oximeter (33522 only)**
- Short or long term (overnight) SpO₂ and Pulse Rate measurements
- ODI, NOD, T90%, T89%, T88, T87%
- Oximetry during exercise test
- 33520 SPIROLAB II - with printer and software
- 33519 SPIROLAB II - with printer software and 10 disposable turbine. For use with disposable turbine only.
- 33410 ADULT MOUTHPIECES - Ø 3 cm ext - box of 500 pcs.
- 33492 THERMAL PAPER - 112 mm x 25 m
- 33515 SpO₂ PROBE - adult - spare
- 33516 SpO₂ PROBE - paediatric
- 33517 DISPOSABLE SpO₂ PROBE - neonatal - box of 10 pcs.
- 33525 ANTIBACTERIAL FILTER - disposable - box of 50 pcs.
- 33507 DISPOSABLE TURBINE - box of 100 pcs.
- 33508 DISPOSABLE TURBINE WITH INTEGRATED MOUTHPIECE - box of 50

- PEDIATRIC INCENTIVE SYSTEM
- HIGH DEFINITION LCD
- DATABASE FOR 6,000 TESTS
- USB+BLUETOOTH

STANDARD ACCESSORIES

- | | |
|----------------------|-----------------------|
| Carrying case | Software Winspiro PRO |
| Battery charger | USB port and cable |
| 1 roll thermal paper | Nose clip |

TECHNICAL SPECIFICATIONS 33521-33522

- | | |
|-------------------------|--|
| Flow/volume range: | ± 16 L/s |
| Volume accuracy: | ±3% or 50 ml |
| Flow accuracy: | ±5% or 200 ml/s |
| Dynamic resistance: | <0.8 cm H ₂ O/l/s |
| Dimensions: | 310 x 205 x 65 mm |
| Parameters: | FVC, FEV1, FEV1/FVC%, FEV3, FEV3/FVC%, FEV6, FEV1/FEV6%, PEF, FEF25-75%, FEF25%, FEF50%, FEF75%, FET, Vext, *FVC, *FEV1, *PEF, PIF, FIVC, FIV1, FIV1/FIVC%, VC, IVC, ERV, IC, FEV1/VC%, VT, VE, Rf, Ti, Te, Ti/T-tot, VT/Ti, MVV *: Best value |
| PC System requirements: | Windows 2000, ME, XP, Seven, Vista. |
| Made in Italy. | |

MINISPIR: USB SPIROMETER

- 33530 MINISPIR with software
 - 33531 MINISPIR + OXYMETER with software
- PC based USB Spirometer (PC not included). Plugs directly into the USB socket of your PC, no need of batteries or other connections.

Provided of internal temperature sensor for automatic BTPS conversion.

Measured parameters: FVC, FEV1, FEV1/FVC%, FEV3, FEV3/FVC%, FEV6, FEV1/FEV6%, PEF, FEF25%, FEF50%, FEF75%, FEF25-75%, FET, Vext, FIVC, FIV1, FIV1/F1VC%, PIF, *FVC, *FEV1, *PEF, VC, IVC, IC, ERV, FEV1/VC%, VT, VE, Rf, ti, te, ti/t-tot, VT/ti, MVV best values

WinspiroPRO PC software:

On line PC connection with simple to use icon-based interface. Flow/Volume and volume/time curve shown in real time on PC. Lung age estimation. PRE-POST bronchodilator comparison. Bronchial challenge test with FEV1 dose response curve. Spirometry interpretation with test quality assurance. Includes a series of user-selectable and amusing paediatric incentive animations. Powerful database facilities. Printout with complete spirometry report. Data and graphs export also via e-mail.

- 33410 ADULT MOUTHPIECES - Ø 3 cm ext - box of 500 pcs.
- 33508 DISPOSABLE TURBINE WITH INTEGRATED MOUTHPIECE - box of 50

PC SYSTEM REQUIREMENTS

- Microsoft Windows:
- 2000, ME, XP, Seven, Vista
- Screen resolution: 1024x768
- Hard disk: 160 MB
- USB socket available

TECHNICAL SPECIFICATIONS

- Size: 52x128x26 mm
- Weight: 70 g
- Flow range: ± 16 l/s
- Volume accuracy: ± 3% or 50 ml
- Flow accuracy: ± 5% or 200 ml/s



STANDARD
ATS

FDA Approved

Supplied with
USB cable,
carrying case,
winspiroPRO
software

Made in Italy

33530

DATOSPIR TOUCH - SPIROMETERS

- 33476 DATOSPIR-TOUCH - TURBINE TRANSDUCER
 - 33477 DATOSPIR-TOUCH - FLEISCH PNEUMOTACHOMETER
 - 33478 DATOSPIR-TOUCH - DISPOSABLE FLOW TRANSDUCER
- New digital spirometer with colour touchpad display in three operation modes: primary care, occupational or diagnostic.
- Internal printer and USB external printer connection
 - Optional Bluetooth or Ethernet connectivity
 - QWERTY keyboard
 - Internal database for more than 6500 tests
 - Rechargeable battery
 - Electronic weather station (temperature, humidity and pressure)
 - F/V & V/T curves
 - 3 best tests selectable and printable
 - Pediatric incentive and acoustic signal
 - Quality control (QC prompts and QC Grades)
 - Autodiagnostic (Miller's Quadrant, Kory and Lyons, NHLEP, ATS)



Spirometry software W20 included (English, Italian, French, Spanish)



| GIMA code | ACCESSORIES FOR DATOSPIR TOUCH | | | |
|-----------|--|---------------|-------|-------|
| 33470 | Bluetooth module (PC & Printer) | | | |
| 33479 | Ethernet module | | | |
| 33480 | SpO ₂ module | | | |
| 33483 | MIP-MEP module | | | |
| 33505 | Calibration syringe 3 litres | | | |
| GIMA code | CONSUMABLES AND SPARES | Compatibility | | |
| | | 33476 | 33477 | 33478 |
| 33502 | Disposable transducers | | | • |
| 33506 | Adult mouthpieces - Ø 28 ext x 65 mm | • | • | |
| 33494 | Pediatric mouthpieces - Ø 21 ext x 50 mm | • | • | |
| 33475 | Adaptor for pediatric mouthpieces | • | • | |
| 33492 | Thermal paper - 112 mm | • | • | • |
| 33501 | Reusable bacterial filter | • | • | |
| 33504 | Membrane for bacterial filter | • | • | |
| 33490 | Fleisch transducer - (1) - spare | | • | |
| 33489 | Turbine transducer - (2) - spare | • | | |

TECHNICAL SPECIFICATIONS

Parameters: FVC, VC, MVV, FEV1, PEF, MEF 25%, MEF 50%, MEF 75%, FEF25-75%, ERV, IRV, TV, IC, MVV, RESP/Min, FVC (l), FEV0.5 (l), FEV1 (l), FEV3 (l), FEV0.5/FVC (%), FEV1/FVC (%), FEV3/FVC (%), FEV1/VC (%), PEF (l/s), MEF25% (l/s), MEF50% (l/s), MEF75% (l/s), FEF75-85% (l/s), FEF25-75% (s), FEF100% (s), MEF50%MIF50%, MTT (s), FEV1/FEV0.5, FEV1/PEF (%), MIF50% (l/s), FIVC (l), FIV1 (l), FIV1/FIVC (%), FEV1/FIV1 (%), PIF (l/s), PEF/PIF, Vext. (l), VC (l), TV (l), ERV (l), IRV (l), IC (l), Ti (s), Te (s), Tt (s), Ti/Tt (%), MVV (l/min), Br/Min, MVV ind (l/min), Lung Age, COPD disk

Predicted value: ERS, NHANES III, Knudson, Platino, Morris, SEPAR (Spain), Crapo, Zapletal, Polgar-Weng, Padilla (Mexico), Gutierrez (Chile), Cruz (Mexico), Golshan (Iran).

Measuring range: Flow from 0 to ±16 l/s; Volume from 0 to 10

Flow-Volume accuracy: 5% or 200ml - 3% or 50 ml whichever greater (ATS, ERS)

Flow resistance: <0.06 kPa/l/s at 14 l/s (ATS, ERS)

Resistance at 14 l/s: Turbine ≤ 0.125 kPa/l/s Fleisch ≤ 0.095 kPa/l/s

Display: Colour touchpad Display 640x480 pixels / 116.6x87.8 mm

Safety standard: IEC 601.1 (EN60601.1), UNE 20-613, IEC 601.1.1 (EN601.1.1)

Power supply: 125-240 V, 50/60 Hz Power 30 VA (approx.) Made in Europe.

STANDARD ACCESSORIES

| | |
|--------------------------|---|
| Spirometry software W20 | 25 carton mouth piece (33476, 33477 only) |
| Nose clip | 1 reusable mouth piece |
| 2 rolls of thermal paper | 25 disposable transducer (33478 only) |
| USB cable | manual: English, Italian, Spanish |
| Rechargeable battery | |

GIMASPIR 120 - SPIROMETERS WITH SOFTWARE

- 33485 GIMASPIR 120B - Turbine type - with software
 - 33487 GIMASPIR 120D - Fleisch type - with software
- GIMASPIR 120 spirometers have different types of transducers (Fleisch or Turbine), a wide liquid crystal back-lit screen and an internal or external printer. They can incorporate a module for pulse oximetry measurement (SpO₂). Software allows connection to a computer to perform and store the spirometric tests, or to transfer information.
- All the system is controlled by a microprocessor for the acquisition, calculation and display of alphanumeric and graphic data.
- Gimaspir comes complete with transducer (Fleisch or Turbine type), 100 disposable mouthpieces, noseclip, 2 rolls of thermal paper, mains power supply, manual and software.



Internal software and manual in English/Italian. On request available in Spanish, French, Portuguese, German



Spirometry software W20 included (English, Italian, French, Spanish)

| TECHNICAL SPECIFICATION | GIMASPIR 120 | |
|--|----------------|-----------|
| | B | D |
| Type of transducer | TURBINE | FLEISCH |
| FVC, VC, MVV tests in PRE | • | • |
| Bronchoconstriction tests | • | • |
| Graphic incentive for children | • | • |
| Internal data base for graphics tests | 150 tests | 500 tests |
| Internal printer | 112 mm | 112 mm |
| External printer connection | Option | • |
| Data transfer via Internet with PC of: | | |
| - Patients tests - Check-up data - Software upgrade | • | • |
| Tests exportation to other systems | • | - |
| Calibration for quality control or tests | • | • |
| SpO ₂ module, MIP.MEP module | Option | Option |
| Software under Windows to work with PC | • | • |
| Measuring range: Flow from 0 to ± 16 l/s; volume from 0 to 10 l | | |
| Flow-Volume accuracy: 5% or 200ml/s - 3% or 50 ml whichever greater (ATS, ERS) | | |
| Flow resistance: <0.06 kPa/l/s at 14 l/s (ATS, ERS) | | |
| Resistance at 14 l/s: Turbine ≤ 0.125 KPa/l/s Fleisch ≤ 0.095 KPa/l/s | | |
| Display: Liquid Crystal Display; 320x240 pixels, Area of 120x90 mm | | |
| Data input: Alphanumeric membrane keyboard | | |
| Safety standards: IEC 601.1 (EN60601.1), UNE 20-613, IEC 601.1.1 (EN601.1.1) | | |
| Power supply: 200-240 V 50/60 Hz (110V on demand) | | |
| Power 25 VA (approx.) | | |
| | Made in Europe | |

| GIMA code | ACCESSORIES FOR SPIROMETERS | Compatibility of accessories | | | |
|-----------|--|------------------------------|---|----|----|
| | | Gimaspir 120 | | | |
| | | A | B | C | D |
| 27139 | Carrying Bag | • | • | • | • |
| 33489 | Turbine transducer - (2) - spare | • | • | | |
| 33490 | Fleisch transducer - (1) - spare | | | • | • |
| 33492 | Thermal paper - 112 mm | • | • | • | • |
| 33506 | Adult mouthpieces - Ø 28 ext x 65 mm | • | • | • | • |
| 33494 | Pediatric mouthpieces - Ø 21 ext x 70 mm | • | • | • | • |
| 33495 | Adaptor for pediatric mouthpiece | • | • | ** | ** |
| 33496 | SpO ₂ pulse oximetry module* | • | • | • | • |
| 33497 | Bronchoconstriction tests* | • | • | • | • |
| 33498 | Int. database for 500 tests w. graphics* | • | • | • | • |
| 33499 | Pmax - Pmax module* | • | • | • | • |
| 33500 | Rechargeable battery | • | • | | |
| 33505 | Calibration syringe 3 litres | • | • | • | • |

*If ordered separately, please indicate serial number of equipment, necessary to have access password ** On request