MT 10 - HANDHELD IMPEDANCE TYMPANOMETER

- **33665 MT10 - HANDHELD TYMPANOMETER**
- **33666 MT10 - HANDHELD TYMPANOMETER WITH IPSI-REFLEX**

Professional handheld tympanometer for setting fast and reliable testing in an easy and cost effective way.

Objective analysis
Fast and easy to operate and provides objective measures that cannot be obtained by otoscopy alone.

Easy and fast tympanograms
Results can be obtained with little efforts and with no response required from the patient. This is especially beneficial when dealing with difficult-to-test patients or small children.

Clinical application
Suitable for diagnostic use as tympanometer and (33666 only) reflex responses are all recorded with great detail. You can detect otitis media (a major cause of temporary or permanent hearing impairment in children), a perforated eardrum, cholesteotomas and certain neurological disorders. You can also check tympanostomy tubes and follow up on post medical treatments.

Ipsilateral Acoustic Reflex (33666 only)
Four different reflex tests at 500, 1,000, 2,000, 4,000 Hz may be performed per ear using either fixed or automatic intensity selection. Actual reflex characteristics are displayed on the screen.

30 patients in memory
Can hold test results of up to 30 patients, allowing to screen a large group of patients and print out the data at a later time.

PC-integration with optional infrared USB interface and software. Full data-transfer to PC

33669

interacoustics

Supplied with handle, set of 139 disposable ear-tips (mixed sizes) 4x1.5 V battery and manual in GB, DE, FR, IT, ES, SE, GR, PT, DK, FI, CZ, PL, LT, EE, HU, NL, NO, IS, RO, MK.
Internal software: GB, FR, DE.

- **- -400 to +200 daPa**
- **- ipsi-reflex (33666 only)**
- **- 30 patient memory**
- **- PC integration**

Ergonomic to hold. Included handle make it stable and lightweight as it can rest on your arm during the measurement.

Size: 19x8x4 cm excluding probe (length with probe 22.5 cm)
Weight 285 g without battery

- **33667 INTERFACE USB ADAPTER AND SOFTWARE BY IRDA PORT**
- **33669 SANIBEL MPTII PORTABLE THERMAL PRINTER**
- **33670 THERMAL PAPER ROLLS - box of 3**

TECHNICAL SPECIFICATIONS

Tympanometry

Analysis performed:	Peak compliance; peak pressure, gradient; equivalent ear canal volume
Probe tone:	226 Hz
Pressure levels:	+200 daPa to -400 daPa
Ear volume measurement range:	0.2 ml to 5 ml
Sweep speed:	Typically 200-300 daPa/sec; depending on ear & cavity volume
Pressure limits (safety shut off):	+600 to -800 daPa

Reflex measuremets (33666 only)

Measurement mode:	ipsilateral
Reflex tone levels:	500 Hz, 1 kHz, 2 kHz, 4 kHz
Four reflex levels:	100 dB with 5 dB or 10 dB steps; 95 dB, 90 dB or 85 dB with 5 dB steps
Reflex analysis:	Reflex pass/refer at each level tested; Maximum amplitude of each reflex (seen on printed report and PC report); Pressure at which reflex was performed

Data management

Data storage:	30 records. Any recording can be stored once the tympanogram is viewed
Data held:	Patient Initials, Tympanogram and Reflex graphs and analysis for Left and/or Right Ear, Time and Date of recording, which ears were tested, whether or not the record has been printed and sent to a PC, parameters printed and/or sent to a PC, parameters used for analysis

Other data

Internal backup:	>30 days without main batteries fitted
Battery Lifetime:	Approx. 400 tests (Alkaline AA batteries)
Supported printer:	Martel MCP8830 or Sanibel MPTII
Interface:	Infra-red, IrDA hardware, 9600 baud
Information printed:	Space for patient and clinician's details, Tympanogram analysis parameters,Tympanogram, Reflex analysis parameters, Reflex graph, S. N. of device, Last and Next Due Calibration dates
Safety standards:	IEC 60601-1. EMC: IEC 60601-1-2
Impedance standard:	lEe 60645-5, Type 2 Tympanometer

PA5 PEDIATRIC PORTABLE AUDIOMETER

interacoustics

- **33601 PA5 AUDIOMETER**
- **33602 TDH39 AUDIOMETRIC HEAD PHONE**

Paediatric portable audiometer with air conduction, free-field and visual stimulation capabilities. By means of a headphone it can be also used as a regular screening audiometer for adults. PA5 helps doctors in evaluating the auditory behaviour in neonates and infants till 24 months by means of specific tests:

Auropalpebral Reflex (APR) test
APR test is a startle reflex of the eyelid elicited by relatively strong sounds that can be performed on neonates from the day of birth. It is not based on co-operation with the newborn child.

Conditioned Orientation Response (COR) test
Based on the "Orientation Reflex", a natural reflex movement elicited by sound or visual stimulation. If the visual stimulation elicits a reflex which is conditioned by a tone, the child will look towards the visual stimulation as soon as the tone is heard. If the conditioning is effective the child will look in the direction of the sound source even before the visual stimulation is presented.

Visual Reinforcement Audiometry (VRA) test
VRA test is an extension and modification of COR, where the cooperation with the child is less important. Not only the sound localisation orientation reflex are accepted but also four other reactions: reflex reactions (body and face), search reactions, orientation reactions and spontaneous reactions.

Reflex audiometry and maturation of auditory response tests
Different stimuli are presented in terms of intensity, frequency, duration, direction of sound in order to elicit proper reactions like waking-up, crying, astonishment, direct sound localization.

Supplied with GB manual and quick guide (GB, US, DE, FR, SE, IT, PT, DK, FI, ES, GR, CZ, PL, NL, NO, EE, HU, SL).

33601

TECHNICAL SPECIFICATIONS

Frequencies:	500, 1,000, 2,000, 3,000, 4,000 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
Dimensions - weight:		LxWxH: 25x7x5 cm - 360 g
Power supply:	3AA batteries (included)	

BOEL STYLE PEDIATRIC AUDIOLOGY TEST   CE

- **33599 GIMA AUDIOTEST - pediatric audiology test for early detection of childhood deafness**

The Boel test is a unique screening tool that tests the hearing abilities and child's response to a sound stimulus, even at an early age (between 6 to 10 months). GIMA audiotest is based on the BOEL test both for the ergonomics (designed to be held in the palm of the hand not visible to the child) and the standard sound of the bells. The two sound stimuli emitted by the audiometer reproduce a dull low-frequency tone located at about 125-150 Hz and an acute high-frequency tone located at about 5.0-5.1 kHz in exactly the same way as the bells of the Boel test (amplitude 86dBA; 96dBA). Testing the child's response to these highly significant thresholds. Easy to use, with only two buttons for the selection of two frequencies, lightweight and battery-powered.

33599

Class I medical device according to 93/42/EEC.
MADE IN ITALY

TIMPANI HANDHELD TYMPANOMETER/SCREENING AUDIOMETER

MADE IN ITALY

Timpani can be supplied with its docking station, ideal to place the device, to recharge the battery faster and to transfer data to the PC at the same time.

53560 + 53566

53560

53560

Timpani is supplied with Inventis Maestro software, USB connection cable, medical grade power supply, assorted eartips, GB, IT manuals in a carrying case.

• **53560 TIMPANI HANDHELD TYMPANOMETER**
Timpani is a lightweight, compact and powerful device, designed to conduct middle ear screening tests simply, swiftly and accurately. The basic version of Timpani allows to perform automatic tympanometry exam using 226 Hz probe tone. Optional licenses allow acoustic reflexes test and screening pure tone audiometry. The device features a wide colour display with touch-screen interface.

• **53563 REFLEX LICENSE - PLUS**
To conduct ipsilateral acoustic reflex test at 0.5, 1, 2 and 4 kHz.

• **53564 SCREENING PURE TONE AUDIOMETRY (PTA) LICENSE WITH PRE-CALIBRATED HEADSET**
To conduct pure tone air conduction audiometry.

• **53565 PATIENT RESPONSE BUTTON FOR PTA**
• **53566 DOCKING STATION FOR TIMPANI**
• **53567 BLUETOOTH THERMAL PRINTER**
• **35674 THERMAL PAPER ROLL 57 mm - box of 20**

LANGUAGES	GB	FR	IT	RU	ES	PL	PT	JP	CH	KR	DE	TR
Firmware	X	X	X		X	X						
Maestro software	X	X	X	X	X	X	X	X	X	X	X	X
Manual*	X		X		X							

GB and IT included with product, ES for download from www.gimaitaly.com

TECHNICAL SPECIFICATIONS

Measurement system
Probe tone: 226 Hz at 85 dB SPL
Comp. range: 0.2 to 8.0 ml at 226 Hz, 0.9 to 16.0 mmho at 1000 Hz
Pressure range: from +200 to -400 daPa
Tympanometry
Type of test: automatic tympanometry
Start: automatic
Scan rate: 400 daPa/sec
Acoustic reflex (only with 53563)
Stimulation: ipsilateral at 226 Hz
Available tests: autothreshold, fixed intensity
Stimuli: 0.5, 1, 2 and 4 kHz (with reflex lic. Plus)
Maximum int.: 100 dB HL (ipsi)
Stim. Duration: 1 sec
Audiometry (only with 53564)
Intensity - Freq. range: -10 to 100 dB HL - 125-8000 Hz

Input - output: pure tone - AC
Device specifications
Memory: 50 patients
Display type: color graphical with touch screen
Display size: 2.8" / 43.2x57.6 mm
Resolution: 240x320 pixels
Power supply: Lithium-Ion rechargeable battery
Battery life: >4 hours of continuous use
Pc interface: USB (driverless)
Software: Inventis Maestro (compatible with Noah)
Size - weight: 65 x 44 x 240 mm (2.6 x 1.8 x 9.5 inches) - 340 g / 12 oz
Standards: Imped.: EN 60645-5/ANSI S3.39, Type 2/3
PTA: EN 60645-1/ANSI S3.6, Type 4/4
Safety: EN 60601-1 - EMC: EN 60601-1-2 Class IIA (93/42/EEC)
Annual calibration: Timpani needs annual calibration by authorized centre. Please check on www.gimaitaly.com list of countries where you can find a centre.

MAICO MA1 SUPER-LIGHTWEIGHT HEARING SCREENER

• **33600 MAICO MA1 HEARING SCREENER WITH HEADSET**
Hearing screener with super-lightweight design, small enough to fit in the palm of the hand. Ideal for fast screening purposes. The device is capable of delivering a pure tone signal to one ear at a time. The stimulus range is 15 to 50 dB HL in level steps of 5 dB. Test frequencies range from 500 to 4000 Hz. Automatic ON/OFF function.
It is supplied with headset DD45, cradle and 2AA batteries. Multilingual manual: GB, FR, IT.

33600

CE 0123

Headset DD45 included

TECHNICAL SPECIFICATIONS

Test signal:	pure tone (continuous)	Hearing level range: 15dB HL to 50 dB HL	Power supply: 2AA batteries (included)
Test frequencies:	500, 1000, 2000, 4000 Hz	Accuracy - distortion:± 4 dB - less than 3%	Standards: IEC 60601-1:2012 Type B, IEC60601-1-2:2014
Level steps:	5 dB	Size - weight: 6.4x15.3xh 2.3 cm - 115 g	Classification: Class IIa (EU 2017/745) Medical Device

SINGLE USE TYMPANOMETER EARTIPS - FOR MOST BRANDS

SANIBEL™ ear tips were designed for use with acoustic immittance instruments and otoacoustic emission system. Made of a soft and sticky biocompatible material, these ear tips greatly improve the ease of obtaining and keeping a good seal, allowing the tester to quickly move on to other tasks. Available in different sizes, with different shapes (mushroom and flanged ear tips for infants).
The complete range makes it possible to accomodate all ear canal shapes and sizes. All Sanibel™ ear tips are latex free.

Sanibel™

VERIFIED COMPATIBILITY FOR SANIBEL™ ADI

Amplivox®	Otowave™ with clear (Type 1) probe
Interacoustics®	AT235™ & AT235h™ with clear probe tip adapter
	AA222™ & AA220™ with clear probe tip adapter
	Eclipse™ and MT10™ with clear probe tip, Titan™
Maico®	MI24™, MI26™, MI34™, MI44™ with clear probe tip adapter
	easyTimp™ - Otowave™ - Ero-scan plus™ - easyScreen™
MEDRx®	Otowave™
Grason-Stadler®:	Corti™

GIMA code	SANIBEL™ ADI FLANGED INFANT EAR TIPS	Minimum order
53515	Ear tip 3-5 mm - red	bag of 100 pcs
53516	Ear tip 4-7 mm - blue	bag of 100 pcs
53517	Ear tip 5-8 mm - yellow	bag of 100 pcs

GIMA code	SANIBEL™ ADI MUSHROOM EAR TIPS	Minimum order
53520	Ear tip 7 mm - blue	bag of 100 pcs
53521	Ear tip 8 mm - yellow	bag of 100 pcs
53522	Ear tip 9 mm - green	bag of 100 pcs
53523	Ear tip 10 mm - red	bag of 100 pcs
53524	Ear tip 11 mm - blue	bag of 100 pcs
53525	Ear tip 12 mm - yellow	bag of 100 pcs
53526	Ear tip 13 mm - green	bag of 100 pcs
53527	Ear tip 14 mm - red	bag of 100 pcs

SCREENING AUDIOMETER

• 53549 MAICO MA27 SCREENING AUDIOMETER
Air conduction audiometer for basic screening with rigid and lightweight case. It has 11 frequencies, built-in carrying handle and compartment to store headphones and accessories. Tough, accurate and reliable with large fingertip control knobs for easy frequency and hearing levels adjustments.
Selectable display languages: GB, FR, IT, ES, DE.
Supplied with AC headset DD45, audiogram pad and power supply.
Multilingual manual: GB, FR, IT, ES, DE, PL, RU.
• 53555 PELTOR INSULATION HEADBAND*
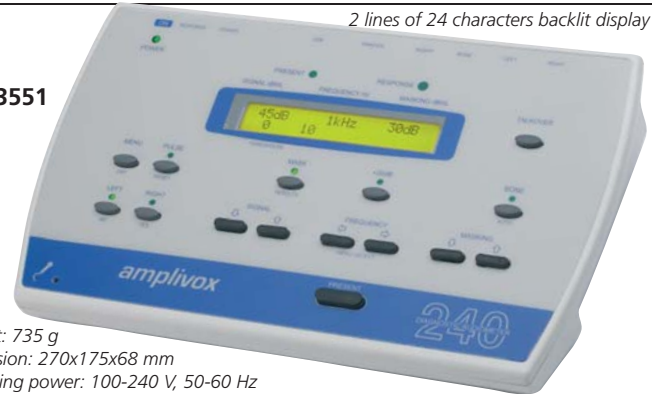**• 53556 AUDIOGRAM CARDS - box of 50**

CE 0123

Headset with transducer

TECHNICAL SPECIFICATIONS	
Display:	38.1x76.2 mm, monochrome
Level steps:	5 or 1 dB
Hearing level range:	-10 dB HL to 100 dB HL
Test signal:	pure tone and warble tone (pulsed and continuous)
Test frequencies:	125, 250, 500, 750, 1000, 1500, 2000, 3000, 4000, 6000, 8000 Hz
Size - Weight:	25.5x37xh 15 cm - 2.4 kg
Power supply:	100-240VAC ± 10 %, 50/60 Hz, 0.6 A
Standards:	IEC 60601-1:2012, AAMI ES60601-1:2005+A2+A1, CAN/CSA-C22.2 No. 60601-1:14 Type B IEC 60601-1-2:2014, IEC 60645-1:2017 Type 4, ANSI/ASA S3.6-2018 Type 4
Classification:	Class IIa (EU 2017/745), Medical Device

**Should be used with headset transducers supplied with device*

DIAGNOSTIC AUDIOMETER

2 lines of 24 characters backlit display

53551

Weight: 735 g
Dimension: 270x175x68 mm
Operating power: 100-240 V, 50-60 Hz

• 53551 AMPLIVOX 240 DIAGNOSTIC AUDIOMETER - air, bone, masking
Cost-effective diagnostic audiometer with USB connectivity, ideal for desktop and mobile use.
- 11 test frequencies: 125 to 8,000 Hz (AC), 250 to 8,000 Hz (BC)
- -10 to 120 dBHL range (AC), -10 to 70 dBHL (BC), 90 dBHL max (250 to 4,000 Hz) insert masking output
- threshold retention function
- single, pulsed or warble tone preset
- automatic AC test functionality
Supplied with audiometric headset, bone conductor headset, patient response switch, audiogram cards (box of 50), main power adaptor, carrying case and manual GB, IT, ES.
On request FR, SE, RU, PT.
• 53555 PELTOR INSULATION HEADBAND*
• 53556 AUDIOGRAM CARDS - box of 50
• 53557 INSERT FOR MASKING

53555

53557

SCREENING DIAGNOSTIC AND CLINICAL 2 CHANNEL AUDIOMETERS

• 33623 SIBELSOUND 400-A SCREENING AUDIOMETER with W50 software - air conduction
• 33624 SIBELSOUND 400-AOM DIAGNOSTIC AUDIOMETER with W50 software - air + bone + masking
• 33626 SIBELSOUND 400-SUPRA CLINICAL AUDIOMETER - air + bone + mask + supraliminar tests + W50 software + Intercom kit
Two-channel digital audiometers based on DSP processing. Designed for quick and easy audiometric exploration of hearing thresholds and screening tests, such as suprathreshold pure tone tests (FOWLER-ABLB, TONE DECAY, WEBER, LUSCHER, ...).
- **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 to100 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:** continuous, pulse, alternate, 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, IMSS MEXICO, ELI, SAL, KLOCKHOFF, MOH, OTHERS ...)
Communication system:
- Print directly to a USB printer or connect to W50 Software.
- Direct USB **connection to PC to W50 audiometry software**

CE 0318

Programme personalization according to users need

for viewing, storage, transmission, analysis and introduction of audiometric tests. It also allows to input data performed by other audiometers and show automatic diagnosis (council IMSS,...). Compatible Windows 7, 8.1 and 10 (32/64 bits).
• 33621 INSULATION DEVICE for air conduction phone*
**Compatible with headset TDH39 and DD45*
• 33629 AUDIOMETRY SOFTWARE W50 - optional for models sold up to March 2023.
Linked to audiometer S.N., please specify with order.
Dimension: 390x260x105 mm
Weight: 2.4 kg without accessories
Power: 100-240 V, 50/60 Hz

LCD alphanumeric backlight 2 lines of 16 characters

WITH SOFTWARE

User manual GB, IT (available on request FR, ES)

FREQUENCIES AND LEVELS

	125	250	500	750	1,000	1,500	2,000	3,000	4,000	6,000	8,000	HZ
Standard frequency	125	250	500	750	1,000	1,500	2,000	3,000	4,000	6,000	8,000	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	55	-	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	-	-	dB HL
White AC						100						dB SPL
Speech						100						dB SPL
LOGO-AUDIOMETRY												
Air conduction					100							dB SPL
Free field					80 dB at 1m from the patient							dB SPL
Minimum levels												
All options	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	dB HL

SIBELSOUND 400 FEATURES

	A	AOM	SUPRA
Audiometry type	4 screening	3 diagnostic	2 clinical
Air conduction TDH 39	•	•	•
Bone conduction B71		•	•
Masking by white narrow band & speech noise		•	•
Sisi test			•
Supraliminar tests			•
Speechaudiometry			•
Intercom kit (headphone + microphone)			•
Musical frequencies			•
Intercom data base	150 tests	1,000 tests	1,000 tests
USB connectivity	•	•	•
W50 audiometry software	•	•	•

PC CONTROLLED PORTABLE AUDIOMETERS

PICCOLO PORTABLE AUDIOMETERS
Piccolo is a basic diagnostic audiometer offering air and bone audiometry functions. Piccolo can be controlled from a computer running Windows. Lightweight, compact design, powerful, user-friendly software and Noah connectivity combine to make Piccolo the ideal choice for professionals on the move.
- two different models available:
Basic (AC only) for Pc use
Plus (AC/BC) for Pc use
- computer control through the Maestro software.
Compatible for Windows 7, 8, 10
- small and light weight
- power supply through the USB connection, when controlled by computer.
Software language:
GB, FR, IT, ES, DE, PL, PT, RU.
CD manual and quick guide
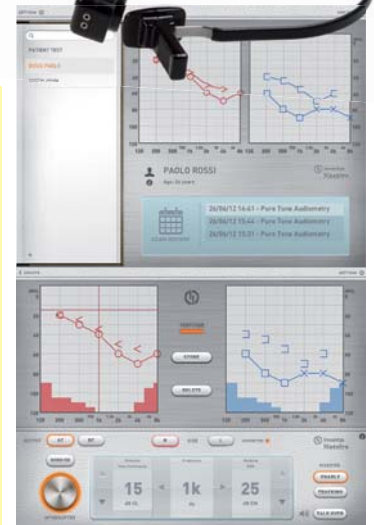GB, FR, IT, ES, DE, PL, PT, NL.
Piccolo needs annual calibration by authorized centre. Please check on www.gimaitaly.com list of countries where you can find a centre.

MADE IN ITALY

TECHNICAL SPECIFICATIONS		
	Piccolo Basic	**Piccolo Plus**
Type of device:	Pc control	Pc control
Class EN 60645-1, ANSI S3.6:	4-screening	3-diagnostic
Output:	AC	AC, BC
Masking:	NBN	NBN
Warble tone:	Yes	Yes
Pulsed tone:	0.5 Hz, 1 Hz, 2 Hz	0.5 Hz, 1 Hz, 2 Hz
Frequency range:	125 - 8,000 Hz	125 - 8,000 Hz
Maximum output intensities:	AC: -10 to 120 dB HL	AC: -10 to 120 dB HL
		BC: -10 to 80 dB HL
Attenuator step:	5 dB	5 dB
Automatic audiometry:	HW auto threshold	HW auto threshold
Talk over:	External microphone	External microphone
Connection to PC:	USB [driverless]	USB [driverless]
Controlling software:	├──────────── Maestro module ──────────┤	
Controlling app:	-	Maestro (App Store)
Dimensions:	├────── 16x16x3cm (16.3x6.3x1.2 in) ──────┤	
Weight:	300 g (10.6 oz)	300 g (10.6 oz)
Operating voltage:	100-240 V, 50/60 Hz	100-240 V, 50/60 Hz

GIMA code	SCREENING AND DIAGNOSTIC AUDIOMETERS	Management
33613	Piccolo Basic screening audiometer - air + mask	PC
33615	Piccolo Plus diagnostic audiometer - air + bone + mask	PC

STANDARD ACCESSORIES
- DD445 supra-aural headphones
- B71 bone vibrator (33615 only)
- Patient response switch
- Clip-on microphone for operator to-patient communication
- Inventis Daisy Patient Record Manager, with Daisy Maestro module
- Noah Maestro module
- USB connection cable
- Medical grande power supply
- User Manual

BELL PLUS DIAGNOSTIC AUDIOMETER

• 33635 BELL PLUS DIAGNOSTIC AUDIOMETER - air + bone + mask + software DAISY - MAESTRO
Bell is a basic diagnostic audiometer performing fast and accurate air and bone conduction threshold examinations. Simple operation, fast and reliable automatic examination mode, user-friendly interface and easy portability make Bell the ideal instrument for private clinics, multi-specialist clinics and occupational medicine application.
- pure tone audiometry in AC and BC
- hughsone-Westlake auto threshold test
- colour graphic display·
- internal memory for 100 patients
- cost effective solution

Manual:
GB, FR, IT, ES, DE, PT.

MADE IN ITALY

Bell Plus needs annual calibration by authorized centre. Please check on www.gimaitaly.com list of countries where you can find a centre.

- supplied with air conduction phone and vibrator for bone conduction.
Maestro Software interface
The Maestro module is the software interface of Bell Plus audiometer. When it is connected to PC via USB you can see real time progress of the exam on the display and then download the data. It also allows full control of the audiometer from computer.

STANDARD ACCESSORIES
- DD-445 supra-aural headphones
- B71 bone vibrator
- Patient response switch
- Plastic cover sheet
- Medical grade power supply
- User Manual

TECHNICAL SPECIFICATIONS	
Type of device	Hybrid audiometer
Class (EN 60645-1, ANSI S3.6)	3 diagnostic
Output	AC, BC
Masking	NBN, WN
Insert masking earphone	Yes
Warble tone	Yes
Pulsed tone	0.5 Hz, 1 Hz, 2 Hz
Frequency range	125 - 8,000 Hz
Maximum output intensities	AC: -10 to 120 dB HL
	BC: -10 to 80 dB HL
Attenuator step	5 dB
Automatic audiometry	HW auto threshold
Talk over	Internal or external microphone
Display type	Colour graphic
Display size resolution	4.3", 480x272
Internal memory	100 patients
Operating voltage	100-240 V, 50/60 Hz
Dimensions - weight	32x32x9 cm (12.6x12.6x3.5 in) - 1.8 kg (4.0 lbs)
Compatibility:	Windows 7, 8, 10

33635

314

AUDIOMETRIC BOOTHS - CONFORM TO EU 2017/745 - Class I

31.5 dB at 1,000 Hz

36.2 dB at 1,000 Hz

34.5 dB at 1,000 Hz

Window on the door

Reversible door (left/right) with magnetic closing

OUTSTANDING SOUNDPROOF LEVEL

33648 + 33651

33649 + 33651

33653 + 33651

Left opening

- **33648 NEW PRO 25 - 96x96x197 cm**
- **33650 PRO 25 - 96x96x197 cm**
Portable, lightweight, sound proof booth, easy to install in few minutes. Interior finishing made of acoustic pyramid foam in anthracite grey (33650) or made of sound-absorbing polyurethane, coated with acoustic lining washable and sanitizable (36648). External finishing made of highly resistant, fire proof washable panel. Module for cable connection included.
- **33651 TABLE - 79x50 cm**

- **33649 PRO 28F - 96x96x197 cm**
New compact booth with an outstanding level of soundproofing and excellent acoustic thanks to innovative materials. Internal finishing made of fire proof, washable, sanitizable and very resistant fabric. Internal ventilation system. External finishing made of highly resistant, fireproof, washable panel. Module for cable connection included.
- **33651 TABLE 79x50 cm**

- **33654 PRO 30 - 107x107x244** cm**
- **33653 PRO 30 - 132x132x244** cm**
- **33655 PRO 30 - 211x107x244** cm**
- **33656 PRO 30 - 211x211x244** cm**
- **33657 PRO 30 - size on request**
available any size from 1x1 to 3x3
Interior finishing made of auto extinguishing acoustic pyramid foam in anthracite grey. Range with different sizes, with high noise reduction and ventilation system. External finishing made of highly resistant, fireproof, washable panel and aluminium frame. Module for cable connection included. Sanitizing air-exchanging system on request.
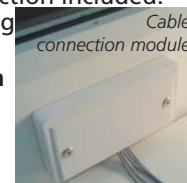- **33651 TABLE 79x50 cm**
- **33652 RAMPS** **for wheelchair access**

Cable connection module

MADE IN ITALY

ACOUSTIC INSULATION							
Hertz	125	250	500	1000	2000	4000	8000
PRO 25 NEW dB	19.1	18.7	30.8	31.5	27.9	35.2	43.3
PRO 25 dB	18.0	16.0	26.7	30.8	28.8	30.9	39.0
PRO 28 dB	21.7	25.6	32.6	36.2	34.0	41.1	43.0
PRO 30 dB	23.4	24.1	27.8	34.5	31.3	36.4	37.7

STANDARD ACCESSORIES
- module for silent audiometer cable connection
- internal illumination
- ventilation system (PRO 28, PRO 30 only)
- ISPM-15 wooden box for transport
- manual: GB, IT

TECHNICAL SPECIFICATIONS							
	33648	**33650**	**33649**	**33654**	**33653**	**33655**	**33656**
External size (cm):	96x96xh 197	96x96xh 197	96x96xh 197	107x107xh 244**	132x132xh 244**	211x107xh 244**	211x211xh 244**
Internal size (cm):	85x85xh 180	81x81xh 180	81x81xh 173.5	92x92xh 201	117x117xh 201	196x92xh 201	196x196xh 201
Door size cm:	55xh 168	55xh 168	55xh 168	75xh 200	75xh 200	75xh 200	75xh 200
opening:	Left/Right	Left/Right	Left/Right	Right*			
Windows size cm:	52xh 52	52xh 52	52xh 52	56xh 88			
material:	2 - crystal insulating safety glass						
Wall thickness cm:	5.5	7.5	7.5	7.5	7.5	7.5	7.5
Weight (kg):	198	198	233	285	355	435	645
Ventilation:	no	no	yes	yes	yes	yes	yes
Tested noise reduction dB at 1,000 Hz:	31.5	30.8	36.2	34.5			
Internal illumination power V-Hz:	230 - 50/60			86-265 - 50/60			
Norms:	Class I Medical Devices European Directive EU 2017/745						

*Left opening available on request   **Height includes air ventilation system (27 cm)*

UNIVERSAL NOSE MASKS AND FACE MASKS FOR CPAP - SINGLE PATIENT

NOSE MASKS AND FACE MASKS FOR CPAP
Airtight, light and soft masks adjust automatically according to different face shapes. Honeycomb vents designed to be gentle and quiet. Quick-release connector helps separate the tubing from the mask easily. Headgear is made of soft and skin-friendly fabric to ensure maximum comfort.
Masks are suitable for Yuwell, Resmed, Philips, Fisher & Paykel and most of CPAP machines in the market.
Therapy pressure range: 4-30 cm H_2O.   Tube connection: 22 mm

Breathing nose masks

Breathing face masks

CE 0123

GIMA code	BREATHING NOSE MASKS
53710	Breathing nose mask - small
53705	Breathing nose mask - medium
53712	Breathing nose mask - large
	BREATHING FACE MASKS
53713	Breathing face mask - small
53714	Breathing face mask - medium
53715	Breathing face mask - large

53705, 53710, 53712
Weight: 64 g

53713-4-5
Weight: 119 g

SLEEP APNEA SCREEN METER

• 33676 SLEEP APNEA SCREEN METER
Suitable for people who have obstructive sleep apnea-hypopnea syndrome (OSAHS), chronic obstructive pulmonary diseases (COPD), asthma, vascular disease or people over 60 years old. For hospital and home use.
- wrist-design, small and light
- multi-function device, to know physiological information
- displays SpO_2, PR, pulse sound, bar graph
- display of pulse and nasal airflow waveform
- alarm for low-power, finger-out and over-limit
- real-time clock   - multi-care record
- 20 hours continuous recording   - PC analysis software
• 33677 RUBBER ADULT SpO_2 PROBE for day
up to S.N. 19040200005
• 33675 RUBBER ADULT SpO_2 PROBE for day
since S.N. 19040300001
• 33678 NON-WOVEN SpO_2 PROBE for night - bag of 2
up to S.N. 19040200005
• 33671 NON-WOVEN SpO_2 PROBE for night - bag of 2
since S.N. 19040300001
• 34172 NASAL OXYGEN CANNULA

Adjustable screen brightness

33676   CE 0123

STANDARD ACCESSORIES
Adult, Neonatal disposable SpO_2 probe
Adapter
Adult SpO_2 probe
USB cable
Software
Nose-oxygen tube
Manual (GB, FR, IT, ES)

33676

TECHNICAL SPECIFICATIONS	
Nasal airflow measure range:	0-40 rpm ±2 rpm
SpO_2 measuring range:	0-100 % ±2 % (70-100 %), resolution 1%
Pulse Rate measuring range:	30-250 bpm ±2 bpm or ± 2% (select the larger)
Resistance to surrounding light:	The difference between the value measured in the condition of man-made light and indoor natural light and that of darkroom is less than ±1 %
Display:	1.8" colour LCD
Power consumption:	≤100 mA
Power supply:	3.7 V rechargeable lithium battery
Battery working hour:	continuously work for more than 20 hours
Safety Type:	Internally powered, Type BF applied part
Dimension of device:	69x50x17.3 mm
Weight:	100 g (lithium battery included)

BREATHCARE PAP DEVICES: CPAP AND AUTO CPAP

Start button

Air outlet

CE 0123

Breathing machine

FOR SLEEP APNEA

Heated humidifier

53700

yuwell   **53701**

• 53700 BREATHCARE PAP DEVICE - CPAP
• 53701 BREATHCARE PAP DEVICE - CPAP/AUTO CPAP
The breathcare PAP devices take care of patients every night. PAP (Positive Airway Pressure) device works as an air compressor, it constantly blows pressurized air to patient's airway, to prevent airway collapse.
The PAP devices contain CPAP and Auto CPAP (53701 only).
CPAP: Continuous Positive Airway Pressure device
Auto CPAP: Automatic Continuous Positive Airway Pressure device
Immediately improve sleep quality
No trauma, safe and comfortable
User friendly with little discomfort
Quiet, noise ≤ 28 dB
Ultra quiet thanks to 4 methods for reducing noise level.
Stable 20,000 hours life time.
Comfortable based on years of clinical data it effectively reduces the average treatment pressure and provides a comfortable therapy experience.
Connection with oxygen concentrator to supply oxygen with

mask which can help ease symptoms of hypercapnia.
Internal software: GB, IT. Supplied with carrying bag, 2 filters, air hose, heated humidifier, breathing nose mask, SD card (only 53701), power adapter, power cable and manual (GB, IT)
• 53704 AIR SOFT TUBE - spare
• 53706 AIR COTTON FILTER - box of 10 - spare
Advised replacement every 2-3 months
• 53707 CONNECTOR to oxygen concentrator
Breathing nose mask, see page 315.

TECHNICAL SPECIFICATIONS	
Treatment mode:	CPAP, Auto CPAP (53701 only)
Pressure range:	4~20 cm H_2O ±0.5 cm H_2O
Time-lapse boosting:	0~45 min
Alarm protection:	face mask fell alarm
Operating power:	100-240 V, 50-60 Hz DC 24 V
Automatic altimetric compensation:	3500m
USM air circuit system:	ultra silence air circuit system
PCM:	noise removal technology
3A self adapting frequency adjustment technique	
Size - weight:	27x13.5xh 10 cm - 1.5 kg

Separable body

Medical humidifier for 1 day line

3.5 inches LCD screen

Portable bag

DISPOSABLE AND RE-USABLE TURBINES FOR MIR SPIROMETERS

• **33507 DISPOSABLE TURBINE WITH INTEGRATED MOUTHPIECE - box of 60**
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, 33511-14, 33518-22, 33527-29, 33530, 33532, 33534.
• **33526 RE-USABLE TURBINE - bayonet**
Easy to replace, no calibration needed. Compatible with GIMA codes: 33510-14, 33518, 33520-22, 33528-32, 33534.

33526   33507

MOUTHPIECES FOR MOST SPIROMETER BRANDS

Paper mouthpieces (disposable) and plastic mouthpieces (re-usable) for most brands of spirometers and peak flow. Paper mouthpieces are packed in individual transparent pouch.

CE 0476

Dispenser of 100

MADE IN EUROPE

33432

Made in USA

GIMA code	Sizes - cm Ø int x ext x h	Suitable for	Compatibility GIMA codes	Other brands	Minimum order
GIMA PAPER MOUTHPIECES					
33410	2.8x3x6.5	adult	33431, 33433, 33471-2, 33510, 33512-14, 33518-22, 33528-32, 33534	Micromedical Vitalograph, Mir Ferraris (Koko legend) Cardiette (Pneumos 300)	box of 500
33897					dispenser of 100
33411	2.0x2.2x6	paediatric		Micromedical Vitalograph, Mir	box of 250
33412	Plastic adapter		33411	Mir	-
33506	2.6x2.8x6.5	adult	33484-7	Sibel, BTL	box of 100
33890	2.5x2.7x7	adult	-	Fukuda Sangjo, Thor	dispenser of 100
33892	2.8x3.05x7	adult	-	Cosmed (Pony model)	dispenser of 100
33898	2.8x3.05x7	adult	-	Cosmed (Pony model)	box of 500
33895	3.03x3.3	adult	-	Sensormedics, Microcard	box of 500
33899	2.42x2.6	adult	-	Sorin Lifewatch, Fukuda Denshi	box of 500
GIMA PLASTIC MOUTHPIECES					
33432*	1.7x2.1x5 2.7x3x5	adult/ped	33431, 33433	Ferraris	-
33691		adult	33682-4, 6, 8	Thor	box of 10

SPIROMETRY PAPERS

• **33493 MIR SPIROLAB PAPER - roll 112mm x 25m - box of 10**
Suitable also for SIBEL DATOSPIR 120 B, C, D, DATOSPIR Touch and GIMASPIR 120 models B, C, D.
• **33891 COSMED PONY PAPER - roll 57 mm x 11 m - box of 25 rolls**
• **33894 COSMED PONY FX PAPER - roll 112 mm x 13m - box of 25 rolls**
Compatible also with Fukuda Spirosift.
• **35674 THERMAL PAPER - roll 57 mm x 25 m - box of 20**
Suitable for SIBEL DATOSPIR 120 A and GIMASPIR 120-A.
• **33404 THERMAL PAPER - roll 111 mm x 8m - box of 25 rolls**
Suitable for Microlab 3500

BACTERIAL FILTER

• **33525 BACTERIAL FILTER - box of 50 for MIR, Medisoft spirometers**
• **33557 SPIROGUARD BACTERIAL FILTER - box of 50**

Compatibility of Spiroguard
Erich Jaeger Gmbh	Masterlab and Masterscreen
Ferraris Medical - P.K. Morgan	Autolink-Benchmark Transflo and USA Transfer System
Sensormedics	2200 - 2400 - 2450
Vitalograph	Wedge-Bellow-Alpha and Escort Spirometers

BACTERIAL FILTER - MOUTHPIECE FOR MOST SPIROMETER BRANDS

BACTERIAL FILTER - MOUTHPIECE
Disposable anatomical filter with integrated mouthpiece to prevent bacterial and viral contamination. Easy to use, direct connection to spirometer on one side, to patient on the other side. Suitable for most of spirometers and devices. Class II A. Individually packed in transparent bag.

CE 0476

MADE IN ITALY

GIMA code	Size - cm Ø int x ext	Compatibility with GIMA codes	Other brands
BACTERIAL FILTERS - MOUTHPIECES - box of 100			
33884	2.75x3	33341, 33433, 33471-2, 33509-14, 33518-22, 33528-32, 33534	Micromedical, Vitalograph, Mir, Ferraris (koko legend), Cardiette (Pneumos 300)
33885	2.7x3.05	-	Cosmed
33886	2.95x3.3	-	Customed, Jaeger
33887	3.05x3.4	-	Sensormedics, Thor, Morgan, Chest, Microgard
33888	3.4x3.6	-	Medical Graphics
33889	2.5x2.7	-	Fukuda Sangjo
33902	2.22x2.8	-	BTL, Sibel

DISPOSABLE NOSE CLIPS FOR SPIROMETRY TESTS

CE 0476

33475   33476   33477

Rubber pads   *Foam pads*   *Rubber large pads*

• **33475 NOSE CLIPS - rubber - 70x40 mm - bag of 100**
• **33476 NOSE CLIPS - foam - 70x40 mm - bag of 100**
• **33477 NOSE CLIPS - rubber large - 70x45 mm - bag of 100**
Gima rubber or foam-padded disposable nose clips help prevent patients from inhaling or exhaling through the nose during spirometry. The tension in the nose clip body keeps it firmly in place while the rubber or foam pads are designed for the best patient comfort. Made of thermoplastic, latex free. Rubber nose clip is available in 2 sizes: standard or large.

MADE IN ITALY

33476

SP-10 POCKET SPIROMETER

CE 0123

AVAILABLE WITH BLUETOOTH

33536

• **33536 SP-10 POCKET SPIROMETER**
• **33535 SP-10 POCKET SPIROMETER WITH BLUETOOTH**
Pocket, portable spirometer with large TFT screen to clearly display both numbers and flow charts.
Synchronously measure FVC, PEF, FEV1, FEV1%, FEF25, FEF2575, FEF75.
Support diagnosis evidence by volume and flow rate chart display. Built-in predicted values. Free PHMS App to save data. Built-in lithium rechargeable battery and battery power display. Supplied with USB cable for PC connection, battery charger and software to calculate data and analyse trend.
• **33410 ADULT MOUTHPIECES - Ø 3 cm ext. - box of 500 pcs**

STANDARD ACCESSORIES
Internal lithium battery
USB cable
PC software (english language)
User manual: GB, FR, IT, ES.

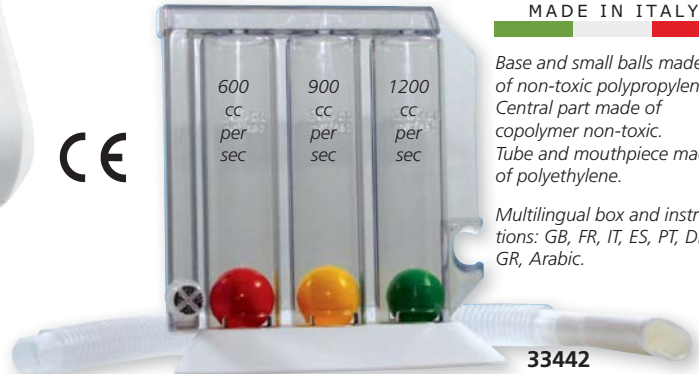| TECHNICAL SPECIFICATIONS |
| --- |
| Max volume: 10 l |
| Volume accuracy: ±3% or 50 ml whichever is greater |
| Flow range: 1 l/sec - 16 l/sec |
| Flow accuracy: ±10% or 0.3 l/sec whichever is greater |
| Parameters: FVC, FEV1, PEF, FEV1%, FEF25, FEF2575, FEF75 |
| CE 92/42 - EMC group I class B - protection type BF |

LUNG EXERCISE DEVICES

• **33442 RESPIPROGRAM**
The respiratory-exerciser Respiprogram exercises the respiration through inspiration. It helps the patient to recover the normal respiration after a chest or abdominal surgery. Composed of: 1 base, 3 small balls different in dimension and colours, 1 transparent central part divided into 3 rooms, 1 tube and mouthpiece. Packed in single box.

MADE IN ITALY

600 cc per sec   900 cc per sec   1200 cc per sec

Base and small balls made of non-toxic polypropylene. Central part made of copolymer non-toxic. Tube and mouthpiece made of polyethylene.

Multilingual box and instructions: GB, FR, IT, ES, PT, DE, GR, Arabic.

33442

• **33436 TRI-BALL® - respiratory exerciser - box of 12**
Tri-Ball® helps the patient to recover the normal respiration after a chest or abdominal surgery. Easy to handle, light and break-resistant design.
Germ-proof mouthpiece holder. It includes a particle filter. Label identification to write patient name and room. Single patient. Label and user manual in GB, FR, DE, IT, ES, PT, NL, HU, PL, LT, CZ, SI, Arabic.

MADE IN SPAIN

33436

600 cc per sec   900 cc per sec   1200 cc per sec

PEAK FLOW METERS

Green area (normal)   PEF >80%
Yellow area (warning)   PEF ≥60%, <80%
Red area (danger)   PEF <60%

Multilingual box and instructions: GB, FR, IT, ES, PT, DE, GR, SE.

33679   **33680**

• **33679 PEAK FLOW METER - 60-800 l/min - adult**
• **33680 PEAK FLOW METER - 50-400 l/min - pediatric**
Regular use of a Peak flow meter can help keep tabs on your asthma by detecting airway narrowing even before you feel any symptoms, giving you time to adjust your medication before your symptoms get worse. Single patient, suitable for adults (33679) and children (33680) as young as 5.
- measure day-to-day changes in your breathing
- track the control of your asthma over time
- show how well your treatment is working
- recognize signs of a flare-up before symptoms appear
- know what steps to take when you have signs of an asthma flare-up
- decide when to call your doctor or get emergency care.

SPACER FOR AEROSOL

Large mask recommended for patients 5 years +   *Medium mask for a secure seal*   *Small mask anatomically shaped for a secure seal*

Weight: 86 g   *Weight: 69 g*   *Weight: 63 g*

33672   **33673**   **33674**

• **33672 SPACER FOR AEROSOL 175 ml - adult (5 years +)**
• **33673 SPACER FOR AEROSOL 175 ml - child (1-5 years)**
• **33674 SPACER FOR AEROSOL 175 ml - baby (0-18 months)**
Anti-static simple and portable aerosol chamber suitable for people with respiratory diseases. It can manage asthma, allowing patients to inhale medicines in a more effectively way. Using a spacer enables to breathe in the mist directly into the lungs and not wasting in the back of the mouth. It helps providing relief from asthma symptoms. It shouldn't be used by people with severe asthma or breathing difficulties. Flow signal whistle to alert patients to breathe slowly included. Chamber size: 52x131 mm. Single patient use only, not sterile. Multilingual box and instructions: GB, FR, IT, ES, PT, DE, GR, SE.

SPIROBANK II SMART - PORTABLE SPIROMETER WITH SPO$_2$ OPTION

• **33512 SPIROBANK II SMART + MIR SPIRO BASIC PC SOFTWARE**
Spirometer with 10,000 tests memory capacity, monochromatic LCD display, 6 keys membrane keypad. Battery power supply (3,7 V-1100 mA lithium) with an autonomy of approx. 50 hours of continuous use, rechargeable with USB port.
- cable (USB 2.0) or wireless (Bluetooth 4.0) connection
- internal temperature sensor for automatic BTPS conversion
- high resolution graphic display
- automatic record of a whole spirometry session including best test
Supplied with USB cable, carrying case, manual GB, IT (FR, ES, PT, DE available on www.gimaitaly.com), re-usable turbine and MIR Spiro Basic software.

• **33514 SPIROBANK II SMART + MIR SPIRO BASIC PC SOFTWARE + OXYMETER**
Same as above with more than 300 hours of oximetric test records (SpO$_2$ % and pulse frequency tests).
Measured parameters: min, max and average SpO$_2$ %, min, max and average pulse frequency, SpO$_2$ total events, test duration, bradycardia events (<40 BPM), tachycardia events (>120 BPM), T90% (time passed with SpO$_2$ ≤89%), T89% (time passed with SpO$_2$ ≤ 88%)
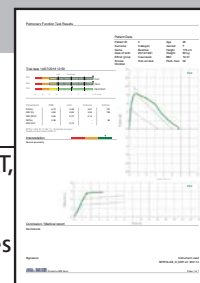
• **33525 ANTIBACTERIAL FILTER - box of 50 disposable**
• **33507 DISPOSABLE TURBINE with mouthpiece - box of 60**
• **33526 REUSABLE TURBINE - spare**
• **33410 MOUTHPIECES int. Ø 2.8 x ext. Ø 3, h 6.5 cm - box of 500**

MIR Spiro Basic PC software functions: (GB, FR, IT, DE, ES, PT, PL, HU, SE, NL, LV, CZ, RO,TR, RU, CN, JP)
- on-line PC connection with icon interface
- real time Flow/Volume and Volume/time curves
- data and graphs export also via e-mail
- data export: CSV file or PDF
Compatible with iPad or tablets
See details at page 320.

PC requirements:
Windows Seven, 8, 10, 11
MAC iOS operating system 10.13

Weight 140 g
Size 55x160x25 mm

33514

Selectable internal software (GB, FR, IT, ES, DE, PT)

160x80 pixel display

MADE IN ITALY

PC connection via USB

FDA 510 (K)
Health Canada
CE 0476
MDR certified

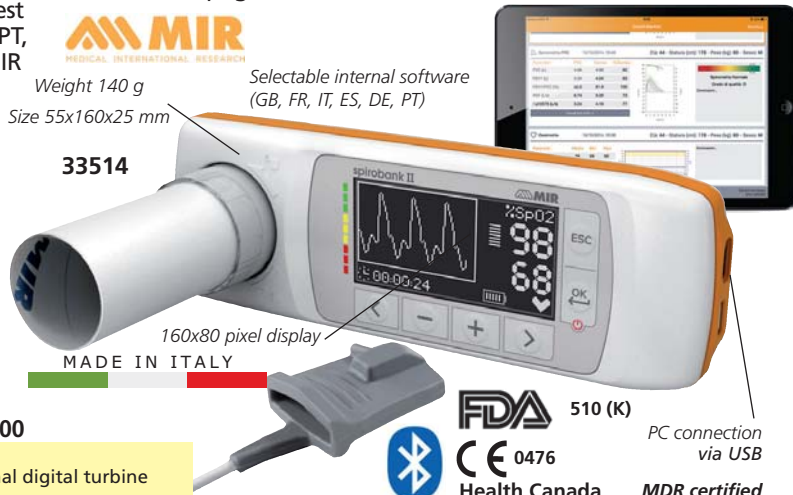### TECHNICAL SPECIFICATIONS - SPIROMETRY

Measured parameters FVC, FEV1, FEV1/FVC%, DTPEF, FEV 0.5, FEV0.5/FVC%, FEV0.75, FEV0.75/FVC%, FEV2, FEV2/FVC%, FEV3, FEV3/FVC%, FEV6, FEV1/FEV6%, PEF, FEF25%, FEF50%, FEF75%, FEF25-75%, FEF75-85%, FET, Vext, Lung Age, EVOL, FIVC, FIV1, PIF, FIV1/FIVC%, FIF25%, FIF50%, FIF75%, R50, PIF, IRV, VC, IVC, IC, ERV, FEV1/VC%, VT, VE, Rf, ti, te, ti/t-tot, VT/ti, MVV	Flow sensor bi-directional digital turbine Flow range ±16L/s Volume accuracy ±2.5% or 50 mL Flow accuracy ±5% or 200 mL/s Dynamic resistance <0.5 cm H$_2$O/L/s Available tests: FVC, VC, IVC, MVV, PRE - POST Connectivity USB 2.0, Bluetooth® 4.0 Power supply Lithium-Ion 3.7V, 1100 mAh

TECHNICAL SPECIFICATIONS - OXIMETRY (33514 only)
Measurement method: red and infrared absorption
SpO$_2$ range: 0-99% ±2 % between 70-99% SpO$_2$
Pulse rate range: 30-300 BPM ±2 BPM or 2%
Signal quality indicator: 0-8 segments on display
Memory capacity: up to 300 hours oximetry

SPIROBANK II BASIC

MIR Spiro Basic PC software. See specifications page 320

33510

FDA 510 (K)
CE 0476
Health Canada   **MDR certified**

• **33510 SPIROBANK II BASIC + MIR SPIRO BASIC PC SOFTWARE**
Complete and rapid pocket spirometer for the General Practitioner to carry out spirometry testing anywhere.
No calibration required, use disposable turbine FlowMIR with integrated mouthpiece (33507) or reusable turbine (33526).
- measures the most important spirometric parameters including: **FVC, VC, IVC, IC, ERV, FEV1, FEV1%, PEF, FEF 25-75, FET, EVOL, TEST POST BD**
- **traffic lights** for immediate test interpretation
- memory up to **10,000 tests**
- rechargeable **long life battery** (40 hours continuous operation)
- real time tests via **USB**
- selectable display language (GB, IT, ES, FR, DE, PT)
Supplied with MIR Spiro Basic PC software, USB cable, one disposable turbine and manual GB, IT (FR, ES, PT, DE on www.gimaitaly.com) in a carrying bag.
• **33507 FLOWMIR DISPOSABLE TURBINE with integrated mouthpiece - box of 60 - spare**
• **33526 REUSABLE TURBINE - optional**
• **33410 MOUTHPIECES int. Ø 2.8 x ext. Ø 3, h 6.5 cm - box of 500**

MADE IN ITALY

TECHNICAL SPECIFICATIONS

Power supply: 3.7 V, 110 mA lithium battery , USB rechargeable	
Keypad: 6-key membrane keyboard	Display: LCD monochrome 160x80 pixel
Flow range: +16 l/s	Flow accuracy: ± 5% or 200 ml/s whichever is greater
Max volume: 10 l	Volume accuracy: ± 2.5% or 50 ml whichever is greater
Data transmission: USB 2.0	Size - weight: 160x55x25 mm - 140 g

SMART ONE PEAK FLOW-FEV1

• **33681 SMART ONE® - Peak Flow and FEV1**
• **33684 SMART ONE® OXI - Peak Flow and FEV1**
Ideal for monitoring respiratory illnesses and in self management of Asthma, COPD, lung transplant care, cystic fibrosis and for use in clinical trials.
Peak flow and FEV1 on smartphone Handheld wireless device connected via Bluetooth to iOS and Android.
App with an exclusive incentive for adult and children based on exhaled flow and volume that gives accurate and helpful results.
Graphic trend of Peak Flow and FEV1 with option to flag any test session.
Test results history with Peak Flow, traffic light health indicator, symptoms scoring and notes.
Turbine flowmeter with plastic mouthpiece For personal use, easy to remove for cleaning.
Manual in GB, IT (FR, ES, DE, PT, available on www.gimaitaly.com)
• **33897 DISPOSABLE MOUTHPIECE**
- paper - box of 100
• **33900 REUSABLE TURBINE + REUSABLE MOUTHPIECE**
- plastic - spare

FDA 510 (K)
Health Canada
CE 0476
MDR certified

33684

MADE IN ITALY

Shared Peak Flow and FEV1 trend

TECHNICAL SPECIFICATIONS

33900

Power supply:	2 batteries AAA 1.5 V included
Autonomy:	1,000 tests
Connectivity:	Low energy Bluetooth® 4.0
Size - weight:	49x109x21 mm - 61 g (with batteries)
Mouthpieces:	Ø 30 mm (1.18 inch)
Spirometry (only 33684)	
Flow sensor:	bi-directional digital turbine
Flow range:	±16 L/s Peak flow accuracy: ±10% or 0.33 L/s
Volume accuracy:	±2.5% or 50 ml
Dynamic resistance:	<0.5 cm H$_2$O/L/s
Measured parameters:	FEV1, PEF
Memory capacity:	the application on the smartphone memorizes data
App iOS - Android:	GB, FR, IT, ES, PT, DE, NL*, CZ*, PL, RU, TR, DK*, GR, FI, HR*, NO, SE, HU**

*Only for iOS   **Only for Android*

SPIRODOC® - SPIROMETER AND OXIMETER

- **33532 SPIRODOC SPIROMETER + MIR SPIRO BASIC PC SOFTWARE - bluetooth**
- **33533 SPIRODOC OXIMETER + MIR SPIRO PLATINUM PC SOFTWARE**
- **33534 SPIRODOC SPIROMETER + OXIMETER + MIR SPIRO BASIC PC SOFTWARE - bluetooth**

One touch laboratory for respiratory analysis suitable for professional and personal use, supplied with reusable turbine.
Complete spirometer ATS/ERS compliant
Specialist-level analysis, screening and Home-care monitoring. Various operation modes: "advanced" parameters for the specialist, "reduced" set of parameters for screening as well as a "simplified" version for Home-care operation. FVC, VC, IVC, MVV, PRE-POST. Precise spirometry interpretation including post bronchodilator. All tests are automatically memorized. Automatic BTPS conversion. Memory capacity: 10,000 tests. Wide selection of predicted values. Possibility to enter patient name.
Intelligent pulse oximeter with on-screen results
Simple, clear SpO$_2$ and Pulse Rate measurements with plethysmographic curve. During the single six-minute walk test (6 MWT), Spirodoc® estimates the level of oxygen therapy required by the patient. Spirodoc® carries out sleep desaturation studies and memorizes events as well as body position.
3D Accelerometer with motion analysis
Spirodoc® is the first 3D Oximeter® incorporating a triaxial motion sensor to correlate the saturation level (%SpO$_2$) with physical activity (walk counter, movement analysis and VMU).
Home-care symptoms diary (eDiary)
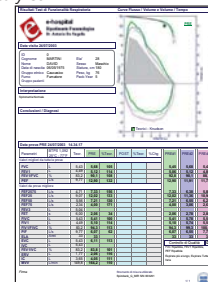Fast on-screen symptoms entry. Easy touch screen with settable

33534

FDA 510 (K)
CE 0476
Health Canada

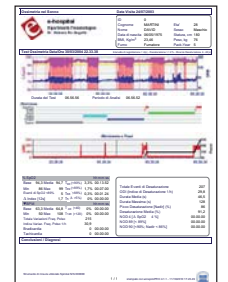**SPIROMETER + OXIMETER + 3D ACCELEROMETER IN ONE UNIT**

Internal software and manual: GB, FR*, IT, ES*, DE*, PT*
* Manual only on www.gimaitaly.com

3 phase report of 6 min walk test: baseline, walk, recovery

Spirometry report

Sleep test report

questions and automatic answer recording for homecare use.
High performance MIR Spiro Basic PC software for spirometry. Multilingual software: see below.
MDR certified.

MADE IN ITALY

TECHNICAL SPECIFICATIONS

Central unit
Display: LCD backlit touch screen display 128x64 pixels
Power supply: Lithium ion 3.7 V, 1100 mA rechargeable battery with 50 hours measurement back up
Accelerometer: Triaxial ±2 g, 400 Hz sampling
Size - weight: central unit 101x48x16 mm, 99 g
removable turbine head: 46x47x24 mm, 17 g
Spirometry
Flow sensor: Bi-directional digital turbine, range: ±16 L/s
Volume accuracy: ±2.5% or 50 mL, whichever is greater
Flow accuracy: ±5% or 200 mL, whichever is greater
Dynamic resistance at 12 L/s: <0.5 cm H$_2$O/L/s

Temperature sensor: semiconductor (0-45°C)
Spirometer measured parameters
FVC, FEV1, FEV1/FVC%, FEV3, FEV3/FVC%, FEV6, FEV1/FEV6%, PEF, FEF25%, FEF50%, FEF75%, FEF25%-75%, FET, Estimated Lung Age, Extr. Vol., FIVC, FIV1, FIV1/FIVC%, PIF, VC, IVC, IC, ERV, FEV1/VC%, VT, VE, Rf, ti, te, ti/t-tot, VT/ti, MW measured, MW calculated
Oximetry
SpO$_2$ range: 0 -100%, ±2% (50-100% SpO$_2$)
Pulse rate range: 20-254 BPM, ±2 BPM or 2%
Pulseoximeter measured parameters
SpO$_2$ [Baseline, Min, Max, Mean], Pulse rate [Baseline,

Min, Max, Mean], T90% [SpO$_2$<90%], T89%[SpO$_2$<89%], T88% [SpO$_2$<88%], T5% [ΔSpO$_2$>5%], Δindex [12s], SpO$_2$ events, Pulse rate events [Bradycardia, Tachycardia], Step counter, Movement [VMU], Recording time, Analysis time
Sleep analysis
Body position, SpO$_2$ events, Desaturation index (ODI), Desaturation [Mean Value, Mean duration, Longest duration, Nadir Peak], ΔSpO$_2$ [Min Drop, Max Drop], Total Pulse Variations, Pulse Rate Index, NOD89% [SpO$_2$<89%; >5min], NOD4% [SpO$_2$ Basale-4%; >5min], NOD90% [SpO$_2$<90%; Nadir<86%; >5min]

MINISPIR® SPIROMETER

- **33528 MINISPIR with MIR SPIRO BASIC PC SOFTWARE**
Real time Flow/Volume loop and Volume/time curve with PRE/POST comparison.
Advanced spirometry test interpretation.
Pediatric incentive animations. Lung Age.
Temperature sensor for BTPS conversion.
Supplied with reusable turbine.
32 measured parameters: FVC, FEV1, FEV1%, FEV3, FEV3%, FEV6, FEV1/FEV6%, PEF, FEF25%, FEF50%, FEF75%, FEF25-75%, FET, Vext, Lung Age, FIVC, FIV1, FIV1%, PIF, VC, IVC, IC, ERV, FEV1/VC%, VT, VE, Rf, ti, te, ti/t-tot, VT/ti, MVV. Manual GB, IT (FR, ES, DE, PT available on www.gimaitaly.com)
MDR certified.
Mir Spiro Basic PC Software
High performance software for spirometry and oximetry see beside.

MADE IN ITALY

FDA 510 (K)
CE 0476
Health Canada

FOR COMPLETE RESPIRATORY ANALYSIS

GIMA code	SPARE PARTS AND ACCESSORIES
33507	Flowmir disposable turbine with integrated mouthpiece - box of 60
33526	Reusable turbine
33410	Adult mouthpieces Ø ext 3 cm - box of 500 pieces for 33526 - spare

TECHNICAL SPECIFICATIONS

Temperature sensor: semiconductor (0-45°C)
Flow sensor: bi-directional digital turbine
Flow range: ± 16 L/s
Volume accuracy: ± 2.5% or 50 mL
Flow accuracy: ± 5% or 200 mL/s
Dynamic resistance at 12 L/s: <0.5 cm H$_2$O/L/s

Communication port: USB
Power Supply: line powered from USB port
Dimension: 50x142x26 mm
Weight: 65 g

MIR SPIRO PC SOFTWARE

MIR SPIRO BASIC AND PLATINUM PC SOFTWARE
The next-generation software for Spirometry. It complies with ATS/ERS 2019. Powerful and advanced, provides a wide range of features in a new graphic and customizable settings. New user interface, much more user intuitive and easier interoperability for EHR/ EMR integration. Automatic updates provide the latest version of software.
MIR Spiro Basic PC Software: standard with all MIR professional products
MIR Spiro Platinum PC Software: standard with 33533
Platinum version can be unlocked by a paid upgrade to MIR.

MIR SPIRO PC SOFTWARE		BASIC	PLATINUM
TEST	FVC Pre/Post, VC Pre/Post	•	•
	Oximetry Spot	•	•
	MVV Pre/Post		•
	Oximetry 6MWT, Oximetry Sleep		•
PATIENT MANAGEMENT	New patient / Patient List / Patient Search	•	•
	Patient Session Summary		•
	Patient Risk factors/Symptoms	•	•
	Test cronology comparison		•
	Worklist		•
PRINTOUTS	FVC Printout STD and ATS 2019	•	•
	FVC Printout STD NIOSH/OSHA		•
	Oximetry Calibration Printout and VC Printout		•
	Quality Grade Printout	•	•
DATA MANAGEMENT	Data sharing/Interoperability	•	•
	Data import from Legacy db	•	•
	Data Import from third parties sfw db	•	•
	Data Export in Excel/csv/ATS/HL7/GDT		•
	Data Recovery		•
	Emphysema Severity Index (ESI)	•	•
	ESI Method Artificial Intelligence		•

PC SYSTEM REQUIREMENTS
Windows: 7, 8, 10, 11 (all 32, 64 bit); RAM 1 GB for 32 bit or 2 GB for 64 bit
1 GHz or faster processor, two or more cores in a 64 bit processor
1 GB free hard disk space
Mac iOS: operating system from 10.13; RAM 2 GB (recommended 4 GB)
1 GB free hard disk space
Connection: USB port or Bluetooth low energy
Multilingual software: GB, FR, IT, ES, PT, DE, PL, HU, RO, SE, NL, CZ, LV, TR, RU, CN, JP

SPIROLAB SPIROMETER: 7" TOUCHSCREEN AND SPO$_2$ OPTION

MIR

CE 0476

FDA 510 (K)

Health Canada

Bluetooth

Dimensions: 220x210x51 mm (8,66x8,26x2")
Weight: 1450 g (3,1lb)
(battery pack included)

Miniflowmeter for reusable and disposable turbine (Ø 30 mm)

33519

| 7" TOUCHSCREEN DISPLAY |
| PEDIATRIC INCENTIVE SYSTEM |
| DATABASE FOR 10,000 TESTS |
| USB 2.0, BLUETOOTH |

• **33519 SPIROLAB® SPIROMETER WITH 7" TOUCHSCREEN**
• **33520 SPIROLAB® SPIROMETER WITH 7" TOUCHSCREEN AND SpO$_2$**
Fast, simple, durable diagnostic spirometer with Miniflowmeter.
Features
- FVC, VC, MVV, PRE/POST Bronchodilator comparison with a wide range of selectable parameters
- long life rechargeable battery
- colour Touchscreen 7" display
- direct connection to external USB Printer PostScript
- 10,000 Spirometry tests or 500 hours of oximetry recording
- selectable internal software languages: GB, FR, IT, ES, DE, PT
- fast and silent built-in B/W printer with customizable printout format
Oximetry option (only 33520)
Adult (standard) and pediatric (optional) reusable finger probe available.
Fast and user friendly
Each function can be activated by a simple touch.
FlowMIR® disposable turbine
- complies with ATS/ERS standard
Totally disposable (mouthpiece, turbine) guarantees 100% hygiene, no cross contamination. No calibration required.
MDR certified

Each turbine is factory calibrated with a computerized system and is individually packed in a clean room

33507

Suitable for children
Patented pediatric incentive directly on the screen.
No need of adaptor.
MIR Spiro Basic PC software
High perfomances PC software for spirometry. See page 320.
Multilingual software:
GB, FR, IT, ES, DE, PT, PL, HU, RO, NL, LV, SE, CZ, RU, TR, JP, CN.

Printout: spirometry report

GIMA code	MIR code	ACCESSORIES AND SPARES	Minimum order
33410	-	Adult mouthpiece - Ø 30 mm ext	box of 500
33493	-	Thermal paper - 112 mm x 25 m	box of 10
33507	910004	Disposable turbine with integrated mouthpiece	box of 60
33525	-	Antibacterial filter - disposable	box of 50
33523	532367	Micro USB cable for PC connection	
33695	-	SpO$_2$ probe - adult - spare	
33696	-	SpO$_2$ probe - paediatric - optional	
33697	910595	Miniflowmeter with cable - spare	

TECHNICAL SPECIFICATIONS - OXIMETRY (33520 only)
SpO$_2$ range:	0-99%
SpO$_2$ accuracy:	± 2% between 70-99% SpO$_2$
Pulse Rate range:	18-300 bpm
Pulse Rate accuracy:	± 2 BPM or 2% whichever is greater
Memory capacity:	up to 500 hours oximetry

OXIMETRY PARAMETERS (33520 only)
%SpO$_2$ and Pulse Rate (Min, Max, Average), Test duration, Total SpO$_2$ Events, T90% (SpO$_2$ time ≤89%), T89% (SpO$_2$ time ≤88%), T40 (Bradycardia duration with Pulse Rate <40 BPM), T120 (Tachycardia duration with Pulse Rate >120 BPM)

STANDARD ACCESSORIES
Battery charger	MIR Spiro basic PC software
1 roll thermal paper	USB port and cable
Reusable turbine	SpO$_2$ adult sensor (33520 only)
Carrying case	Manual: GB, IT, (FR, ES, DE, PT available on www.gimaitaly.com)

TECHNICAL SPECIFICATIONS - SPIROMETRY
Power supply:	Rechargeable battery, approx. 10 hours autonomy
Battery charger:	100-240 V, 50-60 Hz, 400-200 mA
Temperature sensor:	semiconductor (0-45°C)
Flow sensor:	bi-directional digital turbine
Flow range:	±16L/s ±5% or 200mL/s
Volume accuracy:	±2.5% or 50mL
Dynamic resistance:	<0.5 cm H$_2$O/L/s
Connectivity:	USB 2.0, Bluetooth®
Display:	7" colour touch screen LCD, 800x480 resolution
Mouthpieces:	Ø 30 mm (1.18 inch)
Electrical protection:	Class II
Norms:	Electrical safety standard EN 60601-1
	Electromagnetic compatibility EN 60601-1-2

SPIROMETRY PARAMETERS
FVC, FEV1, FEV1/FVC, FEV1/VC, PEF, FEF25, FEF50, FEF75, FEF25-75, FEF75-85, Lung Age, Extrapolated Volume, FET, Time to PEF, FEV0.5, FEV0.5/FVC, FEV0.75, FEV0.75/FVC, FEV2, FEV2/FVC, FEV3, FEV3/FVC, FEV6, FEV1/ FEV6, FEV1/PEF, FEV1/FEV0.5, FIVC, FIV1, FIV1/FIVC, PIF, FIF25, FIF50, FIF75, FEF50/FIF50, VC, IVC, IC, ERV, IRV, Rf, VE, VT, tI, tE, VT/tI, tE/tTOT, MVV (measured), MVV (calculated).

MIR SPIRO BASIC SOFTWARE REQUIREMENTS
Windows 7 (32/64 bit), 8 (32/64 bit), 10 (32/64 bit), 11 (32/64 bit).
iOS operating system 10.13. See page 320 for details.