

SINGLE CHANNEL PALM ECG: CARDIO-A AND CARDIO-B

CE 0123



33259

CE 0476



33260

**4 MEASUREMENT MODES:
PALM, LEG, CHEST,
TRADITIONAL**

PALM ECG'S are designed for general practitioners or for domestic users who suffer from cardiovascular diseases such as hypertension, coronary disorders, giving the possibility of a daily ECG test. Records can be saved and used as a reference for clinical applications. **4 measurement modes: palm, leg, chest or lead wire traditional measurement.**

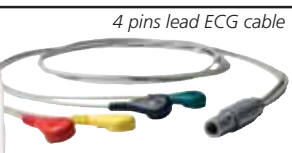
Main features:

- small, portable and easy to use
 - 30 second ECG waveform and measurement results
 - 600 (CARDIO-A) or 1200 (CARDIO-B) ECG waveform can be saved
 - 5 hours (CARDIO-A) or 10 hours (CARDIO-B) ECG continuous measurement data storage
 - analysis and report of 8 types (CARDIO-A) and 17 types (CARDIO-B) of ECG waveform
 - USB 2.0 interface with option data cable and ECG viewer software
 - traditional measurement with optional ECG cable
- CARDIO B with Bluetooth module for wireless data transmission.** Allows to download data on your smartphone or tablet, compatible with Android.
Supplied with multilingual manual and box (GB, FR, IT, ES).

GIMA code	PALM ECG
33260	CARDIO-A palm ECG
33261	CARDIO-B palm ECG - colour display
33259	CARDIO-B Bluetooth palm ECG+viewer software
ACCESSORIES	
33265	ECG viewer software+USB 2.0 cable - for 33260, old 33261
33249	ECG viewer software + USB 2.0 cable for new 33261 since SN: XXS02JL01044 - Jan 2014
33248	New ECG 3 pin lead cable - 3 leads - optional - 2012 from SN: XXQ00HJ03925 for 33260 from SN: XXS02HL01709 for 33261
33264	Old ECG banana lead cable - 3 leads - optional

TECHNICAL SPECIFICATIONS		
	CARDIO A	CARDIO B
ECG bandwidth:	0.5 Hz - 40 Hz	1 Hz - 40 Hz
Heart rate measuring range:	30 - 240 bpm ± 2 bpm	
LCD back light display:	128x64 dot matrix	240x160 dot matrix
Display size:	49x25 mm	57.6x40 mm
Power:	2xAAA batteries	
Dimensions	115x58x18 mm	125x70x21.5 mm
Weight	65 g	106 g

CARDIO-C: 3 CHANNEL POCKET ECG



4 pins lead ECG cable

True colour 3.5" TFT display

CE 0123

FDA 510 (K)

Pocket size: 13x9.5x3.2 cm

32 MB memory inside

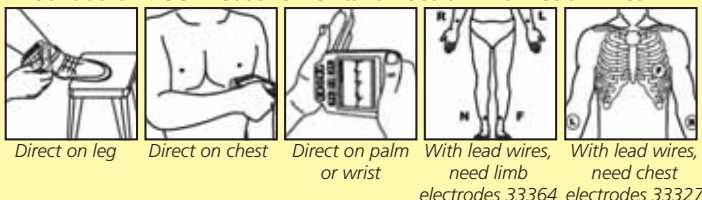
• 33245 CARDIO-C POCKET ECG 3 channel

- small size, light-weight and easy to carry
 - one-key measurement
 - clear ECG waveform and interpretation of results on colour dot-matrix TFT 3.5" screen
 - up to 19 types of measurement results
 - high capacity built-in memory: 24 hours records storage and review for single channel waveform and 8 hours record storage and review for 3-channel waveforms
 - quick measurement: **by built-in metal electrodes**, on palm, chest or leg or **by external lead wires** (needs optional limb and chest electrodes)
 - data management to review or delete data records locally or to upload to PC
- Supplied with ECG viewer software, USB cable, power transformer, ECG 4 pins lead wire, 25 disposable electrodes, manual (GB, FR, IT, ES, DE, PT).
Other accessories see at page 277-278.

- 33364 SET OF 4 LIMB CLAMP ELECTRODES (4 COLOURS) - adult
- 33327 DISPOSABLE TNT ELECTRODES Ø 55 mm

TECHNICAL SPECIFICATIONS	
Heart rate measuring range:	30 bpm ~ 240 bpm
Heart rate measuring accuracy:	± 2 bpm or ±2% whichever is greater
ECG bandwidth:	0.5 Hz ~ 40 Hz
Internal noise level:	≤ 30µVp-p
Display scale:	5.0 mm/mV ±10%
Common-mode rejection ratio (CMRR):	≥ 60 dB
Waveform sweeping speed:	20 mm/s ±10%
Input loop current:	≤ 0.1 µA
Input impedance:	≥ 5 MΩ
Power	
Power:	4 AA alkaline batteries
Supply voltage range:	4.4 ~ 6 VDC
Max average working current:	≤ 160 mA
Auto power-off:	can be adjustable between 1-5 mins
Low battery indication:	4.4 VDC ±0.2 VDC

Methods of ECG measurements: direct or with lead wires



Internal software in GB, IT, FR

CARDIPOCKET ECG - 3 CHANNELS

• 33232 CARDIPOCKET ECG 3 CHANNELS - with software

12-lead ECG printing ECG waveform with thermal printing system, measuring and diagnosing ECG waveform parameters automatically.

- **full-automatic analysis function:** auto-analysis and auto diagnosis for routine ECG parameters. It provides measurement results and auto diagnosis conclusion for HR, P-R interval, P Duration, QRS Duration, Q-T interval, Q-tc, P Axis, QRS Axis, T Axis, R(V5), S(V1), R(V5)+ S(V1)

- **2.83" colour LCD screen** (resolution 320x240) that operates both with touch screen and keys

- **high resolution thermal array output system** 8 dots/mm (vertical)

- **built-in rechargeable lithium detachable battery** can continuously work for 4 hours, print up to 90 minutes and 150 ECG

- **store up to 100 cases** in a SD card (not included)

- **high-accurate digital filter** eliminates baseline drift and distortion to ECG waveform

- **ECG-Sync software** to form a ECG workstation

• 32963 THERMAL PAPER - box of 20 rolls

• 33328 ECG CABLE spare

• 33233 RECHARGEABLE Li-Ion BATTERY

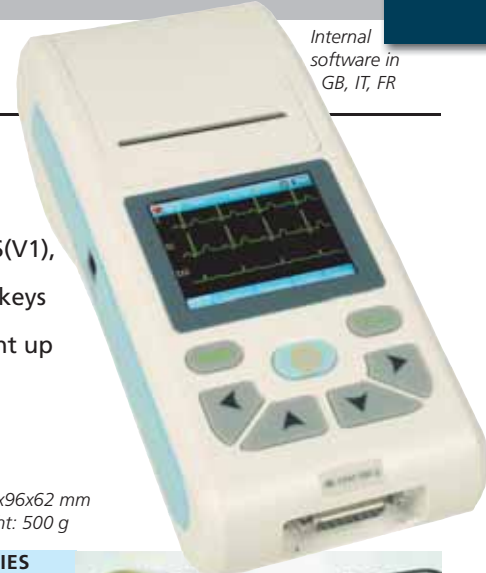
TECHNICAL SPECIFICATIONS

Power:	AC: 100-240 V, 50/60 Hz - DC 12V rechargeable lithium battery 2,000 mAh	
Noise level:	≤15 μVp-p	CMRR: >60 dB, > 100 dB (add filter)
EMG filter:	25/35 Hz	Time constant: ≥3.2 s
Frequency response:	0.05-150 Hz (-3 dB - 0.4 dB)	
Patient leakage current:	<10 μA	
Recording paper:	50 mm x 20 m, high speed thermal paper	
Paper speed:	6.25, 12.5, 25, 50 mm/s ±5%	
Safety standard:	IEC class I, type CF defibrillation-proof applied part floating and defibrillation protection	
Input mode:		
Input circuit current:	≤0.1 μA	Input impedance: ≥50 M Ω

Size: 207x96x62 mm
Net weight: 500 g

STANDARD ACCESSORIES

- Patient cable
- 1 roll of paper
- 1 rechargeable lithium battery
- 4 limb electrodes
- 6 chest limb electrodes
- 1 user manual (GB, IT, FR)
- 1 CD software (GB, FR, IT, ES, DE, TR) and cable for connection to PC



CARDIPOCKET ECG - 1 CHANNEL

• 33257 CARDIPOCKET ECG - standard 12 lead ECG - with software

Compact and lightweight pocket device with unbeatable features:

- wide graphic display (it allows "live" view of ECG trace and selection of all parameters)

- rechargeable lithium battery operated (80 ECG with full charge)

- PC software with interpretation included for storing data into PC (GB/IT)

(operating system: Microsoft Windows 2000/XP/2003/Vista/7)

- multilanguage internal software: GB, IT, DE, FR, ES, TR, CN

- real time continuous records of clear and exact single channel ECG waveform and notes. The notes include mark, sensitivity, chart speed, filter mode, etc

- full-touch keyboard control, easy to use. Screen displays, working position, state of the instrument are clear and easy to be read.

• 32963 THERMAL PAPER - box of 20 rolls

• 33328 ECG CABLE - spare

• 33243 RECHARGEABLE Li-Ion BATTERY up to S.N. CD 1212100050

• 33244 RECHARGEABLE Li-Ion BATTERY since S.N. CD 130730000-1

TECHNICAL SPECIFICATIONS

Power:	AC: 100-240V, 50/60 Hz - DC: 7.4V / 2,000 mAh	
	DC: 9V rechargeable battery	
In optimal DC state up to 8 h standby time, up to 4 h continuous print		
Noise level:	≤15μVp-p	CMRR: >60 dB, >100 dB (add filter)
EMG filter:	35 Hz (-3 dB)	Time constant: ≥3.2s
Sensitivity display:	standard sensitivity: 10mm/mV±2%	
Sensitivity setting:	1/2, 1, 2 (cm/mV), conversion deviation ≤5%	
Recording system:	thermal-array, 8 dots/mm (vertical), 16 dots/mm (horizontal, 50 mm/sec), 32 dots/mm (horizontal, 25 mm/sec)	
Paper speed:	25 mm/s, 50 mm/s ±5%	
Recording paper:	50 mm x 20 m, high-speed roll	
Safety standard:	IEC class I, type CF	
Input circuit current:	≤50nA	

Integrated thermal printer



Weight 800 g with rechargeable battery

Compact: only 190 mm (size: 190x90x40 mm)

60x35 mm wide display

STANDARD ACCESSORIES

- Patient cable
- 1 roll of paper
- 1 rechargeable lithium battery
- 4 limb electrodes
- 6 chest limb electrodes
- 1 user manual (GB, IT, FR)
- 1 CD software and cable for connection to PC



PM10 PALM ECG WITH SOFTWARE AND BLUETOOTH

• 33246 PM10 PALM ECG - with software and Bluetooth

PM10 is a homecare device to check ECG parameters. It can be used as a reference for patient to take further medical treatment and reference for doctor to diagnose. It can help to early prevent from cardiovascular diseases and reduce risks. Intelligent design, it achieves remote health management through mobile application; it can automatically start measurement, store ECG, upload data, download health results. Suitable for patients with chronic diseases, especially coronary heart disease, diabetes, hypertension, myocarditis, obesity, chest pain, palpitations and dyspnea.

4 MEASUREMENT MODES



Limb leads I

Chest leads V

Limb leads I

Limb leads II

Features:

- 1.77" colour TFT-LCD

- quick ECG test with a simple touch. User friendly

- accurate conclusion can be obtained immediately after measuring

- continuously record for up to 500 cases with built-in rechargeable lithium battery in full charge

- Bluetooth transmission

- ECG data can be saved to cloud Platform permanently, easy to check and analyze

- historical data can be printed at any time, easy to diagnose

Size: 100x45x15 mm
Weight: about 60g

Supplied with a carrying bag, a multilanguage manual (GB, FR, IT, ES, DE, PT) and a CD software to visualize data on PC



33246

DIGITAL SINGLE, 3 OR 3/6 CHANNEL ECG

- **33220 SINGLE CHANNEL ECG 100G**
 - large LCD display waveform and data
 - high-resolution thermal printing array system
 - frequency response is as high as 150 Hz
 - capable of printing continuously on channel trace and annotations including lead mark and parameter such as sensitivity, paper speed and filter operation status
 - high resolution digital filter inhibits baseline drift without affecting ECG waveform
 - floating input circuit meets IEC safety standard
 - rechargeable battery supporting more than 50 patient examinations
 - internal software: GB, IT, DE, TR, RU, CN
 - manual: GB, IT, ES
- **33225 RECHARGEABLE BATTERY - spare**
- **32968 PAPER ROLL 50 mm x 20 m - box of 20**
- **33328 ECG CABLE - 10 leads - spare**



CONTEC™

33220

USB connection allows real-time transmission to PC, remote data analysis and diagnosis, management and printing through the PC

- **33221 3 CHANNEL ECG 300G - monitor up to 12 channels**
 - 3.5" TFT colour LCD screen
 - 12 leads simultaneous display
 - thermal printing system
 - AC and DC power supply
 - high capacity built-in lithium rechargeable battery
 - battery power supports up to 150 ECG continuous records
 - built-in Database
 - built-in memory can store more than 1000 cases
 - digital signal processor for filter
 - auto-measurement, auto-analysis, auto-interpretations
 - ECG-Sync software, USB connection to PC
 - internal software: GB, FR, IT, ES, DE, TR, PL, PT, SI, YU, RU, KZ, CN
 - PC software: GB
 - manual: GB, IT, ES, FR
- **33226 RECHARGEABLE BATTERY - spare**
- **32969 PAPER ROLL 80 mm x 20 m - box of 10**
- **33328 ECG CABLE - 10 leads - spare**



33221

USB connection allows real-time transmission to PC, remote data analysis and diagnosis, management and printing through the PC

- **33222 6 CHANNEL ECG 600G - monitor up to 12 channels**
 - 7" TFT, colour LCD touch screen
 - 12 leads simultaneous display
 - digital isolation technology and signal processing solution, digital filter
 - patient management, name, age and id, detail analysis report
 - built-in lithium rechargeable battery
 - thermal printing system provides more than 10 printing modes
 - can print 90 minutes and print out 150 ECG continually
 - ECG-Sync software, USB connection to PC and built-in memory can store more than 1000 cases
 - auto-measurement, auto-analysis and auto-interpretation
 - internal software: GB, FR, IT, ES, DE, TR, PL, PT, SI, RU, KZ, CN
 - PC software: GB. Manual: GB, IT, FR
- **33226 RECHARGEABLE BATTERY - spare**
- **32970 PAPER ROLL 110 mm x 20 m - box of 10**
- **33328 ECG CABLE - 10 leads - spare**



33222

TECHNICAL SPECIFICATIONS

		ECG 100G	ECG 300G	ECG 600G
ECG instrument Input	Safety Type	Class I, type CF applied part, which has defibrillation-proof applied part		
	Lead	Standard 12 leads		
	Input way	Floating and defibrillation protection		
	Patient leak current	<10µA		
	Sampling rate	800 Hz	1,000 Hz	1,000 Hz
	A/D conversion	12bit		
	Frequency response	0.05Hz~150Hz (-3dB, + 0.4dB)		
Dispose Wave Data	Time constant	≥ 3.2s		
	CMRR	>60dB, >100dB(Add filter)		
	Enduring polarization voltage	±500mV		
	Noise level	<15µVp-p		
Waveform output	EMG interference filter	35Hz (-3dB)	25Hz/35Hz (-3dB)	
	AC filter	50Hz/60Hz (-20dB)		
	Recording way	Thermal printing system	Thermal printing system (32spots/mm)	
	Recording paper	50mm(W)×20m(L)	80mm(W)×20m(L)	110mm(W)×20m(L)
	Sensitivity	5, 10, 20mm/mV	2.5, 5, 10, 20, 40 mm/mV	
Power supply Fuse	Paper speed	Auto-record: auto leads changing	Auto-record: 25mm/s, 50mm/s	
			Rhythm record: 25 mm/s, 50 mm/s	
		Manual-record: 25 mm/s, 50 mm/s	Manual-record: 5, 6.25, 10, 12.5, 25, 50 (only 33221), 100 mm/s (only 33222)	
Form	AC	110-220V, 50/60 Hz		
	DC - Lithium battery	7.4V, 2000 mAh	7.4V, 3500 mAh	
		2 pcs ø5x20mm AC time lag; T250mA/250V(Power Supply:220V)		
	Size	315 x 215 x 77 mm		
	Net Weight	1.5 kg	1.6 kg	1.7 kg



- STANDARD ACCESSORIES**
- ECG cable - 1 set
 - Limb electrode clamp - 1 set
 - chest electrodes - 1 set
 - Ground wire
 - Power connection
 - Paper roll
 - USB connection and PC software (only 33221 and 33222)

- **33228 CARRYING BAG 39x29x14 cm**



3 AND 6-12 CHANNEL DIGITAL ECG WITH HIGH RESOLUTION MONITOR

33334

33350

WITH
INTERPRETATION



3 YEARS WARRANTY
made in Italy

Portable with small dimensions and light weight

Large, high resolution backlight Display: LCD 320x240 dots.

- 33334 CARDIOGIMA 3M - 1-3 ch. with interpretation
- 33350 CARDIOGIMA 6M - 3-6-12 ch. with interpretation (monitor 3-6 channels, printer 3-6-12 channels)
- LCD monitor in Standard or Cabrera format with base line setting
- High resolution thermal printer (8 dots/mm): hardcopy 1-3 or 3-6-12 channels real time with possibility to print a millimetric grid
- Manual or automatic recording
- Image freeze with memory scrolling for reviewing and hard copy of acquired signals (Memory 10 seconds for each lead)
- Digital filters for elimination of muscle tremors, power line and base line noises
- Pacemaker detection
- Power supply by built-in high capacity Ni-Cd batteries and fast charging time

- Very simple operation by pre-defined fast keys and menus
- Based on a risk processor for a full digital signal processing
- Made in Italy.

STANDARD ACCESSORIES 3M AND 6M

Patient cable	6 chest limb electrodes
4 limb electrodes	1 roll of paper
Manual (English, Italian)	1 bottle of gel
Rapid guide: English, Spanish, Italian	Battery

GIMA code	CARDIOGIMA ACCESSORIES	Minimum order
27139	Transport bag (see at page 60)	-
32996	Thermal paper 58 mm x 25 m (Cardiogima 3M)	box of 20
32953	Thermal paper 112mm x 23m (Cardiogima 6M)	box of 10
33328	ECG cable 10 leads - spare	-

TECHNICAL SPECIFICATIONS CARDIOGIMA 3M AND 6M

Power supply: internal rechargeable Ni-Cd batteries
 AC/DC Adapter: 100-240V, 50-60 Hz; 200mA
 Battery autonomy: 2.5 hours
 Applied part: CF type
 Input impedance: > 100 Mohm
 Frequency response: 0.05: 145 Hz
 Cmrr: > 91 dB (33334), Cmrr: > 100 dB (33350) Time constant: > 3.2 s
 Acquisition: 12 bit 800 samples/sec/channel-isochrome
 Leads: 12 standard or Cabrera

Sensitivity: 5mm/mV; 10mm/mV; 20mm/mV ±5%
 Scrolling speed: 5mm/s; 10mm/s; 25mm/s; 50mm/s
 Signal memory: 10s for each lead
 Printer: thermal printer 8 dots/mm, paper 58 mm (3M) 110 mm (6M).
 Filters: muscles tremors 35Hz digital; power line interferences 50-60Hz digital; high pass 0.5Hz digital
 Defibrillation protection: internal
 Display/Hardcopy: 1/3 channel (3M) 3/6/12 channel (6M)
 Dimensions: 240x160x65 mm. Weight: 1.5 kg. Made in Italy

CARDIOGIMA 1M - 1/3 CHANNEL ECG WITH PARAMETERS CALCULATION



3 YEARS WARRANTY
made in Italy

33329

- 33329 CARDIOGIMA 1M - 1-3 channel ECG with monitor
A real portable ECG with small dimension and light weight (1 kg), with LCD monitor 128x64 pixel, high resolution thermal printer (8 dots/mm hardcopy, 1 channel real time) and parameters calculation. With manual or automatic recording, memory 10 seconds for each lead. Includes digital filters for elimination of muscles tremors, power line and base line noises. Based on a risk processor for a fully digital signal processing. Made in Italy.
- 32996 THERMAL PAPER 58 mm x 25 m - box of 20
- 33328 ECG CABLE 10 leads - spare

STANDARD ACCESSORIES

Patient cable	1 roll of paper
1 bottle of gel	4 limb electrodes
Manual (English, Italian)	6 chest limb electrodes
Rapid guide: English, French, Spanish, Italian	Battery

TECHNICAL SPECIFICATIONS

Power supply: internal rechargeable Ni-Mh batteries
 AC/DC Adapter: 100-240V, 50-60 Hz; 200mA
 Battery autonomy: 3 hours
 Applied part: CF type
 Input impedance: > 100 Mohm
 Frequency response: 0.05: 145 Hz
 Cmrr: > 100 dB time constant: > 3.2 s

Acquisition: 12 bit 800 samples/sec/channel
 Leads: 12 standard or Cabrera
 Sensitivity: 5mm/mV; 10mm/mV; 20mm/mV ±5%
 Scrolling speed: 5mm/s; 10mm/s; 25mm/s; 50mm/s
 Signal memory: 10 sec for each lead
 Printer: thermal printer 8 dots/mm, paper 58 mm.
 Defibrillation protection: internal

Filters: muscles tremors 35Hz digital; power line interferences 50-60Hz digital; high pass 0.5Hz digital
 Dimensions: 190x120x60 mm. Weight: 1 kg.
 Conformity standards: 93/42/CEE; EN60601-1; EN60601-1-2; IEC601-2-25 Made in Italy

EDAN SINGLE OR THREE CHANNEL ECG

33330



33333

Single and three channel with 12 channel display



INTERPRETATION

COLOUR DISPLAY

EDAN PORTABLE ECG - 1 and 3 channel

- foldable LCD screen, vivid waveform display
- built-in high resolution thermal printer
- built-in rechargeable Li-ion battery, AC/DC supply
- complete digital filter, avoid baseline drift, AC, EMG interfere
- automatic baseline adjustment
- auto/manual operation selectable
- lead-off detection and alarm

SE-3 Three channel colour ECG also features

- interpretation tested by CSE/AHA/MIT database
- 12 Lead simultaneous acquisition
- automatic ECG parameters measurement and analysis
- auto, manual, rhythm off work mode
- support barcode scanner to simplify patient information input
- LAN/RS232/USB connection to PC
- 12 leads grid printing on normal A4 paper by external printer

ECG Viewer Software: PC based ECG data management software

- compatible with Windows XP, WIN 7, Vista (32 bit, 64 bit)
- multi format reports - XML/SCP/DICOM/PDF/JPG/BMP/TIFF/PNG
- support bi-directional communication with ECG device

GIMA code	EDAN ECG AND ACCESSORIES
33330	Edan SE-1 Single Channel ECG
33333	Edan SE-3 colour Three Channel ECG - interpretative
33336	ECG-Viewer Software (GB, FR, IT, DE, PL, RU, ES, TU) for 33333
32963	Thermal paper - roll 50mm x 25m for 33330 and 33305
32964	Thermal paper - roll 80mm x 25m for 33332/3 and 33306
33328	ECG cable - spare
33318	Rechargeable Lithium battery 2500 mAh - spare
27139	Transport bag - see page 60

TECHNICAL SPECIFICATIONS

	33330	33333
Lead:	One lead	Standard 12 leads
Acquisition mode:	One lead	12 leads simultaneously
Sensitivity:	2.5, 5, 10, 20 mm/mV	> 50 MΩ (10 Hz)
Input impedance:	> 50 MΩ (10 Hz)	EMG Filter 25/35/45 Hz off
Filter:	EMG Filter 35 Hz (-3 dB)	AC/DFT Filter 50 Hz/60Hz (-20 dB)
		DFT Filter 0.05/0.15/0.25/0.32/0.5/0.67 Hz
		Low pass filter 150/100/75 Hz
		AC Filter on/off
Recording mode:	Auto/Manual	Auto/Manual/Rhythm/USBPRT
Rhythm lead:		Any lead selectable
Safety standard:		IEC I/CF
Power supply:	AC: 100-115 V, 220-240 V, 50/60 Hz	Rechargeable Li-ion battery: voltage 14.8 V
		More than 6.5 hours continuous operation with battery supply
Data storage:	-	500 ECG's
Thermal paper:	50 mm x 30 m	rolled 80 mm x 20 m
		folded 80x70 mm x 200 pages
Paper speed:	25 mm/s, 50 mm/s (± 3%)	5mm/s, 6.25 mms 10 mm/s, 12.5 mm/s, 25 mm/s, 50 mm/s (±3 %)
Dimension:		300x260x75 mm
Weight:	2.3 kg (with battery)	2.5 kg (without battery)
Display:	192x64 pixel LCD	320x240 pixels LCD (colour screen)
Selectable display language:	GB, IT, FR, ES, PL, RU, TR, UA	GB, IT, FR, ES, RU, PL, CZ, RO, DE, TR, HR, UA
Interface:	RS 232	Ethernet, RS232, USB
Barcode scanner support:	-	yes
Report formats:	-	PDF, Dicom, SCP, XML

STANDARD ACCESSORIES

Patient cable	1 roll of paper	4 limb electrodes
1 bottle of gel	Rechargeable battery	6 chest limb electrodes
Manual: GB, IT. On request: FR, ES, PT, TR (SE-1 and SE-3), DE, RU (SE-3 only)		

MINDRAY BENEHEART R3 ELECTROCARDIOGRAPH

• 33301 MINDRAY BENEHEART R3 ELECTROCARDIOGRAPH 3 channels

Lightweight portable cardiograph for resting ECG diagnosis.

Reliable analysis - Glasgow algorithm

Utilizes the University of Glasgow ECG analysis algorithm, one of the world-leading resting ECG interpretations.

Great Portability - only 1.2 kg

Weighs only 1.2 kg with battery, easy to carry.

5" clear colour display

Offers the highest resolution in industry, enabling clinicians to observe real-time waveforms accurately.

Convenient operations

ECG recording is automatically unfolded on the writing pad at the top of the unit for notes or signature.

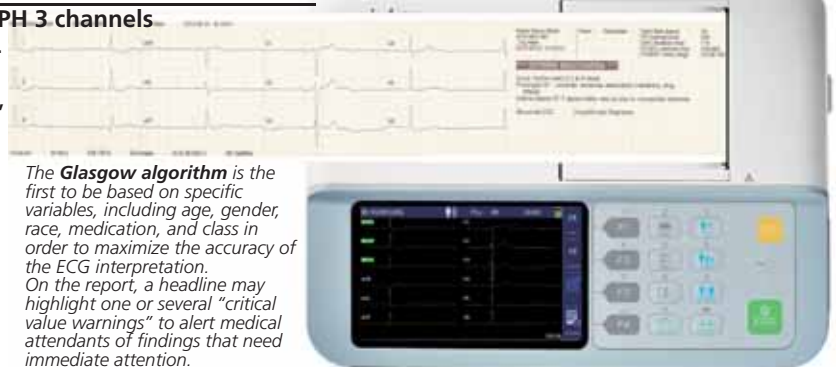
Unique recorder - Z-folded or rolling paper

Compatible with both rolling paper and Z-fold paper.

Easily switchable without dismantling the pressure lever.

• 33014 ROLL THERMAL PAPER - 80 mm x 20 m - box of 10

• 33016 Z-FOLD THERMAL PAPER - 80x70 mm x 200 sheet - box of 25



The **Glasgow algorithm** is the first to be based on specific variables, including age, gender, race, medication, and class in order to maximize the accuracy of the ECG interpretation. On the report, a headline may highlight one or several "critical value warnings" to alert medical attendants of findings that need immediate attention.

STANDARD ACCESSORIES

Cable with banana plugs, IEC	1 roll paper
Limb clamp set of 4	Rechargeable battery
Chest bulb set of 6	User manual in: GB, FR, DE, HU, IT, PL, ES, TR
Glasgow algorithm (available in 13 languages as internal software)	

TECHNICAL SPECIFICATIONS

Power	AC power: 100 to 240 VAC ± 10% 60 VA	ECG amplifier: DC-coupled	Thermal printer:	Dot array/Width 80 mm/speed 5, 12.5, 25, 50 mm/s
Battery-type:	rechargeable Lithium ion battery 11.1 V typical, 2,500 mAh	Input impedance: 50 MD at 10 Hz, defib protected	Software	
- capacity:	6 hours of continuous operation without recording or 500 ECGs in 2.5 x 4 format at 25 mm/s and 10 mm/mV	Patient leakage: < 10 µA	Resting ECG mode:	Records and prints 12-lead resting ECG with 10-second duration
- charge time:	3.5 hours with power off	Heart rate meter: 30 to 300 BPM ± 10% or ± 5 BPM, whichever is greater	Patient information:	Patient ID, secondary ID, age, date of birth, gender, race, medication class and V3 electrode placement
Processing		Sensitivity/gain: 5, 10, 20 mm/mV, Auto	Internal storage:	800 ECGs in internal memory
ECG analysis	500 samples/second (sps)	Colour display	ECG Storage format:	PDF and Mindray storage format
Digital	1,000 samples/second/channel	Resolution: 800x400	internal software:	GB, FR, IT, ES, DE, PL, PT, TR, RU, HU, RO, CZ, CN
Pacer detection	16,000 samples/second/channel	Display data:	Report formats	Thermal printer/PDF/A4/letter
Acquisition mode:	Pre-acquisition or post-acquisition provide 10 seconds of instantaneous ECG acquisition		Size/Weight:	250x194x56 mm/1.2 kg including battery

MULTI CHANNEL ECG WITH INTERPRETATION ON PAPER



33354

SOFTWARE INCLUDED FOR DATA STORAGE ON PC

- **33354 CARDIOGIMA 12 ECG - 3-6-12 channel**
Cost effective 12 channel resting ECG recorder without performance compromise. The simultaneous record of 12 channels has a high diagnostic value - all the 12 channels are shown at the same time. A4 size paper, one body type.
- Main Features:**
- 12 leads simultaneous 10-second resting ECG with interpretation in only 60 seconds multilanguage.
- Internal software+print in GB, FR, IT, DE, RU, TR, CN.
- wide paper printing (A4 size thermal paper, fax paper is OK)
- combined output of all relevant curves, patient data, date, time and instrument settings
- **PC Connections**
Connection to PC with RS 232 port or LAN to submit recorded ECG signal to other specialist for evaluation (only a modem is needed)
- **ECG filing system**
A fully configured PC-based software enables to record, print, change the settings of ECG's and save them in JPG format, which ensure compatibility with most EMR package.
- **rechargeable batteries (optional)** with 1 hour capacity in normal use (about 100 ECG printouts)

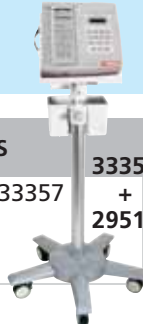
TECHNICAL SPECIFICATIONS

ECG Leads:	3-6-12 channel illustration of ECG signals in continuous recording or 10 sec. recording with interpretation.
Dimension:	296x305.5x92.5 mm Approx 3 kg
Recording channel:	3, 6, 12 channel and 1 channel (60 sec.)
Sensitivity:	2.5, 5, 10, 20, auto (I-aVF: 10, W1-V6: 5) mm/mV
Printing speed:	12.5; 25; 50 mm/s
Filters:	AC (50/60 Hz, -20 dB or better), Muscle (25-35 Hz, -3 dB or better) Low pass filter (off, 40 Hz, 100 Hz, 150 Hz)
Display:	2x16 character LCD display
LCD display:	Sensitivity, speed filter status, HR, Printing form, rhythm lead
LED indicator:	Signal quality, power source, battery
Keyboard:	Membrane keyboard, alphanumeric and symbol available
Patient data:	ID, name, age, sex, height, weight
Basic measurement:	Heart rate, PR, QRS, QT/QTc, P-R-T axis
Recorder:	Thermal print head, thermal paper roll Report papers: A4: 215X297 mm (8.5"x11.7") Letter: 215x280 mm (8.5"x11")
Resolution:	vertical: 8 dots/mm, horizontal: 16 dots/mm
Electrical:	Internal noise: 20 µV (p-p) max Input circuit: floating input Isolated and defibrillation protected DC offset voltage: ≥ ± 300 mV Patient leakage current: < 10µA Frequency response 0.05-150 Hz
Power:	Power supply: AC or built-in battery (options) Power requirement: 100-240 Vac, 50/60 Hz, 1.0-0.5 A Power consumption: 60 W max
Battery capacity:	1 hour of normal use (approx. 100 automatic ECG printouts)
Communication:	PC Connection with RS-232 interface and lan
Safety:	Class I, Type BF
Conformity:	CE, FDA, KFDA, CFDA, NCC

Made in Korea

STANDARD ACCESSORIES

- | | |
|---------------------------------------|----------------------------|
| 1 PC software (GB/IT) | 1 ECG gel tube (250 ml) |
| 1 LAN cable | 1 Recording paper roll |
| 1 Patient cable - 10 leads | 1 Operation manual (GB/IT) |
| 4 ECG clip-on electrodes | |
| 6 Chest electrodes, suction for adult | |
| 1 Power cable | |



GIMA code	CARDIOGIMA 12 ACCESSORIES	
29534	Rechargeable battery - for 33354/33355/33357	33354 + 29519
32950	Thermal paper A4 - for 33354-5-7 - box of 5	
33328	ECG cable for 33354-5-7	
29519	Trolley for 33354-5-7	

DIGITAL 12 CHANNEL COLOUR ECG WITH WI-FI



33223

- **33223 12 CHANNEL ECG 1200G with WI-FI**
- 8" TFT display, 800x600 dots high resolution colour LED backlight
- simultaneous 12 leads acquisition and display
- digital signal technique, AC filter, baseline filter, EMG filter
- auto-analysis and auto-interpretation
- Multi-mode display and printing, such as 12, 6+1 (rhythm), 6, rhythm 12, rhythm 10, rhythm 8, rhythm 6. Manual, Freeze etc
- 0.5 built-in lithium rechargeable battery
- 2 USB and LAN Socket for uploading data to PC
- built-in flash memory. Stores more than 1,000 files
- Multi-language internal software: GB, FR, IT, ES, PT, PL, SI, TR, RU, KZ, CN.
- **33227 RECHARGEABLE BATTERY - spare**
- **32967 PAPER ROLL 210 mm x 30 m**
- **33328 ECG CABLE - 10 leads - spare**



TECHNICAL SPECIFICATIONS

Input way	Floating and defibrillation protection
Lead	Standard 12 leads
Patient leak current	< 10 µA
Input impedance	≥ 50 MΩ
Frequency response	0.05 - 150 Hz (-3 - + 0.4 dB)
Time constant	≥ 3.2 s
CMRR	>60 dB, > 100 dB (adding filter)
EMG interference filter	25/35 Hz (-3 dB)
Thermal paper	210 mm x 30 m high-speed
Paper speed	Auto and rhythm record: 25, 50 mm/s, ±5% Manual record: 5, 6.25, 10, 12.5, 25, 50 mm/s, ±5%
Sensitivity selections	2.5, 5, 10, 20, 40 mm/mV, ±5%. Standard sensitivity is 10 mm/mV ±0.2 mm/mV.
Auto record	Record setup according to auto record format and mode, automatically changing leads, measuring and analyzing.
Rhythm record	Record setup according to rhythm record format and mode, automatically measuring and analyzing.
Manual record	Record setup according to manual record format, manually changing leads.
Measurement parameters	HR, P-R interval, P Duration, QRS Duration, T Duration, Q-T interval, Q-Tc, P Axis, QRS Axis, T Axis, R(V5), S(V1), R(V5)+S(V1)
Product safety type	Class I CF defibrillation and pacing protection
Size	334x320x85 mm
Power	AC: 100-240 V, 50/60 Hz DC: 14.8 V, 3700mAh rechargeable lithium battery

STANDARD ACCESSORIES

- | | |
|--|------------------|
| 1 ECG cable | 1 ground wire |
| 1 set limb electrode clamp | 1 paper roll |
| 1 set chest electrodes | Power connection |
| USB connection | |
| Rechargeable battery | |
| Software (same languages as internal software) | |
| Manual: GB, FR, IT | |



CARDIO 7: 12 CHANNEL RESTING ECG WITH TOUCH SCREEN

SOFTWARE EKG VIEW PLUS
for data storage on PC



Long term ECG recording and automatic arrhythmia detection

Touch screen operation full alphanumeric keyboard support

Optional spirometer function

USB function

- **33357 ECG CARDIO 7: 12 CHANNEL ECG WITH TOUCH SCREEN**
- 12 channel interpretive ECG for adult, pediatric and neonatal use
- over 130 kinds of interpretation results based on advanced Minnesota code, HRV (Heart Rate Variability analysis)
- memory for up to 200 patients
- real-time preview monitor
- PC compatible through LAN or Wi-Fi
- multi-language selectable software (GB, RU, FR, DE, IT, CN, ES, TU, PL, RU, PT)
 - lead fault message
 - pace maker detection
 - automatic arrhythmia detection
 - 3, 5, 10 minutes long term recording
 - grid function allows you to use low cost plain fax paper
 - wide and clear colour 7" TFT LCD (800x480)
 - touch screen for easy operation
 - full disclosure function
- **32950 THERMAL PAPER A4 - box of 5 rolls**
- **29534 RECHARGEABLE Ni-MH 12 V BATTERY up to S.N. T7xxxxxxx - optional**
- **29536 RECHARGEABLE Li-Ion BATTERY since S.N. T8xxxxxxx - optional**
- **29519 TROLLEY**
- **33328 ECG CABLE**



33357

One touch operation for analyzing, storing and printing within 3 seconds

Rotary key access to all menus

Various standard formats: JPG, PDF, XML, MFER, DICOM

STANDARD ACCESSORIES	
Patient cable - 10 leads	1 paper roll
LAN cable	4 limb electrodes
1 bottle of ECG cream (70 g)	6 chest limb electrodes
1 power cable	EKG View Plus (GB, IT)
manual (GB, IT)	

TECHNICAL SPECIFICATIONS

ECG leads :	10 lead, 12 channel simultaneous ECG and acquisition	Resolution:	Vertical: 8 dot/mm Horizontal: 16 dot/mm
Dimension:	300(W) x 299(H) x 123(D)mm, approx. 3.5 kg	Electrical:	Internal noise: 20 µV (p-p) max Input circuit: floating input Input impedance: ≥50 MΩ Input voltage range: ≥ ±5 mV Common mode rejection: > 105 dB DC offset voltage: ≥ ±400 mV Time constant: 3.2 sec Patient leakage current: < 10 µA Frequency response: 0.05 ~150 Hz Isolated and defibrillation protected
Recording channel:	3 channels + 1 rhythm, 3 channels + 3 rhythm, 6 channels + 1 rhythm, 12 channels, 60 seconds 1 channel, 3, 5, 10 minutes 1 channel and beat report	Signal quality control:	Disconnected lead detection Pacemaker pulse detection storage for 200 ECGs (Internal on flash memory) AC 100~240 VAC, 50/60 Hz or battery (option) 2.0~1.0 A, 60 VA max 4 hours of normal use (approx.200 ECG printouts)
Sensitivity:	2.5, 5, 10, 20, auto (I~aVF: 10, V1~V6: 5) mm/mV	ECG data storage:	PC connection with LAN D2 Wi-Fi
Printing speed:	5, 12.5, 25, 50, 100 mm/s	Power:	Class I, Type CF, CE, CSA, FDA, KFDA, CFDA, CCC
Sampling rate:	2,000 samples/sec	Battery (Li-Ion):	
Filters:	AC (50/60 Hz, -20 dB or better) Muscle (25~35 Hz, -3dB or better) Base line drift (0.05, 0.1, 0.2 Hz, -3dB or better) Low pass filter: off, 40 Hz, 100 Hz, 150 Hz	Communication:	
Display:	7" color TFT LCD display (800x480), 12 channels preview ECG wave	Safety conformity:	
Monitor display:	ID, date, sensitivity, speed, filter, form, rhythm lead		
User interface:	Touch screen (alphanumeric and symbol available), Keyboard, rotary push-knob (pop-up menu)		
Patient data:	ID, name, age, sex, height, weight, smoke, race		
Basic measurement:	Heart rate, PR int, QRS dur, QT/QTc, P-R-T axis		
Recorder:	Thermal print head, roll paper A4 report paper: 210x300 mm (8.5"x11")		

SPIROMETER MODULE FOR CARDIO 7

• **33356 SPIROMETER MODULE - for code 33357**

It transforms CARDIOGIMA 7 in a 2 in 1 system: ECG-SPIROMETER.

Spirometry measuring values:

FVC: FEV 1.0, FEV 1/FVC, FEV 0.2-1.2L, FIVC, FEV 25-75, FEV 75-85%,
PEF: FEF 200-1200 ml, FEF 25%, FEF 50%, FEF 75%, PIF,
FET 100%, FIVC.

SVC: SVC, ERV, IRV, TV, EC, IC,

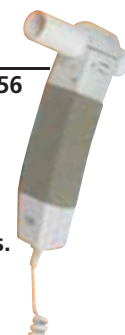
33356

MVV: TV, MVV, FB

Pre and post bronchodilator comparison.

Presentation: flow volume loop, flow time plot, measurement values table. Complies with ATS standard.

• **33362 DISPOSABLE MOUTHPIECES - box of 100 pcs.**



ECG CABLE COMPATIBLE WITH MOST ECG BRANDS

• **33328 ECG cable - 10 leads**

Long lasting, individually tested cable compatible with the following ECG machines:

BIONET: Cardiocare, Cardiotouch

CARDIOLINE: E1, E1R, E3, Delta 300, Delta 360, C3.

CARDIETTE (Elettronica Trentina):

Autoruler 12/1, Autoruler 12/3, Excel 103, Excel 106, Astron Comp 1, Astron Comp 3, Astron Comp 6, Start 100 P, Start 100 H, Start 200, Start 200HV, AR600, AR 600 ADV, AR1200, AR1200ADV.

CARDIORAPID CAMINA: K111, K112, K33, K36, K300 M, K300 P, K600 P, K600 D, K130 B, K 130 D.

CONTEC: 100G, 300G, 600G, 1,200G

EDAN: Smart SE-1, SE-3

ESAOTE: P80, P8000

GIMA: CARDIOGIMA 1M, 3M, 6M, 12, 12M

HP: Pagewriter 1513, 154B/C, 1514D, 1515A/B, 1517A.

KONTRON EKG P80

MACQUAIRE CT100, CT200.

M4 MEDICAL: M traces

NIHON - KOHDEN Cardiofax 651, 6581, 8110.

PROGETTI all models: EPG junior, EPG view, EPG6 view, EPG6 view plus

SCHILLER AT/1, AT/2, AT/3, AT/4, AT/5, AT/6,

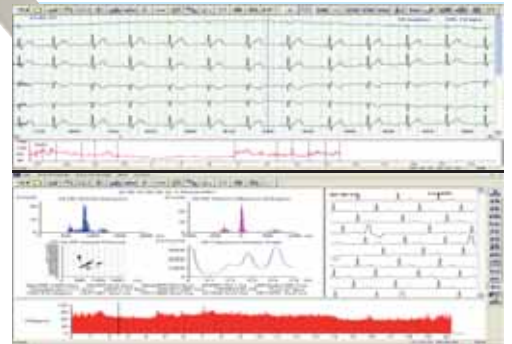
AT/10, CS6, CS12, CS100, CV6, P80.



HOLTER ECG SYSTEM - 24 HOURS MONITORING



Monitor not included



• 35130 ECG HOLTER + SOFTWARE

ECG Holter system includes ECG recorder and software connectable to a computer system or laser printer. The recorder has built-in flash storage media to increase memory capacity. The sampling rate of 1,000 sampling/sec has improved the quality of waveform.

Accuracy of the system is ensured by AHA and MIT data.

Features:

- windows software interface (GB, IT, PL)
 - quick and accurate analyzing system
 - special editing system of R point
 - perfect analysis function of ST segment
 - analysis function of T wave of all channels and T wave trend graph
 - review of ECG trend graph
 - analysis system of HR variability, providing regular SDNN, SDANN, RMSSD, LF, HF, time domain and frequency domain
 - QT analysis and QT trend graph
 - acquire pacing ECG directly without separate channel;
- Also have the functions of VCG, VLP, TVCG, HRT, TWA

Recorder:

- 12 channel Synchronized ECG Acquisition
- small ECG recorder with OLED colour screen to display real time ECG waveform and review storage data.
- capacity up to 2G
- selectable sampling rate, 200, 500, 1,000 sampling/sec
- sampling accuracy: 12 bit
- built-in FLASH storage media, to prevent the flash card from damage due to repeated insertion and pull out
- USB interface
- operating system: Win 98, 2000, XP, 7, 8, 10

• 35131 ECG CABLE - spare

TECHNICAL SPECIFICATIONS

Scale voltage: 1mV±5%
 Standard sensitivity: 10mm/mV ±5%
 Noise level: ≤30µV
 CMRR: ≥60dB
 Frequency response: 10Hz as benchmark, 0.5Hz~55Hz; -3dB
 Time constant: >3.2s
 Scan speed: 25mm/s ±5%
 Enduring polarization voltage: ±300mV

Least measure signal: 50µV p-p
 Interference between channels: scan track deflection (result from interference between channels) <0.5mm
 Product safety type: type B (internally powered)
 Size: 111 (L) x60 (W) x25 (H) mm
 Net weight: 105 g (without battery)



STANDARD ACCESSORIES

- 1 Holter recorder
- 1 CD with software
- 10 leads patient cable
- 10 disposable ECG sensor
- 1 pouch for hanging recorder
- 1 USB cable for data downloads
- Instruction Manual (GB, IT)



PC-ECG WITH INTERPRETATION SOFTWARE AND USB PORT

• 33320 PC-ECG + ECG LAB SOFTWARE

Innovative PC-ECG device that can be connected to your PC via USB port. No power cable is required as it is powered through the USB PC cable. The unit is supplied with a 10 banana plug ECG cable (length 295 cm) and a powerful interpretation software (GB, FR, IT, DE, ES, PT, CN).

Main software features:

- 12 lead resting ECG with auto interpretation (ECG)
- vector ECG (VCG)
- sampling screen colour customization
- standard or thermal paper print, B&W or colour
- auto interpretation On or Off
- tests comparison
- multi hour ECG monitoring with holter analysis
- simple exercise stress test with report
- e-mail, PDF, ASCII, HL7, Dicom, GDT Interfaces

• 33328 ECG CABLE - SPARE

• 33321 PC-ECG+CARDIOLOGY SOFTWARE

Same as code 33320 but with the following specialist functions:

- timed vector ECG (TVCG)
- SAECG (Signal Averaged ECG) ventricular late potentials analysis
- QTd analysis
- High Frequency ECG (HFECG)
- Frequency Cardiogram (FCECG)
- simple exercise ECG
- multi ECG report formats
- measurement table
- 90s resting ECG full disclosure
- hour ECG

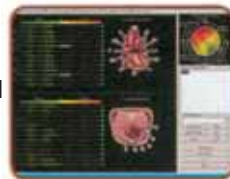
• 33322 CARDIOLOGY SOFTWARE to upgrade 33320 into 33321

TECHNICAL SPECIFICATIONS

Communication port: USB - Support HL7, Dicom interface
 Size: 120x85x28 mm - 190 g
 Power source: 5V DC (from PC USB port)
 Patient insulation: 4000 V AC
 Defibrillation protection: built-in patient cable
 Sample rate: 10240Hz - Sample accuracy: 16 bit
 PC minimum requirements: Windows 2000, XP Vista and Windows 7
 CPU ≥ 1 GHz - HD ≥ 40 G - RAM ≥ 256 M

STANDARD ACCESSORIES

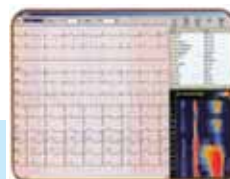
- 4 limb electrodes
- 6 chest electrodes
- Patient cable 10 leads,
- 10 electrodes
- USB pen driver
- CD software
- Banana plug



ECG CAD gram to locate coronary artery disease and ischemia



3-VCG analysis



QT Dispersion QTD analysis with chroma map

Above 3 pictures refers to code 33321



CE 0197

PC not included



Only 550 g

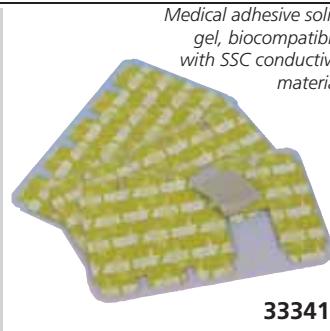
4 mm pins



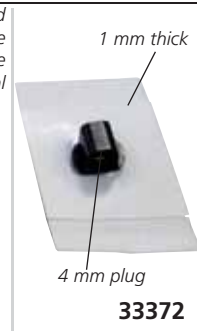
FIAB ECG UNIVERSAL ELECTRODES



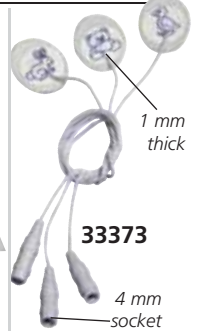
All with silver chloride sensor and S/S snap



33341



33372



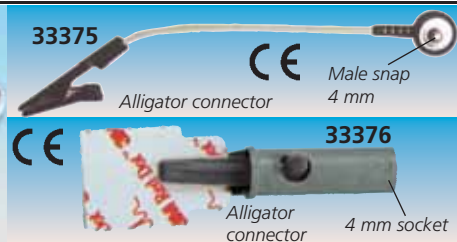
33373

GIMA code	FIAB code	Material	Size	Gel	Shape	Connection	Application	Minimum order
33313	F9089P-100	Foam	Ø 32x36 mm	Solid	Oval	Snap	Pediatric - rest, long term, stress and ECG holter	box of 2,000 pcs (20 bags of 100)
33370	F9060P	PE-Foam	Ø 40 mm	Solid	Round	Snap	Pediatric - rest, long term, stress and ECG holter	bag of 50 pcs
33314	F9089-100	Foam	Ø 36x40 mm	Solid	Oval	Snap	Adult - rest, long term, stress and ECG holter	box of 2,000 pcs (20 bags of 100)
33371	F9060	PE-Foam	Ø 48x50 mm	Solid	Oval	Snap	Adult - rest, long term, stress and ECG holter	bag of 50 pcs
33344	F9067	PE-Foam	Ø 48x50 mm	Liquid	Oval	Snap	Adult - rest, stress and ECG holter	box of 1,200 pcs (24 bags of 50)
33327	F2080	Non woven	Ø 55 mm	Solid	Round	Snap	Adult - rest ECG	box of 1,200 pcs (24 bags of 50)
33341	F3001ECG	Gelled	34x23 mm	Solid	TAB	Alligator	Adult - rest ECG	bag of 100 pcs
33372	F9047/4FL	PE-Foam	28x44 mm	Liquid	Rectangular	Plug 4 mm	Adult - rest ECG	box of 1,000 pcs (20 bags of 50)
33373	F9053N	Foam	Ø 23x30 mm	Solid	Oval	35 cm wire with 4 mm socket	Pediatric and neonatal	box of 150 pcs (5 bags of 30)

ADAPTORS FOR ECG ELECTRODES



33367 Ø 4 mm socket



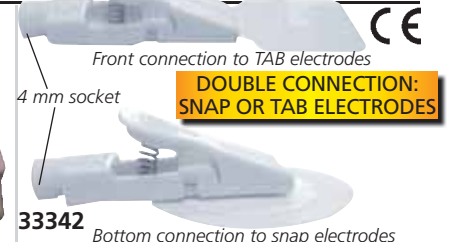
33375



33376



33374



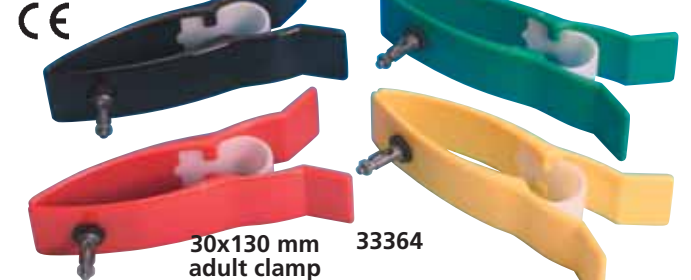
33342

DOUBLE CONNECTION: SNAP OR TAB ELECTRODES

GIMA code	UNIVERSAL ADAPTERS FOR ECG ELECTRODES	Minimum order
33367	Set of 10 adaptors (6 white, 1 yellow, 1 green, 1 red, 1 black) for ECG electrodes with 4 mm snap - codes 33313, 33314, 33327, 33344, 33370, 33371	set of 10 pcs
33375	Alligator adaptor with wire - total length: 16,5 cm	10 pcs
33376	Alligator adaptor	10 pcs
33342	Multifunction adaptor - can fit both snap electrodes and TAB electrodes - size 14x54x17 mm	10 pcs
33374	Grabber adaptor - fit snap electrodes - size 22.5x33 mm	10 pcs

LIMB CLAMP AND CHEST ELECTRODES

Silver coated plastic material
Conform to EN 60601-2-25



30x130 mm adult clamp 33364

20x90 mm pediatric clamp 33363



33324 Electrode Ø 30 mm

33369 Ø 30 mm

33365 Ø 24 mm

33368 Ø 15 mm

4 mm elastic connector, 4 mm metal connector hole with screw and clips

Universal connection: hole with screw (4 mm) and clip
Universal connection - hole with screw (4 mm) and clip
Silver coated plastic material conform to EN 60601-2-25

GIMA code	UNIVERSAL REUSABLE ECG ELECTRODES LATEX FREE - NICKEL FREE	Minimum order
33363	Set of 4 limb clamp electrodes (4 colours) pediatric	1 set
33364	Set of 4 limb clamp electrodes (4 colours) adult	1 set
33368	Set of 6 chest electrodes Ø 15 mm - silver coated	1 set
33365	Set of 6 chest electrodes Ø 24 mm - silver coated	1 set
33369	Set of 6 chest electrodes Ø 30 mm - silver coated	1 set
33323	Set of 6 chest electr. Ultra Ø 24 mm - silver coated	1 set
33324	Set of 6 chest electr. Ultra Ø 30 mm - silver coated	1 set

3M™ RED DOT™ ELECTRODES



GIMA code	3M code	3M™ RED DOT™ ELECTRODES	Minimum order
Gel electrodes - short term diagnostics			
33378	2330	3M™ Red Dot™ - 3.2 x 2.2 cm	bag of 100
Foam monitoring electrodes			
33293	2570	3M™ Red Dot™ - 4 x 3.5 cm	bag of 50
33294	2237	3M™ Red Dot™ - Ø 6 cm	bag of 50
Non woven monitoring electrodes			
33299	2248-50	3M™ Red Dot™ - Pediatric - Ø 4.5 cm	box of 50
33300	2271	3M™ Red Dot™ - 5.6 x 5.1 cm	box of 50
33297	2239	3M™ Red Dot™ - Ø 6 cm	box of 1,000*

3M 2330 resting ECG electrode with adhesive gel

3M 2570 electrode with foam tape and sticky gel - radiolucent. 5-days wearing time

3M 2237 fluid resistant foam polyethylene backing. 3-days wearing time

33300



3M 2271 diaphoretic soft cloth monitoring electrode with blue abradar 3-days wearing time

33299



3M 2248-50 pediatric monitoring electrode with micropore tape backing

33297



3M 2239 monitoring electrode with micropore tape backing 3-days wearing time

*20 bags of 50 pieces

AMBU BLUE SENSOR ECG ELECTRODES



4 mm	Tab or snap	GIMA code	AMBU code	Description	Application	Gel type	Backing material	Size (mm)	Shape	Shelf life* (month)	Radiolucent	Connector type	Minimum order	Packaging
		33200 33201	SU-00-A/60 SU-00-C/100	Blue sensor SU	Resting	Wet	Polymer	49x33	Tear drop	24	No	4 mm TAB	box of 1,200 box of 1,200	20 pouches of 60 12 pouches of 100
		33203	L-00-S/25	Blue sensor L	Long-term	Wet	Microporous	68.2x55	Round w/offset	24	No	Snap	box of 500	20 pouches of 25
		33204 33205 33206	VL-00-S/25 VL-00-S/25 VL-00-A/25	Blue sensor VL	Long-term	Wet	Microporous	72x68	Round w/offset	24	No	Snap Snap 4mm	box of 25 box of 500 box of 500	1 pouch of 25 20 pouches of 25 20 pouches of 25
		33208 33209	R-00-A/25 R-00-S/25	Blue sensor R	Stress test	Wet	Foam	57x48	Round w/offset	24	No	4mm Snap	box of 500 box of 500	20 pouches of 25 20 pouches of 25
		33211 33212	M-00-A/50 M-00-S/50	Blue sensor M	Short-term	Wet	Polymer	40.8x34	Round w/offset	15	No	4mm Snap	box of 1,000 box of 1,000	20 pouches of 50 20 pouches of 50

*Shelf life means maximum life from production date. Average Gima shelf life is 50 to 90% of maximum life

BLUE SENSOR

BlueSensor is the world's most time and cost efficient range of electrodes that delivers unmatched readings, user convenience and patient comfort. BlueSensor ensures that you don't get your workflow disrupted by false alarms or have to waste time resolving problems with electrode adhesion.

Exact monitoring - clear picture

Blue Sensor electrodes give a fast and reliable trace without the need for skin preparation, maximizing comfort for the patient. We know that fast, exact monitoring that ensures a clear picture of the patients' heartbeat is essential to accurate diagnoses.

AMBU BLUE SENSOR SU

- highly conductive wet gel
- superior quick adhesion
- unique offset connector - fitting or tab

- occlusive backing material
 - high quality Ag/AgCl sensor
- ### AMBU BLUE SENSOR L
- highly conductive wet gel
 - combination of instant and long-term adhesives

- breathable microporous material
- unique offset connector

AMBU BLUE SENSOR VL

- highly conductive wet gel
- combination of instant and long-term adhesives

- breathable microporous material
- unique offset connector

AMBU BLUE SENSOR R

- highly conductive wet gel
- superior adhesion
- comfortable foam backing
- large measuring area



- unique offset connector
 - high quality Ag/AgCl sensor
- ### AMBU BLUE SENSOR M
- highly conductive wet gel
 - superior adhesion
 - occlusive backing material
 - unique offset connector
 - high quality Ag/AgCl sensor

ECG GEL AND SPRAY

- **33266 ECG GEL** - 250 ml - box of 40 tubes
 - **33263 ECG GEL** - 5 l - box of 4 bags**
 - **33268 ECG SPRAY GEL** - 250 ml - box of 20 tubes
- Suitable for non pre-gelled electrodes, ECG latches and pendant switches in any ECG and exertional applications. Allows ECG waves clear transfer to equipment.

It is hypoallergenic, does not irritate skin, does not contain oil and oily substances, does not contain formaldehyde and salt, has no toxic effects and is odourless.

- **33283 PUMP FOR BAG 5 l**

**Includes 4 empty bottles 250 ml and 1 nozzle for easy refill



SONY MEDICAL PRINTERS



Space saving design:
154x240xh 88 mm,
for flexible integration
into medical carts

33968

SONY

- 33968 SONY HYBRID GRAPHIC PRINTER UP-X898 MD - black/white

Produces A6 size printings in about 2 seconds, with superb print quality with 325 dpi and grey level of 256 steps. Can take both analogue video and digital signal inputs. 110-240 V AC, 50/60 Hz.

- 33993 SONY COLOUR PRINTER UP-25 MD

High quality analogue A6 Dye. Sublimation Printer for use in medical applications.

An ideal technology for making high quality, accurate photographic prints.

See more info on www.gimaitaly.com



33993

SONY ORIGINAL PAPER



SONY

SONY VIDEOPRINTER PAPERS

- 72726 SONY PAPER - UPP-110 HD - box of 10 rolls High density printing paper - 110 mm x 20 m
- 72727 SONY PAPER - UPP-110 HG - box of 10 rolls High glossy printing paper - 110 mm x 18 m
- 72728 SONY PAPER UPP-110S - box of 10 rolls
- 72729 SONY PAPER UPP-110HA - box of 10 rolls
- 72735 SONY COLOUR PAPER UPC-21L (4 ink rolls + 200 supports 144x100 mm)

MITSUBISHI ORIGINAL PAPER

- 72740 MITSUBISHI PAPER K65HM-CE - box of 4



COMPATIBLE PAPERS FOR SONY AND MITSUBISHI PRINTERS



ULTRASOUND COMPATIBLE PAPER FOR VIDEOPRINTERS

Top quality thermal print media perfectly fitting Sony and Mitsubishi thermal printers.

Long lasting image durability for high storage durability
- high humidity and heat resistance for long storage
- strong resistance to water, finger prints and ultrasound gel drops.

Precise, high resolution image reproduction
- first class colour intensity for highest black colour density

- outstanding, bright, sharp and detailed medical image
- high glossy, brilliant, photorealistic reproduction

Trouble-free printing and long-term use of printer
- easy tearing along the cross direction
- minimum curling for flat photo media and easy filing

- built-in anti-electrostatic layer preventing thermal head damage.



72745

72751

GIMA code	SONY	Compatibility MITSUBISHI	Paper grade	Size mm x m	Minimum order
72745	UPP-110HG	K91HG/KP91HG	high glossy	110x18	box of 5
72746	UPP-84HG	-		84x12.5	box of 10
72747	UPP-110HD	-	high density	110x20	box of 5
72748	-	K65HM/KP65HM		110x20	box of 5
72749	UPP-210HD	-		210x25	box of 5
72750	UPP110S	-	standard	110x20	box of 5
72751	-	K61S/KP61S/KP61B		110x20	box of 5

COMPATIBLE DEFIBRILLATOR ECG THERMAL PAPER - DIFFERENT BRANDS

GIMA code	MANUFACTURER AND MODEL	Type	Width mm	Length m	Sheet	Marker	Grid*	Min. order	GIMA code	MANUFACTURER AND MODEL	Type	Width mm	Length m	Sheet	Marker	Grid*	Min. order
33100	CORPLUS Corplus 3	roll	106	20	-	no	or/red	10	33102	PHILIPS Defibrillator MRX	roll	75	25	-	no	or/red	10
	MINDRAY								33103	Heartstart XL	roll	50	30	-	no	or/red	20
32968	Beneheart D3, D6	roll	50	20	-	no	or/red	20		PHYSIO CONTROL							
	HEWLETT PACKARD								33032	Life Pack 8-9-10	roll	50	23	-	no	or/red	20
33103	40457C/D, Codemaster 100, XL	roll	50	30	-	no	or/red	20	33033	Life pack 11-12-15	roll	107	25	-	no	or/red	10
	NIHON KOHDEN									SCHILLER							
33029	Def. TEC 5521, 5531, BSM 2300, 3000	pack	50	100	200	no	or/red	25	32983	Defigard 6002	pack	80	70	300	yes	or/red	20
										ZOLL							
32988	Tech-8300	roll	50	30	-	no	or/red	20	33106	Defi/1400 (P/N 8000-0300)	pack	90	90	200	yes	or/red	20

*or/red: grid could be orange or red colour

GIMA ULTRASOUND GEL



BLUE

TRANSPARENT

33276

33274

33272

33278+33283

33277

33275

33273

33279

GIMA code	ULTRASOUND GEL	Minimum order
33269	Sterile ultrasound gel - sachet - 20ml - transp	box of 48
33271	Ultrasound gel - sachet - 20ml - transparent	box of 200
33270	Ultrasound gel - tube 60 ml - transparent	box of 12
33272	Ultrasound gel - tube 250 ml - blue	box of 40
33273	Ultrasound gel - tube 250 ml - transparent	box of 40
33274	Ultrasound gel - bottle 1 l - blue	box of 12
33275	Ultrasound gel - bottle 1 l - transparent	box of 12
33276	Ultrasound gel - tank 5 l - blue	box of 2*
33277	Ultrasound gel - tank 5 l - transparent	box of 2*
33278	Ultrasound gel - bag 5 l - blue	box of 4**
33279	Ultrasound gel - bag 5 l - transparent	box of 4**
33283	Pump for tank 5 l and bag 5 l	

*includes 2 empty bottles 250 ml ** includes 4 empty bottles 250 ml and 1 nozzle

GIMA ULTRASOUND GEL

Hypoallergenic, water soluble gel suitable for ultrasonography, doppler and defibrillator applications. It ensures the ultrasound waves come to the equipment display in a clear and uninterrupted way. Salt, formaldehyde, fragrance free.



33270

33271

33269

GEL CLEANER

- 33281 GEL PROBE CLEANER 250 ml 33281

It removes the gel left over the probe, makes the image clearer and extends the probe life. Thanks to the active agents contained, it prevents the bacteria to pass from patient to patient, and it ensures hygiene. Alcohol-free.



COSMETIC GEL

- 33254



33253



33255



TECARTHERAPY CREAM

- 33251 TECARTHERAPY CREAM 1 l 33251

It allows to reduce the contact impedance between the probe and the skin. The high conductivity ensures the best results both in the capacitive phase and in the resistive phase of the treatment. Preservatives and dyes used are non-toxic. Latex free.



EEG PASTE

- 33262 EEG PASTE - 400 g 33262

Used with EEG electrodes in EEG application for brain mapping. Thanks to the active substances in its content, it allows the electrode to cling to the strand of hair easily and provides conductivity. It is hypoallergenic, does not irritate skin, soluble in water and can be cleaned easily. Does not contain oil and oily substances. It has no toxic effects and odour.



KONIX COSMETIC LASER & CAVITATION GEL

Laser & Cavitation gel reduces the pain that patients experience during depilation and makes the device last longer by cooling the device head and window. Thanks to the vacuum technology, its active substances and its high viscosity it preserves probe from damages. It is not affected by the body salt during the use, ensures an easy application.

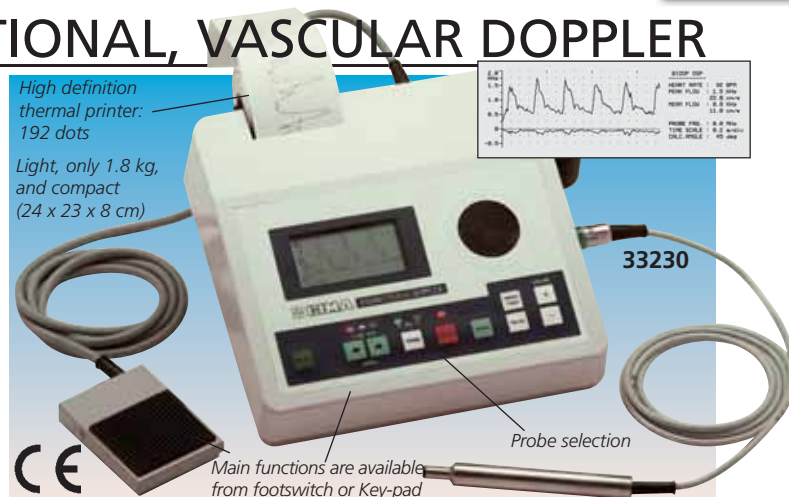
Technical properties: it is hypoallergenic, does not irritate skin, is water soluble and easily cleanable. Oily substances, formaldehyde and salt free. No toxic effects and odourless.

GIMA code	COSMETIC LASER & CAVITATION GEL	Minimum order
33253	Cosmetic gel - tube 250 ml	box of 40
33254	Cosmetic gel - bottle 1 l	box of 12
33255	Cosmetic gel - bag 5 l	box of 4**
33283	Pump for bag 5 l	

** includes 4 empty bottles 250 ml and 1 nozzle for easy refill

GIMA PORTABLE, BIDIRECTIONAL, VASCULAR DOPPLER

- **33230 GIMA BIDIRECTIONAL DOPPLER NON STEREO with two probes: 4 and 8 MHz**
- Continuous wave (CW) bidirectional doppler equipped with electronic probes for high sensitivity and low background noise.
- bidirectional graphic separation of flow (forward and reverse)
- LCD graphic display for real time display of forward and reverse flow in bidirectional or separate mode
- selectable amplitude scale: 1, 2, 4, 8 kHz during the test and before printing. Preset zero line
- 5 minutes (300 sec.) continuous and reviewable memorized test. Operator can select the most meaningful exam and print it.
- calculation of: heart rate, peak flow and mean flow
- simultaneous connection of high sensitivity probes
- internal rechargeable large capacity battery (Ni-Cd 1.8 Ah); the system can be operated during charging. Autonomy 8 hours
- footswitch for freezing or memorizing the graphs
- hardcopy may or may not include the parameter calculation
- printing time scale: 25 mm/s
- Hi-fi audio output for correct acoustic diagnosis



- **33240 GIMA BIDIRECTIONAL PROBE 4 MHz - spare for 33230**
- **33241 GIMA BIDIRECTIONAL PROBE 8 MHz - spare for 33230**
- **33250 THERMAL PAPER 58 mm x25m (pack of 5 rolls)**

POCKET DOPPLER WITH INTERCHANGEABLE OR FIXED PROBES



TECHNICAL SPECIFICATIONS	
Ultrasound	Power supply
Frequency: 2, 5 or 8 MHz continuous wave	Battery 9V Alkaline (not included)
Transducer: 2 crystal narrow beam	Expected battery life: >9 hours
Output power: <15mW/cm ² SATA	Output
Audio Response: 300Hz - 4 KHz	Headset: Audio output to optional headset (not included)
Unit Controls	Material: ABS / Noryl
Keys: 1 Key (for unit on/off)	Size - weight: 150 mm by 75 mm - 299 g
Controls: rotary volume	Classification: Class I Type B - IEC 60601-1
Indicators: Yellow battery low LED	

GIMA POCKET DOPPLERS

Small, lightweight, high sensitivity pocket Doppler. Its probes are ideal for use by a General Practitioner, vascular specialist for routine vascular examination in ER for vessel location, or by specialists in diabetes, urology and gynaecology. Vascular flow signals and FHR are easily located using the transducer while internal signal processing minimizes noise artefacts. The flow signal is also available to the user via the built-in loudspeaker with output level controlled by rotary volume control. 2 years warranty. Supplied in a nice bag with probe, cable, gel tube and 7 languages user manual: GB, FR, DE, IT, ES, GR, PT.

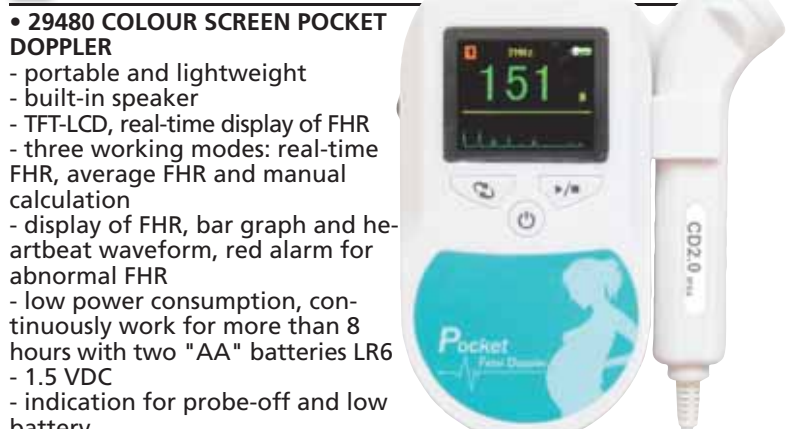
GIMA code	GIMA POCKET DOPPLERS
33120	DOPPLER V2005 with 5 MHz fixed vascular probe
33121	DOPPLER V2008 with 8 MHz fixed vascular probe
33123	DOPPLER V2000 (without probe)
33126	2 MHz interchangeable probe - foetal for V2000
33127	5 MHz interchangeable probe - vascular for V2000
33128	8 MHz interchangeable probe - vascular for V2000
29511	ON/OFF membrane switch spare for 33120/3

SONOTRAX DOPPLERS



GIMA code	DOPPLERS AND INTERCHANGEABLE PROBES - LATEX FREE
29490	SONOTRAX LITE DOPPLER - without probe - with bag
29491	SONOTRAX BASIC DOPPLER - with display - without probe - with carrying bag
29493	SONOTRAX PRO II DOPPLER with backlit display built-in audio recorder and rechargeable batteries, battery charger, carrying bag, without probe
29496	2MHz waterproof probe - gynaecology
29497	3MHz waterproof probe - gynaecology
29498	4MHz waterproof probe - vascular
29499	8MHz waterproof probe - vascular

SONOLINE COLOUR DOPPLER



- **29480 COLOUR SCREEN POCKET DOPPLER**
- portable and lightweight
- built-in speaker
- TFT-LCD, real-time display of FHR
- three working modes: real-time FHR, average FHR and manual calculation
- display of FHR, bar graph and heartbeat waveform, red alarm for abnormal FHR
- low power consumption, continuously work for more than 8 hours with two "AA" batteries LR6 - 1.5 VDC
- indication for probe-off and low battery
- **29481 2 MHz WATERPROOF PROBE - gyn**
- **29482 3 MHz WATERPROOF PROBE - gyn**
- **29483 4 MHz WATERPROOF PROBE - vascular**
- **29484 8 MHz WATERPROOF PROBE - vascular**

TECHNICAL SPECIFICATIONS		
Ultrasound working frequency:	2 MHz ± 10%	
Fetal heart rate:	range: 50-240 bpm	accuracy: ± 2 bpm
	resolution: 1 bpm	
Alarm:	high limit: 160 bpm	low limit: 120 bpm
Ultrasound intensity:	< 5 mm/cm ²	
Auto power off after	1 minute no signal	
Dimension - weight:	135x92x29 mm - 245 g	

MINDRAY DP-10 AND DP-20 DIGITAL ULTRASOUND SYSTEM

DP-10 slim and smart

Good image quality, easy to use and lightweight to take it anywhere. It combines fashionable design, diagnostic confidence and economy.

DP-20 exceeds your expectations

Smart portable B/W ultrasound system with advanced features

Display modes and imaging processing:

Broadband, multi-frequency imaging: B, B/B, 4B, B/M, M

Imaging processing:

- multi-frequency probes for 2D imaging modes -
- iClear: speckle reduction image
- THI (Tissue Harmonic Imaging) with convex probe 33976 only

- TSI (Tissue Specific Imaging)
- zoom function: spot zoom, pan zoom
- ExFOV (Extended field of view)

Extended view of the anatomical structure on all convex and linear probes allow to discover better diagnostic information.

- iTouch (Auto image optimization)

User interface

- alphanumeric QWERTY keyboard with backlight
- trackball: speed presettable
- 8-segment TGC
- user defined blank keys: shortcut for easy access to menus

iStation™ intelligent workflow

Intelligent patient data management system

- integrated search engine for patient data
- detailed patient information review
- intelligent data backup/restore
- patient data/image sending, data deleting (USB, DVD, DICOM)
- exam managing: activate exam

Storage/review mode:

- image archive on hard disk and USB mobile storage medium, temporary saving in cine memory, directly transfer report to PC
- 2 USB ports
- multiple image formats: BMP, JPG, DCM, FRM, AVI, DCM, CIN
- iVision: demo player
- Cine review: auto, manual (auto review segment can be set), supports linked cine review for 2D, M images
- Cine memory capacity (max.)
- clip length presettable: 1-60 s

B mode: 11959 frames M mode: 110.0 s

Supplied with GB, IT manual and CD manual (GB, FR, IT, ES, PT, DE, RU, BR).

GIMA code	DIGITAL ULTRASONIC DIAGNOSTIC IMAGING SYSTEM	
33970	MINDRAY DP-10 B/W system with 1-probe connector, 12.1" high resolution LED monitor, 2 USB port, 1 VGA OUT port, 1 video OUT, 1 S-Video OUT, software, without probe	
33971	MINDRAY DP-20 portable B/W system with 1-probe connector, 12.1" high resolution LED monitor, 2 USB port, THI, iStation™, software package, without probe	
PW DOPPLER		
33969	PW (Pulse Wave) doppler for probes 33976, 33977	
ACCESSORIES		
33875	Needle guided brackets for Linear probe (33977, 33983)	
33876	Needle guided brackets for Micro-Convex probe (33979, 33984)	
33974	Lithium-ion rechargeable battery for DP-20	
33985	Carrying bag for DP-10, DP-20, DP-30	
33986	UMT-110 mobile trolley for DP-10, DP-20, DP-30	
33968	SONY HYBRID GRAPHIC PRINTER X898 MD	

PROBES DP-10 - DP-20		FREQUENCY (MHz)		● Main application										
GIMA code	Mindray code	Scanning method	Main freq.	Probe band width	ABDOMINAL	OB / GYN	UROLOGY	SMALL PARTS	CARDIOLOGY	MSK	VASCULAR	PEDIATRIC	ORTHOPEDICS	INTRAOPERATIVE
33976	35C50EB	Convex	3.5	2.0 - 5.0	●	●	●	●	●	●	●	●	●	●
33977	75L38EB	Linear	7.5	5.0 - 10.0	●	●	●	●	●	●	●	●	●	●
33978	65C15EA	Micro-convex	6.5	5.0 - 8.5	●	●	●	●	●	●	●	●	●	●
33979	65EC10EB	Micro-convex	6.5	5.0 - 8.5	●	●	●	●	●	●	●	●	●	●
33980	35C20EA	Micro-convex	3.5	2.0 - 5.0	●	●	●	●	●	●	●	●	●	●
33983	75L53EA	Linear	7.5	5.0 - 10.0	●	●	●	●	●	●	●	●	●	●



iScanHelper function

Dedicated inbuilt tutorial function to enhance ultrasound experience.

- wide selection of application specific exam planes
- anatomical illustrations
- standard ultrasound images
- scanning reference pictures
- tips on scanning and diagnosing

Optional PW doppler for probes 33976 (Convex), 33977 (Linear)

DP-10/20 support superb PW Doppler imaging to access blood flow in different clinical conditions.

With PW, doctors will be able to:

- differentiate non echoarea and blood vessels
- distinguish arteries and veins
- evaluate blood flow velocity for more comprehensive diagnosis
- Check the health of a fetus by blood flow evaluation of the umbilical cord

Features

Parameter adjustment: Gain, Sample volume size, Scale, Steer, Dynamic range, Wall filter, etc.

Measurement: Trace, HR, Velocity, PS/ED, PI, RI, etc.

33985



TECHNICAL SPECIFICATIONS	
Dimension:	16x29xh 35.4 cm (6.3"x11.4"xh 13.9")
Weight:	5.1 kg
Display:	12.1" LED, high-resolution 1024x768
Display language:	DP-10, DP-20: GB, FR, DE, IT, ES, PT, RU, CZ, PL
Power:	AC100-240 V, 50-60 Hz
	Rechargeable lithium-ion battery (DP-20 only) - on request



MINDRAY DP-50 DIGITAL ULTRASOUND DIAGNOSTIC SYSTEM



33973 + 33988

Supplied with GB, IT manual and CD manual
GB, IT, FR, DE, RU, ES, PT, BR.

- **33973 MINDRAY DP-50 PORTABLE ULTRASOUND with 15" high resolution LCD monitor, 2 probe connectors, 320GB hard disk, 4 USB ports, multiple software package, without probes. Imaging mode: B, B/B, 4B, B/M, M**
Image processing technology:
 - Phase Shift Harmonic Imaging
 - Tissue Harmonic Imaging
 - iBeam™ Spatial Compound Imaging
 - iClear™ Adaptive Speckle Suppression Imaging
 - iTouch™ Auto Optimization
 - Trapezoid imaging
 - iZoom™ Automatically expand the image to full screen
 - Slant scanning for linear probes (2D Steer)**Wideband multifrequency probes: continuously adjustable 2-14 MHz**
Intelligent Workflow/Storage/Review:
 - iStation™ Intelligent patient data management system
 - 320 GB integrated hard disk for storage
 - 4 USB ports
 - Cine memory capacity (Max.) B mode: 10566 frames
 - M mode: 66.3 s
- **33972 MINDRAY DP-50 PT PORTABLE ULTRASOUND PHYSIOTHERAPY PRESET with 15" high resolution LCD monitor, 2 probe connectors, 320GB hard disk, 4 USB ports, multiple software package, without probes.**
 Same as 33973 but with real time ultrasound imaging (RTUI) for physiotherapy.
 Dedicated Physiotherapy presets: pelvic/hip/lumbar spine/shoulder/elbow/wrist/knee/ankle/Achilles tendon/cervical spine.
 Dynamic tracking therapeutic effects with image comparison function. Optimal musculoskeletal image quality

TECHNICAL SPECIFICATIONS	
Display:	15" LCD
Display language:	GB, FR, IT, ES, PT, RU, PL, CZ, TR, FI, DK, NO, SE, DE
Power:	AC 100-240 V - 50/60 Hz rechargeable lithium-ion battery - on request
Size and weight:	19x41.5xh 37.8 cm (7.5"x16.3"xh 14.9"); 7.7 kg (17 lb)

MINDRAY Z5 COLOUR DIAGNOSTIC ULTRASOUND SYSTEM

- **33880 MINDRAY Z5 COLOUR PORTABLE ULTRASOUND with 15" high resolution LCD monitor, 2 probe connectors, 320GB hard disk, 4 USB ports, multiple software package, without probes.**
 A colour doppler system that offers a rare combination of high performance and low cost. Superior image quality, affordability, versatility and mobility in a unique portable Doppler system:
Versatility
 - scanning modes: B, Colour, PW, Power, M, FreeXros M
 - image display modes: B, 2B, 4B, B/C, B/M, B/PW, Triplex PW
 - applications: ABD/OB/GYN/CAR/SML/URO/VAS/ORTH/EM/NERVE
 - transducer variety : Convex, Linear, Micro-convex, Endocavity
 - extended scanning angle with ExFov function
 - high frequency linear probe for superficial scanning**Productivity**
 - iTouch: quick image optimization with one-click
 - iZoom: instant full screen zoom with one-click
 - iStation: patient database review and analysis platform
 - iStorage: direct data transfer to PC
 - Clipboard: easy play, preview and sharing of cineloop
 - Multiple image formats : BMP, JPG, DCM, AVI, DCM, CIN**Mobility**
 - compact and streamlined design weighing 7.7kg
 - 15" LCD monitor with 30 degree tilt function
 - dual universal transducer connectors

- two level backlit keyboard for varying requirements
- can be packed in a convenient hand-carried bag for easy transportation
- 1.5 h uninterrupted scanning with rechargeable battery
- Supplied with CD manual: GB, FR, IT, ES, PT, DE, RU, BR.



33880

TECHNICAL SPECIFICATIONS	
Display:	15" LCD high resolution 1024x768
Software display + keyboard input:	GB, FR, IT, ES, PT, RU, PL, CZ, DE
Keyboard input:	TR, FI, DK, NO, SE
Power:	AC 100-240 V - 50/60 Hz rechargeable lithium-ion battery - on request
Size and weight:	19x41.5xh 37.8 cm (7.5"x16.3"xh 14.9"); 8.8 kg (19.4 lb)

PROBES AND ACCESSORIES FOR DP-50 AND Z5

GIMA code	ACCESSORIES for DP-50 and Z5
33875	Needle guided brackets for Linear probe (33983)
33876	Needle guided brackets for Micro-Convex probe (33984)
33975	Lithium-ion rechargeable battery for DP-50 and Z5
33987	Carrying bag for DP-50 and Z5
33988	UMT-150 mobile trolley for DP-50 and Z5
33968	SONY PRINTER UP-X898 MD FOR DP-50
33993	SONY COLOUR PRINTER UP-25 MD FOR Z5

PROBES DP-50 and Z5			FREQUENCY (MHz)		● Main application									
GIMA code	Mindray code	Scanning method	Main freq.	Probe band width	ABDOMINAL	OB / GYN	UROLOGY	SMALL PARTS	CARDIOLOGY	VASK	VASCULAR	PEDIATRIC	PROSTATE	ORTHOPEDIC
33982	35C50EA	Convex	3.5	2.0 - 5.0	•	•	•	•	•	•	•	•	•	•
33983	75L53EA	Linear	7.5	5.0 - 10.0	•	•	•	•	•	•	•	•	•	•
33978*	65C15EA	Micro-convex	6.5	5.0 - 8.5	•	•	•	•	•	•	•	•	•	•
33984*	65EC10EA	Micro-convex	6.5	5.0 - 8.5	•	•	•	•	•	•	•	•	•	•
33990*	10L24EA	Linear array	10.0	8.0 - 14	•	•	•	•	•	•	•	•	•	•
34004	75L38EA	Linear	7.5	5.0 - 10.0	•	•	•	•	•	•	•	•	•	•

*not for DP-50PT



33987

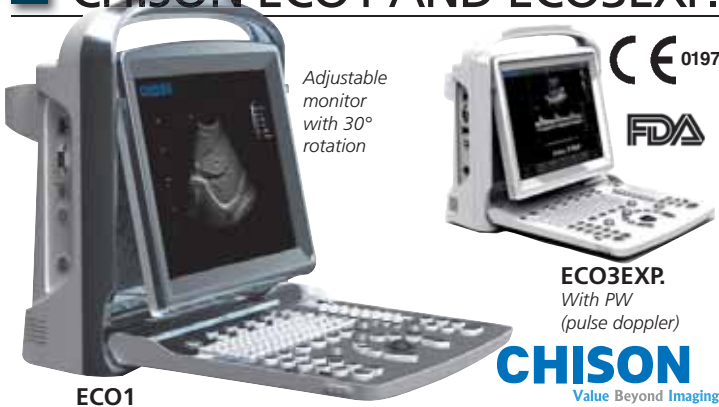
Trolley size:
44,5x53,5x
h 81 or 87 cm

Height selectable
(2 levels) when installing



33988

CHISON ECO1 AND ECO3EXP. DIGITAL ULTRASOUND SYSTEMS



Adjustable monitor with 30° rotation

ECO3EXP. With PW (pulse doppler)

CHISON
Value Beyond Imaging

ECO1									
GIMA code	DIGITAL ULTRASOUND B&W DIAGNOSTIC IMAGING SYSTEM								
33863	CHISON ECO1 with 1 probe connector without probe								
33864	CHISON ECO3EXP. with 2 probe connectors without probe								
STANDARD PACKAGE									
	ECO1	ECO3EXP.	ECO5						
12" high resolution LED monitor - B&W	•	•	•						
12" high resolution LED monitor - colour			•						
8G memory card	•	•	•						
Hot Key	•	•	•						
PC printer connection	•	•	•						
3 USB port	•	•	•						
1 ethernet port	•	•	•						
1 video out port, 1 VGA out port	•	•	•						
1 footswitch port	•	•	•						
Full screen display	•	•	•						
2.5 hours rechargeable lithium-ion battery	optional	•	•						
Power adaptor	•	•	•						
Standard software package	•	•	•						
Easy View image archive system	•	•	•						
THI	•	•	•						
PW (doppler function to detect blood flow speed)		•	•						
TECHNICAL SPECIFICATIONS									
Dimension and weight: 33.5x15.5xh 35 cm (13.2"x6.1"xh 13.8"); 6 kg									
Display: 12" LED, high resolution 1024x768									
Power: AC 100-240 V - 50/60 Hz rechargeable lithium-ion battery (ECO1 option, ECO3EXP. standard)									
LANGUAGE - switchable by user									
	GB	IT	FR	ES	DE	CZ	TR	CN	RU
Software	•	•	•	•	•	•	•	•	•
User manual	•	•	•	•	•	•	•	•	•

ECO1 Premium Design, Surprising Price

ECO3EXP. Premium Black&White Model with Doppler,

- ultra-compact and ultra-light weight, easy to carry
- latest LED screen technology, super bright images allow to easily view scan even outdoor.
- ergonomic monitor design, 30 degree rotation, adjustable.
- ultra-long battery life up to 2.5 hours, for outdoor scanning
- one-key to enlarge image to full screen, easy to view from distance
- streamlined workflow, easy to operate, 6-one-key to finish the cycle of diagnosis.

Display modes and imaging processing

B, B/B, 4B, M, B/M, PW (ECO3EXP. only) multi-frequency imaging

Imaging processing

- compound Imaging
- i-image intelligent image optimization
- THI (Tissue Harmonic Imaging)
- SRA (Speckle Reduction Algorithm)
- full digital beam-former
- full screen display
- trapezoidal
- automatic PW trace (ECO3EXP. only)
- Chroma
- AIO (Automatic Image Optimization)

User interface

- fold-up control panel and alphanumeric keyboard
- back-lit keyboard for good visibility in dark room
- interactive back-lighting
- indicator lights identify activated keys
- 8 TGC slides for easy adjustment
- short cut knob for quick adjustment (hot key user- defined)
- neat and clear keyboard layout, doctor can remember easily
- user defined preset

Streamlined workflow, one key to:

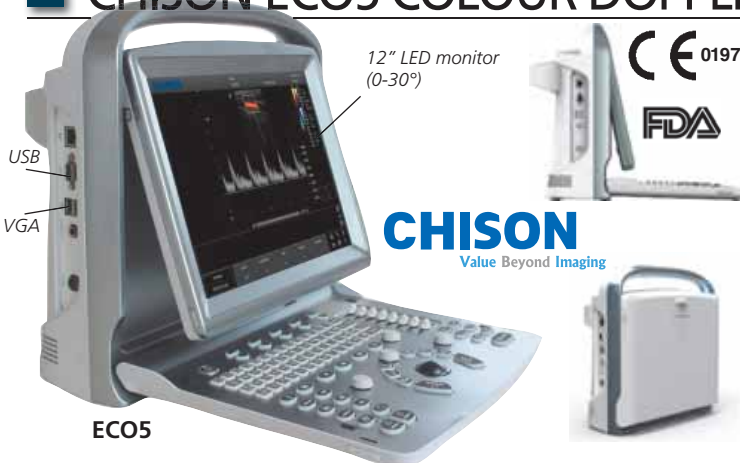
- select desired application with automatic preset
- optimize the image automatically (AIO)
- save still image and CINE loop
- print to PC printer* (laser or inkjet) or video printer
- Make report
- Measure

*See list of compatible printers on our websites

EASYVIEW™ Archive system

- image archive on hard disk and USB mobile storage
- 3 USB ports
- multiple image formats: BMP, JPG, DCM, CIN, AVI
- cine review: auto, manual (auto review segment can be set for 2D, M, PW (ECO3EXP. only) images
- cine memory capacity (256 frames/10s)

CHISON ECO5 COLOUR DOPPLER DIGITAL ULTRASOUND SYSTEM



12" LED monitor (0-30°)

USB
VGA

ECO5

• 33865 CHISON ECO5 Colour Doppler 12" high resolution color LED monitor, 8G high speed memory, 3 USB ports, 2 probe connectors, EASYVIEW™ archive system, without probe Imaging model: B, B/B, 4B, B/M, M, CFM, PW

Imaging processing:

- MCI (Multiple Compound Imaging)
- i-image intelligent image optimization
- THI (Tissue Harmonic Imaging)
- SRA (Speckle Reduction Algorithm)
- full digital beam-former
- trapezoidal
- automatic PW trace
- Chroma
- full screen display model
- AIO (Automatic Image Optimization)

Other specifications as ECO3EXP.

TECHNICAL SPECIFICATIONS

Dimension and weight: 33.5x15.5xh 35 cm (13.2"x6.1"xh 13.8"); 6.5kg
 Display: 12" LED, high-resolution colour 1024x768
 Power: AC 100-240 V, 50-60 Hz
 Rechargeable lithium-ion battery

PROBES AND ACCESSORIES FOR CHISON ECO SERIES

PROBES ECO1 - 3 - 5					FREQUENCY(MHz)					Main application				
GIMA code	CHISON code	Scanning method	Main freq.	Probe band width	ABDOMINAL	OB&GYN	UROLOGY	SMALL PARTS	BASIC CARDIOL.	MSK	VASCULAR	PEDIATRIC	ORTHOPAE.	
33998	C3-A	Convex	3.5	2.5 - 5.0	•	•	•	•	•	•	•	•	•	
33999	L7M-A	Linear**	7.5	5.3 - 10.0	•	•	•	•	•	•	•	•	•	
33871	L7S-A	Linear***	9.0	5.3 - 11.0	•	•	•	•	•	•	•	•	•	
33872	V6-A	Trans-vaginal	6.0	4.5 - 8.0	•	•	•	•	•	•	•	•	•	
33997	MC6-A	Micro-convex	6.0	4.5 - 8.0	•	•	•	•	•	•	•	•	•	
33873*	R7-A	Trans-rectal	7.5	5.0 - 10.0	•	•	•	•	•	•	•	•	•	
33874	MC3-A	Micro-convex	3.0	2.5 - 5.0	•	•	•	•	•	•	•	•	•	

*For ECO3EXP. and ECO5 only **With 40 mm footprint, general linear probe
 ***With 30 mm footprint for superficial tissue exams with higher resolution

GIMA code	ECO SERIES ACCESSORIES	
33869	Rechargeable lithium-ion battery BT-2500 (2.5 hours)	
33867	ECO trolley TR-9000	
33868	Carrying bag	
33866	Needle guided brackets - specify for which probe (for 33998-9, 33872-4 only)	
PRINTERS		
33968	SONY UP-X898 MD B&W printer (for ECO1 and ECO3EXP.)	
33993	SONY UP25MD colour printer(for ECO5)	



CHISON QBit5 AND i8 ECO-COLOUR DOPPLERS



CHISON
Value Beyond Imaging
CE 0197
FDA

• **33877 QBit5 ECO-COLOUR DOPPLER** - 15" flat high resolution LED monitor. Supplied with 2 probe connectors and 1 parking probe connector, trolley, keyboard, large image storage: 32 GB HardDisk, 6 USB ports, VGA format, without probes. Affordable and reliable colour doppler with advanced technologies: compound imaging, quad beam former imaging, Q-image, Q-flow, X-contrast providing superb images. The Streamlined workflow and ergonomic outlook design improve work efficiency.

Imaging modes: - Power Doppler / Directional PD - B/BC - CFM - PW mode - CW mode - full screen - duplex, triplex - chroma B/M/PW/CW - B, 2B, 4B, B/M, M *Four chambers view, B/BC mode* - trapezoidal on linear probe
Image processing technology: - Speckle Reduction Algorithm (SRA) - direct print to PC or video printer - automatic image optimizer (AIO) - fusion harmonic imaging (FHI)

Special radiology function: 2D steer and super needle (optional)
Phased array probe and package
Phased array probe functions include CW, TDI, ECG, Colour M and complete calculation packages including PISA/Dp/Dt

GIMA code for QBit5	GIMA code for i8	PROBES Scanning Method	FREQUENCY (MHz)			Main application								
			Main freq.	Probe band width QBit5	Probe band width i8	ABDOMINAL	OB/GYN	UROLOGY	SMALL PARTS	CARDIOLOGY	TCD	PEDIATRICS	VESSELS	
33953	33953	CONVEX	3.5	2-6.8	2.5-5.3	●	●							
33955	33955	LINEAR	7.5	4-15	5-10			●						●
33956	33956	MICRO-CONVEX (TRANSVAGINAL)	6.0	4-12	4-10.7		●							
33964	33964	MICRO CONVEX (BASIC CARDIAC)	3.0	2-6.8	2.5-6.4					●			●	
-	33963	CARDIAC (PHASED ARRAY)	3.0	-	2.5-4					●				
33879	-	CARDIAC (PHASED ARRAY)	3.0	1.5-5.3	-					●	●			
33958	33958	PEDIATRIC	5.0	4-10.7	3.5-8									●
-	33959*	4D CONVEX	4.5	-	2.2-6.4	●	●							

*Spare for 33966

• **33965 i8 ECO-COLOUR DOPPLER** - 19" flat high resolution monitor
Supplied with 4 probe connector, trolley, keyboard, large image storage: 500 GB HardDisk, 6 USB port, DVD-RW, VGA format, I-image, Cardiac Package, without probes. Digital colour Doppler System with professional features: I-IMAGE improves image quality and offers ECG Intelligent I-image optimization.

Imaging mode: - B, 2B, 4B, B/M, M - CFM, Power doppler, Directional PD - B/BC mode - PW mode, CW mode (with cardiac probe) - panoramic - instant triplex, duplex, quadplex - trapezoidal on linear probe - chroma B/M/PW/CW
Image processing technology: - Tissue Harmonic Imaging (THI) on all probes - Speckle Reduction Algorithm (SRA) - Multiple Compound Imaging (MCI)

Wideband multifrequency probes
Continuously adjustable, 2.5-12 MHz
Operating voltage: 100-240 V, 50-60 Hz
Cardiac Package (colour M, CW, steering M, ECG, TDI, IMT)

• **33966 i8 ECO-COLOUR DOPPLER+4D PROBE AND PACKAGE**
Same as 33965 but with 4D real time imaging composed of 3D pictures with addition of live motion and probe 4D convex (33959).
• **33993 SONY UP - 25 MD COLOUR PRINTER A6** for i3, i8, QBit5
• **33968 SONY UP-X898 B/W PRINTER** for i3, i8, QBit5



CHISON 600M PORTABLE ULTRASOUND



• **33930 CHISON 600M PORTABLE ULTRASOUND**
10" SVGA monitor with two probe connectors, 256 frames cine memory, USB port, VGA port, without probes
- zooming and measurement functions (max scanning depth: 252 mm)
- wide applications: GYN, urology, abdominal, small parts
- 4-steps sweep speeds for cardiac study: 2s, 4s, 6s, 8s
- 4-steps zoom with depth control: x0.8, x1.0, x1.5, x2.0

- various measurements: distance, circumference, area, volume
- full Ob/Gyn software included: 7 EDD tables (BPD, GS, FL, AD, HC, AC, CRL), G.A. (fetal age) from 4-43 weeks
- fetal weight, fetal heart rate measurement
- imaging reversing: up/down, left/right, positive/negative
- power supply: 110-230 V, 50-60 Hz

• **33968 SONY PRINTER UP-X898 MD** • **33901 TROLLEY FOR 33930**

GIMA code	PROBES Outlook	Scanning Method	FREQUENCY (MHz)		Main application					
			Main freq.	4-Step Multi-frequency	ABDOMINAL	OB/GYN	UROLOGY	SMALL PARTS	BREAST	VESSELS
33932	CONVEX	3.5	2.5/3.5/4.0/5.0	●	●	●				
33933	LINEAR	7.5	5.0/6.0/7.5/9.0				●	○	●	

Lightweight: only 7 kg (size: 42x27x25 cm)

SONOTOUCH™ 10.4" TOUCH ULTRASOUND COLOUR DOPPLER

• **33919 SONOTOUCH™ 30** - colour doppler with built-in probe connector, 10" high contrast LED monitor, 16 G memory, 3 USB port, video, LAN port, without probe. Lightweight, portable, small size, touchscreen ultrasound devices.

Main features:

- display mode: B, B/B, 4B, B/M, M, Colour and PW mode. In the M or B/M mode, 4 steps sweep speeds.
- multi-step display magnification, depth enhancement
- setting adjustment of total gain, and 8 segments of TGC slides for selection and adjustment
- multifocal firing focus, edge enhancement, frame averaging, compound
- image freezing and storage function, built-in 16 GB high-speed memory and external USB memory disk can be connected to the system for mass storage through USB port. Stored images can be retrieved for analysis.
- 256 frames of real-time images can be stored in Cine-memory
- probe scanning direction can be changed and the image can be reversed in left/right, up/down direction
- measurements of distance, area, circumference, volume, OB etc. Automatic calculation of OB and cardiology. Direct display of gestation age, expected date of child delivery and direct measure of heart rate
- real-time clock displays date and time automatically
- display of body marks with corresponding probe position indication
- annotation function in image area of the screen. Special annotation terms for different exam-mode can be added according to user's requirement
- built-in rechargeable lithium Ion battery. Life up to 2.5 hours
- full touch screen display



Button free screen and waterproof front panel

Select your applications from visual icons



Take measure with your fingers, no trackball (accuracy 1 mm)

Adjustable angle stand converts into carrying handle

Refine the image with easy, touch driven TGC, focus and depth



GIMA code	PROBES	FREQUENCY (MHz)		● Main application						
	Scanning Method	Main freq.	Probe band width	ABDOMINAL OB/GYN	UROLOGY	CARDIOLOGY	VASCULAR	SMALL PARTS	MSK	PAEDIATRIC
33922	CONVEX	3.5	2.5 - 5.0	●	●	●				
33923	LINEAR	7.5	5.0 - 10.0				●	●	●	
33924	MICRO-CONVEX	3.0	2.5 - 5.0	●	●	●				
33926	TRANSVAGINAL	6.0	4.0 - 7.5			●	●			
33927	MICRO-CONVEX	6.0	4.0 - 8.0							●

CHISON Q5, Q9 AND Q9 4D PORTABLE COLOURDOPPLER

• **33950 CHISON Q5 COLOURDOPPLER** with 2 probe connector, 15" high resolution monitor, 500 GB hardisk, 2 USB port, LAN port, Video, TV, VGA out, I-Image, without probe. Portable digital colour doppler with high professional features:

Imaging mode:

- Instant Triplex, Duplex
- B, 2B, 4B, B/M, M
- CFM
- PW mode
- Power Doppler / Directional PD
- Trapezoidal
- Chroma B/PW

Image processing technology:

- Multi-beam former technology
- I-image™: image optimization technology
- THI
- Speckle reduction algorithm (SRA)
- Multiple compound imaging (MCI)

Operating voltage: 110-240 V, 50-60 Hz. Manual: GB, IT, on request FR.

• **33952 CHISON Q9 COLOURDOPPLER**
Same as Q5 but with TDI quantitative cardiac dialysis, THI on all probes, double phase digital beam, DPDBF, IMT calculation, needle enhancement, 500 GB hard disk, quadplex, Cardiac Package. Suitable for cardiac use.

Cardiac Package (ECG software, CW, Free Steering M, colour M, TDI) included.

• **33951 CHISON Q9+4D COLOURDOPPLER**
Same as Q9 but with 4D real time imaging.

• **33901 TROLLEY FOR Q5, Q8, Q9**



GIMA code for Q5	GIMA code for Q9	PROBES	FREQUENCY (MHz)		● Main application						
		Scanning Method	Main freq.	Probe band width	ABDOMINAL OB/GYN	UROLOGY	SMALL PARTS	CARDIOLOGY	ENDOCAVITY	PAEDIATRICS	VESSELS
33954	33954	CONVEX	3.5	2.5 - 5.3	●	●	●				
33955	33955	LINEAR	7.5	5.0 - 12.0			●				●
33956	33956	TRANSVAGINAL (MICRO-CONVEX)	6.0	4.0 - 12.0			●	●			
-	33957	CARDIAC (PHASED ARRAY)	3.0	2.5 - 5.0						●	
33958	33958	PEDIATRIC	5.0	3.5 - 9.6							●
33959	33959	4D CONVEX	4.0	2 - 6.8	●	●					



GIMA VITAL SIGNS MONITORS

"Vital Signs" is a line of small multi-parameter patient monitors, which can monitor the vital physiological parameters: non-invasive blood pressure (NIBP), pulse oxygen saturation (SpO₂), electrocardiogram (ECG) and temperature (TEMP).

Features:

- small size, clear and bright display (14x17 cm) for remote view
- up to 12,000 groups of NIBP measurements can be stored and listed
- up to 96 hours of SpO₂ and HR trend curve can be displayed
- built-in rechargeable battery, 2 hours use (35120-2) or 3 hours (35124)
- USB port (35124 only)
- optional built-in thermal printer

GIMA code	MONITOR	SpO ₂	NIBP	ECG	TEMP
35120	VITAL-S	•			
35121	VITAL-SNT	•	•		•
35122	VITAL-SNET	•		•	
35124	VITAL PRO-SNET	•	•	•	•
35125	Printer* - optional	* Installation done by Gima if ordered with monitor.			
35141	Paper 5.1 cm x 12 m - box of 5	Need service if ordered later.			
35126	Lead acid re-chargeable battery - spare for 35120-2				
35129	Lithium re-chargeable battery - spare for 35124				
35135	Adult SpO ₂ probe - spare				
35136	Pediatric SpO ₂ probe				
35137	ECG cable - spare				
35140	NIBP cuff - 10-19 cm - pediatric				
35142	NIBP cuff - 18-26 cm - pediatric XL				
35139	NIBP cuff - 21-35 cm - adult				
35143	NIBP cuff - 27-42 cm - adult XL				
35127	Trolley - adjustable 73 to 113 cm				
35128	Rail clamp				

STANDARD ACCESSORIES	35120	35121	35122	35124
- Adult SpO ₂ probe	•			
- NIBP adult cuff		•	•	•
- Temperature probe - skin type		•	•	•
- ECG cable + 10 ECG electrodes		•	•	•
- Lead acid battery	•			
- Lithium battery				•
- Manual (English)	•	•	•	•



TECHNICAL SPECIFICATIONS	
NIBP	Pulse rate measurement accuracy: ± 2 bpm or 2% whichever is greater
Technology: Oscillometric method	Size: 18.5 x 18 x h 29 cm Weight: 2.4 kg
Standard measurement range:	ECG and TEMP
Systolic: Adult: 50 - 240 mmHg	Heart rate range: 20 - 300 bpm
Diastolic: Adult: 15 - 180 mmHg	TEMP measurement range: 25 - 45 °C
MAP: Adult: 25 - 200 mmHg	Accuracy: ±2 bpm or 1% whichever is greater (ECG) ±0.2 °C (TEMP)
Measurement mode: Manual, Auto, STAT	Power
SpO₂	AC power supply: 100 - 250V, 50/60 Hz
SpO ₂ measurement range: 0 - 99%	Internal power supply: 12 VDC (rechargeable)
SpO ₂ measurement accuracy:	Battery:
75 - 99% ±2%	12V 2,3AH (lead-acid battery) (35120-2)
50 - 74% ±3%	30bpm~240bpm
Low perfusion performance: 0.4%	
Pulse rate measurement range:	
30bpm~240bpm	

PC-3000 MULTI-PARAMETER PATIENT MONITOR



- 35134 PC 3000 MULTI-PARAMETER PATIENT MONITOR
- 7" high resolution colour TFT display, 5-channel waveform display
- standard parameters: ECG, RESP, SpO₂, NIBP, 2-TEMP, PR; Arrhythmia analysis and ST segment analysis
- up to 12,000 groups parameter data & 60-hour ECG waveform storage and recall
- 1,000-hour graphic and tabular trends for all parameters
- 7-channel ECG simultaneous waveforms display
- protection against interference from defibrillator, electrosurgical knife
- adult / pediatric measurement modes
- visual and audible alarms; networking capability
- carrying handle with bed-hooks

Internal software: GB, IT. On request: FR, ES, PT, PL, CZ, TR, CN.

STANDARD ACCESSORIES		
1 ECG cable	1 NIBP cuff	10 Disposable electrodes
1 SpO ₂ probe	1 Li-ion battery	1 Body surface temperature transducer
1 AC power Adapter	1 Power cable	User manual

GIMA code	ACCESSORIES - SPARES
35135	Adult SpO ₂ probe - spare
35136	Pediatric SpO ₂ probe
35137	ECG cable - spare
35138	Li-ion battery - spare
35140	NIBP cuff - arm circumf. 10-19 cm - pediatric
35142	NIBP cuff - arm circumf. 18-26 cm - pediatric XL
35139	NIBP cuff - arm circumf. 21-35 cm - adult - spare
35143	NIBP cuff - arm circumf. 27-42 cm - adult XL

TECHNICAL SPECIFICATIONS	
NIBP Monitoring	Automatic measurement by oscillating method
Measuring method:	Initial cuff inflation pressure: Adult mode: <180mmHg infant mode: <120mmHg
Overpressure protection limit:	Adult mode: 300mmHg Infant mode: 240 mmHg
Measuring range	
Systolic pressure:	Adult: 40-225 mmHg Infant: 40-200 mmHg
Diastolic pressure:	Adult: 20-215 mmHg Infant: 20-165 mmHg
Mean arterial pressure:	Adult: 10-195 mmHg Infant: 10-150 mmHg
Measurement accuracy:	Systolic ±10% Diastolic ±10% MAP ±10%
Measurement mode:	Manual, Auto, STAT
Automatic measuring:	1-240min
TEMP Monitoring	
Measuring range, accuracy:	25.0 - 45.0 °C, ±0.2°C
SpO₂ & Pulse Rate Monitoring	
Transducer:	dual-wave length LED
SpO ₂ measuring range:	35%-100%
Low perfusion capability:	0.4%-5%
SpO ₂ display accuracy:	70%-100% ±3%
PR measuring range:	30bpm-250bpm
PR measuring accuracy:	±2bpm
ECG Monitoring	
Heart rate measurement:	±0.4 mVp - ±5 mVp
Heart rate display range:	20 - 250bpm
Display accuracy*:	±1% or ± 2 bpm, whichever is greater
Heart rate alarm delay time:	≤10s
Sensitivity selection:	Auto, x1/2, x1, x2, x4 tolerance: ≤5%
Sweeping speed:	12.5 mm/s, 25 mm/s, 50 mm/s tolerance: ≤10%
Common-mode rejection ratio:	≥89 dB
Frequency response:	Monitoring mode: 0.5 - 40 Hz Diagnostic mode: 0.05 - 75 Hz
RESP Monitoring	
Monitoring range, accuracy:	0 - 120 rpm, ±5% or 2 rpm, whichever is greater
RESP alarm range:	0 - 100 bpm ±10%
Other Technical Specifications	
Power supply:	100 - 250 Vac, 50/60 Hz <80 VA
Networking port:	serial/Net port



UP 7000 MULTI-PARAMETER PATIENT MONITOR

ECG+RESP+SpO₂+
2 TEMP+PR



- 35145 MULTI-PARAMETER PATIENT MONITOR ECG, RESP, SpO₂, 2 TEMP, PR
- 12.1" high resolution colour TFT display
- 3 channel ECG amplification
- arrhythmia analysis and ST segment analysis
- up to 800 groups parameter data & 24-hour ECG waveform storage and recall
- 480-hour graphic and tabular trends for all parameters
- 7 trace ECG waveforms simultaneous display
- protection against interference from defibrillator
- adult/pediatric measurement modes
- visual and audible alarms
- built-in rechargeable battery
- built-in thermal printer
- multilanguage internal software: GB, FR, IT, ES, PT, PL, CZ, TR, RU, CN



GIMA code	ACCESSORIES AND SPARES
35135	Adult SpO ₂ probe
35136	Pediatric SpO ₂ probe
35137	ECG cable
35140	NIBP cuff - arm circumf. 10-19 cm - pediatric
35142	NIBP cuff - arm circumf. 18-26 cm - pediatric XL
35139	NIBP cuff - arm circumf. 21-35 cm - adult
35143	NIBP cuff - arm circumf. 27-42 cm - adult XL
35126	Lead acid rechargeable battery - spare
35141	Paper 5.1 cm x 12 m - box of 5
35150	Trolley - adjustable 73 to 113 cm

STANDARD ACCESSORIES		
- Adult SpO ₂ probe	- Re-chargable battery	- Disposable electrode
- NIBP adult cuff	- Printer	- Dust-protective mantle
- Temperature probe - skin	- Power supply cable	- Manual (GB, IT)
- Temperature probe - rectal	- ECG cable 5 leads (RA - LA - LL - PL - C)	

TECHNICAL SPECIFICATIONS			
NIBP Monitoring			
Measuring method:	Oscillometric		
Measuring range:	Systolic pressure:	Diastolic pressure:	Mean arterial pressure:
adult:	40-255mmHg	10-220mmHg	20-215mmHg
pediatric:	40-200mmHg	10-110mmHg	20-165mmHg
TEMP Monitoring			
Measuring range:	25.0°C-45.0°C ±0.2°C		
Response time:	≤ 150 sec		
SpO₂ & Pulse Rate Monitoring			
SpO ₂ measuring range:	35%~100%		
PR measuring range:	30bpm~240bpm ±2bpm		
ECG Monitoring			
Heart rate measurement:	±0.4mVp~±5mVp		
Heart rate display range:	20bpm~250bpm		
RESP Monitoring			
Measuring method:	Thoracic impedance		
Monitoring range:	0rpm~120rpm,		
Monitoring accuracy:	±5% or ±2rpm whichever is greater		
Other Technical Specifications			
Power supply:	100~250Vac, 50/60Hz		
Power consumption:	<80 VA		
Display mode:	12.1 inches TFT color LCD		
Alarming mode:	Audible-visual alarm		
Networking port:	Ethernet port		
Size - weight:	29x31.5x15 cm - 3.9 kg		

CMS 8000 CONTEC PATIENT MONITOR

ECG+RESP+SpO₂+
NIBP+2 TEMP+PR



- 35151 CMS 8000 PATIENT MONITOR ECG, RESP, SpO₂, PR, NIBP, DUAL CHANNEL TEMP
- 12.1" TFT colour LCD display
- multilanguage interface (GB, IT, FR, DE, ES, PT, NL, PL, CZ, TR, RO, RU)
- adult/pediatric/neonate measurement modes
- 8 channel waveform synchronous display
- 7 lead ECG waveform on one screen
- anti-motion, anti-ambient light interference digital SpO₂ technology
- AC/DC rechargeable lithium battery
- manual/AUTO/continuous NIBP measurement mode
- standard/OXY- graph/Trend-graph/big characters and view bed interfaces

Size: 314x145x264 mm
Weight: 3.9 kg

GIMA code	ACCESSORIES AND SPARES
35149	Adult SpO ₂ probe - 3 m cable - spare
35107	Neonate SpO ₂ probe <3 kg - reusable
35108	SpO ₂ extension cable
35113	Pediatric NIBP cuff 18-26 cm
35114	Adult NIBP cuff 25-35 cm
35115	Adult large NIBP cuff 33-47 cm
35116	Thigh NIBP cuff 46-66 cm
35154	Rectal temp probe - optional
35155	Skin temp probe - spare
35156	ECG cable - spare
35157	Printer - optional
35158	Trolley
35159	Rechargeable lithium battery - spare
32968	Printer paper roll 50 mm x 20 m



Adjustable height
104-130 cm

STANDARD ACCESSORIES	
- Adult SpO ₂ probe	- ECG cable
- NIBP adult cuff	- power supply cable
- NIBP extension tube	- manual (GB, IT, ES) on request (PT, TR)
- Temperature probe - skin	- ECG electrodes
- Rechargeable lithium battery	

TECHNICAL SPECIFICATIONS	
ECG	Measurement period in CONT mode: 5 min
5-lead, dual channel, 3-lead, single channel	Measurement alarm: 10-270 mmHg
Scan speed: 12.5 mm/s, 50 mm/s	SpO₂
ST segment monitoring	Measurement and alarm range: 0-100%
Measurement and alarm range: -2.0 mV ±2.0 mV	Measurement accuracy: 70-100% ±2%
RESP	PR
Method: R-F (RA-LL) impedance	Measurement and alarm range: 30-250 bpm
Measurement and alarm range: 0-150 rpm	TEMP
Apnea alarm: 10-40 sec	Channel: dual channel
NIBP	Measurement and alarm range: 0-50 °C
Method: oscillometry	Power supply: 110-240 V - 50/60 Hz
Mode: manual/AUTO/continuous	Safety classification: Classe I type CF
Measurement interval in AUTO mode:	Defibrillation-proof applied part
1/2/3/4/5/10/15/30/60/90/120/240/480/960 min	

BM7 PREMIUM PATIENT MONITOR FOR INTENSIVE CARE



• **33774 BM7 MONITOR 12.1"** touch screen LCD display - 7 channels
Premium patient monitor for intensive care.

Superior features:

- touch screen operation display
- individual sweep speed setting for each parameter
- 168 full hours of trend data storage
- 4-split large multiple display modes
- oxy/CRG
- drug calculation
- screen freeze ON-OFF
- ST level analysis histogram

High performances:

- ECG, SpO₂, NIBP, Respiration, 2 Temp, 2 IBP
- Sidestream EtCO₂ - optional
- 13 Arrhythmia analysis modes
- high performance **Suntech NIBP**
- Li-ion battery with longer life time (1.5 hrs continuous operation)
- possibility to connect to BM central monitoring system see page 291

• **33725 CART** - adjustable height, basket included

• **33709 Li-ion BATTERY 11.1 V** - spare

Same accessories and probes as BM5 monitors, see page 292, 293.

STANDARD ACCESSORIES

5-lead patient Cable (MECA5 (AHA), MACE5 (IEC))
Electrodes - box of 10
NIBP extension tube (3m)
Reusable Adult Cuff (25-35 cm)

Reusable Pediatric Cuff
SpO₂ extension cable (2m)
Reusable Adult SpO₂ probe
DC adapter (18 VDC, 2.5A)

Li-ion 11.1 V battery
Thermal printer
2 paper roll
User manual: GB, IT

TECHNICAL SPECIFICATIONS

MONITOR
Display, Resolution 12.1" color TFT. 800x600 pixels
Dimension 322x250x224.8 mm
Weight Approx. 4.5 kg
Trace 6 waveforms: 2xECG, SpO₂, RR or EtCO₂, 2xIBP
Sweep speed: 6.25, 12.5, 25, 50 mm/sec
Indicators Categorized alarms (3 priority levels)
Visual alarm lamp handle and heart beat tone
QRS beep & SpO₂ pulse beep
SpO₂ pitch tone
Battery status, external Power LED
Interfaces Touch screen, rotary knob
Connectors DC input connector: 18 VDC, 2.5 A
Defibrillator Sync. Output:
- Signal level: 0 to 5 V pulse
- Pulse width: 100 ± 10 ms
LAN digital output for transferring data
External VGA monitor connection
DC output 5VDC. 1A Max
Battery Rechargeable Li-ion battery,
1.5 hours continuous operation
Thermal Printer Speed: 25, 50 mm/sec,
paper width: 58 mm
Data Storage 168 hours trends, 20 cases of
10 sec alarm waveform
USB memory storage
Internal language (selectable) GB, FR, IT, ES, DE,
CZ, PL, PT, RO, BG, HU, TR, RU, CN, KR

ECG
Leads type 3-lead, 5-lead
Lead selection 3-lead: I, II, III
5 lead: I, II, III, aVR, aVL, aVF, V
3-lead: 1 channel
5-lead: 2/7 channel
Heart rate range Adult: 15-300 bpm
Neonate/pediatric: 15-350 bpm
Heart rate accuracy ±1 bpm or ±1% whichever is greater
Sweep speed 6.25, 12.5, 25, 50 mm/sec
Filter Diagnosis: 0.05~120 Hz
Monitoring: 0.5~40 Hz
Moderate: 0.5~25 Hz
Maximum: 5~25 Hz
S-T segment detection range -2.0 to 2.0 mV
Arrhythmia analysis ASYSTOLE, VTACH, VFIB,
BIGEMINY, ACCVENT, COUPLET,
IRREGULAR, PAUSE, PVC, RONT,
TRIGIMINY, VBRADY, SHORTRUN
Pacemaker detection mode
Indicator on waveform display (user selectable)
Protection Against electrosurgical interference
and defibrillation
RESPIRATION
Method Thoracic impedance
Channel selection RA-LA or RA-LL
Measurement range 5-120 breath per minute
Accuracy ±1 breath per minute
Apnea alarm Yes
SpO₂ range 0 to 100%; (70 to 100% ±2% digits)

Pulse rate range 0 to 254 bpm ±2 bpm
NIBP SUNTECH
Method Oscillometry
Operation Mode manual / Automatic / Continuous
Pressure measurement range 0-300 mmHg
Safety pressure: Adult: 300 mmHg
Neonate: 150 mmHg
Adult pressure: 20 to 220 mmHg
Measurement range: Pulse rate: 30-220 bpm
Pediatric pressure: 20-160 mmHg
Pulse rate: 30-220 bpm
Neonate pressure: 20-130 mmHg
Pulse rate: 30-220 bpm
Accuracy: The static pressure measurement is
within ±3 mmHg
Meets ANSI/AAMI SP 10 2002
TEMPERATURE
Measurement range: 10 to 45°C (59 to 113°F) ±0.1°C
Compatibility YSI SERIES 400 temperature probes
IBP
Channels 2
Measurement range: -50 to 300 mmHg
Accuracy <100 mmHg ±1 mmHg
>-100 mmHg ±1% of reading
Pulse rate measurement range 0 to 300 bpm
Zero balancing Range: ±200 mmHg
Accuracy: ±1 mmHg
Drift: ±1 mmHg of over 24 hours
Transducer sensitivity: 5 µV/mmHg
Pulse rate measurement range: 0 to 300 bpm

BM1, BM3, BM5, BM7 MONITOR ACCESSORIES

GIMA code	ACCESSORIES FOR BM1, BM3, BM5, BM7	Image	Image	Image	
33738	NIBP Extension cable, 3 m (necessary for all cuffs)			33736	
33735				Adult cuff - 49x15 cm - need ext. cable 33738	
33736				Child cuff - 35x11 cm - need ext. cable 33738	
32848				Obese cuff 62x75.5 - need ext. cable 33738	
33737				Kit of 3 neonatal cuffs* - needs cable 33738	
32810				Mini cuff 16x5 cm - needs 33738+33739	
32811	Mini cuff 23x5 cm - needs 33738+33739		32811		
33739	Metal connector (necessary for mini cuff)				
33771	Temp Temperature sensor 3.0 m, skin type <i>Compatible with Drager MM15114, MM15822, GE 21733601, Philips HP21059B, Nihon Kohden P242A, Datascope 0206-02-0003</i>			33772	
33772				Temperature sensor 3.0 m, rectal type	
33743	Paper Thermal paper 57.5 mm, 38 Ø				
33742	Battery Ni-MH 12V battery - up to January 2006** - BM3, BM3 Plus Ni-MH 12V battery - Since January 2006** - BM3, BM3 Plus Li-ion battery - Since Sept. 2007** - new BM3, Plus, BM5 Li-ion battery 11.1 V - 6 cell for EtCO ₂ - for 33782 only Li-ion battery 11.1 V for BM1 Li-ion battery 11.1 V for BM7				33715
33715					
33717					
33798					
33710					
33709	Li-ion battery 11.1 V for BM7				
33747	Adapter AC adapter for BM3, BM5, BM7				

**Date is approximative. Please select battery according to picture and specifications

* Cuff 3.3-5.6 cm, 4.2-7.1 cm, 5-10.5 cm

COLOUR MULTIPARAMETER MONITORS



Bed-rail hook
Ergonomic handle

Pacemaker detection indicated on ECG display

58 mm built-in printer for both real time and trend data (Speeds: 25-50 mm/sec)

Battery status indicator - continuous operating time 1.5 h

Printing sample



Easy mounting with bed-rail hook



Direct connection of external monitor through optional card

- 33718 GIMA BM3 MONITOR (7" - 800x480 - TFT display)
- 33719 GIMA BM3 VET MONITOR - VETERINARY

ECG+SpO₂+NIBP+RESP+TEMPERATURE

- GIMA monitors are configured with
- 7" colour TFT LCD for a clear view
 - Individual sweep speed setting for each parameter
 - 128 full hours trend data stored
 - SpO₂ measurement with very low perfusion detection and pulse beep
 - 2 traces ECG
 - screen freeze on/off
 - connection to Central monitoring system using LAN or W-LAN
 - Li-ion Battery (for 1.5 hours continuous operation)
 - High-performance ECG detection and analysis
 - input impedance for dry skin or electrode patch
 - ST level, PVC count real-time display
 - 3 kinds of Arrhythmia analysis
 - Enhanced data management
 - graphical and tabular trends
 - 20 cases per 10 sec alarm waveform stored, reviewed and printed
 - Internal software selectable in GB, DE, FR, IT, PT, PL, RO, HU, ES, CZ, BG, RU, TR, CN
 - User manual: GB, IT (on request: ES, FR, DE).

Angle of plate adjustable

Height of cart is adjustable



33725

Moving cart increase flexibility around the ward or department.

See temperature sensors, cuffs, batteries and accessories at page 290, 293

STANDARD ACCESSORIES	33718	33719
3 lead patient cable (ECG)	•	• vet
Disposable electrodes: 10 pcs	•	•
NIBP tubing - 3m	•	•
Reusable adult cuff 25-35 cm	•	•
Reusable child cuff	•	•
Set of 3 veterinary cuffs	•	•
SpO ₂ sensor - reusable	•	• vet
SpO ₂ sensor extension cable 2 m	•	•
Thermal printer 58 mm	•	•
DC adaptor (18 VDC, 2.5A)	•	•
Battery	•	•
User manual: GB, IT	•	•

PATIENT CENTRAL SYSTEM (up to 31 monitors)

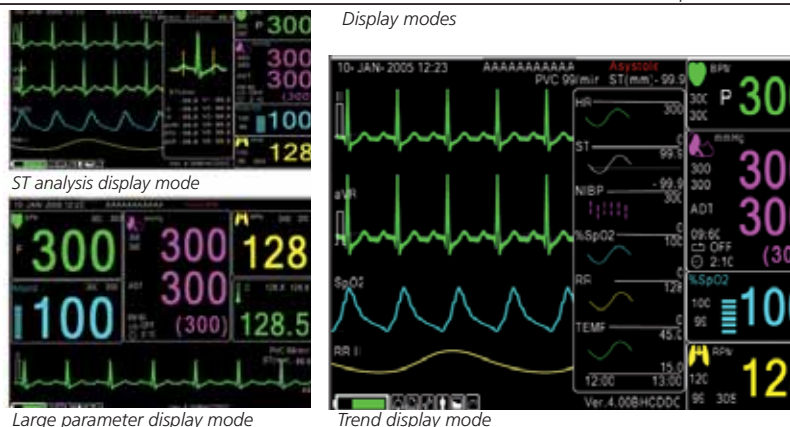
It allows the user to monitor and extract the exact status of several patients simultaneously at a place. Convenient bidirectional communication allows you to admit new patient information, set alarms at either central station or patient monitor.

- 33745 WIRE CENTRAL SYSTEM (PC, monitor, 16 port switch and software)
- 33746 LAN CABLE - 3 m
- 33767 LAN CABLE - 30 m

One for any monitor to be connected. Customized cable length on request.

- 33758 WIRELESS CENTRAL SYSTEM (PC, monitor, wireless router and software)
- 33759 WIRELESS CONNECTION KIT

Ethernet converter and power cable
One for any monitor to be connected.



ST analysis display mode

Large parameter display mode

Trend display mode

TECHNICAL SPECIFICATIONS

GENERAL	
Display:	7" colour TFT 800x480 pixels
Dimensions - Weight:	238x250x163 mm - 3.1 kg
Trace	4 waveforms: 2*ECG, SpO ₂ , Respiration
Indicators	Sweep speed: 6.25, 12.5, 25, 50 mm/sec Categorized alarms (3 priority levels) Visual alarm, QRS beep & SpO ₂ Pulse beep Percent (%) SpO ₂ pitch tone, Battery status, External Power LED
Thermal printer:	25, 50 mm/sec (paper width 58 mm)
Battery:	Rechargeable Li-ion battery Operating time: 1.5 hours (fully charged)
Interfaces:	LAN digital output for transferring data DC input connector: 18 VDC, 2.5 A max
Operating voltage:	100-240 V, 50-60 Hz
Data storage:	128 hours trends, 20 cases of 10 sec alarm waveform
ECG	
Lead type:	3-lead, 5-lead (option)
Lead selection:	3-lead I, II, III 5-lead I, II, III, aVR, aVL, aVF, V (option)
Heart rate range:	Adult: 30 to 300 bpm, Neonate/Pediatric: 30 to 350 bpm
Heart rate accuracy:	± 1bpm or ± 1%, whichever is greater
Sweep speed:	6.25, 12.5, 25, 50 mm/sec
Filter:	Diagnosis: 0.05 to 150 Hz - Monitoring: 0.5 to 40 Hz Moderate: 0.5 to 25 Hz - Maximum: 5 to 25 Hz
S-T segment detection range:	-2.0 to 2.0 mV

Arrhythmia analysis:	ASYSTOLE, VTACH, VFIB
Pacemaker detection mode:	Indicator on waveform display (user selectable) Against electro-surgical interference and defibrillation
Protection:	
SpO ₂	
% Saturation Range:	0% to 100% ± 2 digits (70% to 100%)
Pulse rate range:	30 to 254 bpm ± 2 bpm
NIBP	
Technique:	Oscillometric
Measurement Modes:	Manual/automatic/continuous
Pressure range:	0 to 300 mmHg ± 3 mmHg
Measurement range:	Adult pressure: 20 to 260 mmHg Pediatric pressure: 20 to 230 mmHg Neonatal pressure: 20 to 120 mmHg
Respirations	
Method:	Thoracic impedance
Range:	5 to 120 breath/min
Accuracy:	± 1 breath/min
Apnea alarm:	yes
Temperature Unit	
Range:	0° to 50°C (32°F to 122°F)
Accuracy:	± 0.1°C (25°C to 50°C), ± 0.2°C (0°C to 24°C)
Compatible with:	YSI Series 400 Temperature Probes



33745

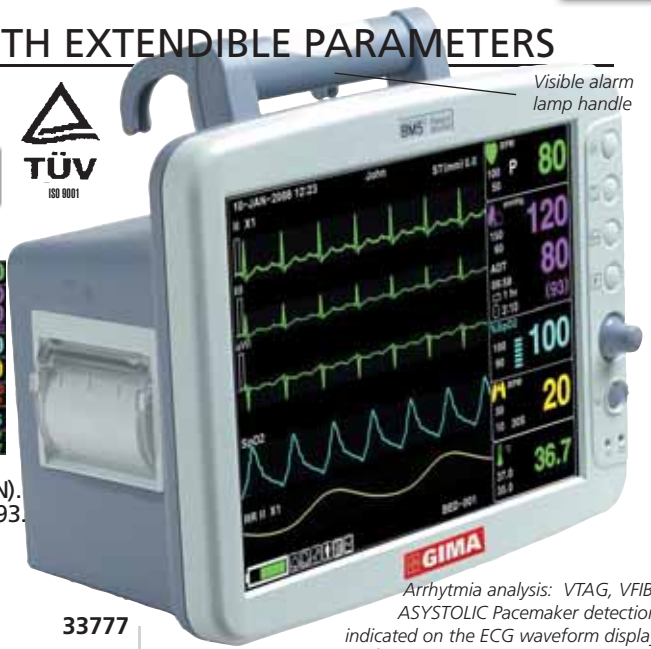
BM5 MULTIPARAMETER MONITOR WITH EXTENDIBLE PARAMETERS

- 33777 GIMA BM5 MONITOR - 10.4" TFT display - 7 ch ECG
 - 33779 GIMA BM5 VET MONITOR - 10.4" TFT display
 - high-performance ECG analysis
 - ST level PVC count display
 - 13 kinds of Arrhythmia analysis
 - 7 channels
 - 10.4" colour TFT screen with 6 waveforms
 - visible alarm lamp handle
 - SpO₂ technology with very low-perfusion detection
 - SpO₂ pitch tone
 - 58 mm built-in chart recorder
 - graphical and tabular trends of printing
 - LAN or wireless LAN
 - 128 full hours trend data stored
 - direct DC input for vehicle transport
 - Li-ion battery with long life time
 - connection to central monitoring system
 - selectable software language (GB, DE, FR, IT, PT, PL, RO, HU, ES, CZ, BG, RU, TR, CN).
- Standard accessories as BM3 monitor, page 291. Other accessories page 290-293.



ECG+SPO₂+NIBP+RESP+ 2 TEMP, optional 2 IBP + ETCO₂ MODULE

12 Channel display



Visible alarm lamp handle

Arrhythmia analysis: VTAG, VFIB, ASYSTOLIC Pacemaker detection indicated on the ECG waveform display

GIMA code	TEMPERATURE, EtCO ₂ AND IBP KIT
33771	Temperature sensor 2.75 m - skin type
33772	Temperature sensor 2.75 m - rectal
33741	Exacon temperature sensor 2.75 m - rectal
33796	EtCO ₂ Sidestream module for 33714, 33777/8/9
33790	Intubated Filter Line H - adult - box of 10 for 33796
33791	Intubated Filter Line H - infant - box of 10 for 33796
33792	Non intubated CO ₂ nasal cannula - adult - box of 10 for 33796
33793	Non intubated CO ₂ nasal cannula - pediatric - box of 10 for 33796
33794	Non intubated CO ₂ +O ₂ nasal cannula - adult - box of 10 for 33796
33795	Non intubated CO ₂ +O ₂ nasal cannula - pediatric - box of 10 for 33796
33786	Single line monitoring kit (catheter)
33787	IBP Kit - disposable - single
33788	IBP Kit - reusable (not autoclavable) - single
33789	IBP Kit - reusable (not autoclavable) - double

<p>33777</p> <p>33790 Airway adapter set with dehumidification tubing for intubated adult Suitable also for VET (dog, horse)</p>	<p>33792</p> <p>33794</p>
<p>33791</p> <p>33791 Airway adapter set with dehumidification tubing for intubated infants Suitable also for VET (cat, puppy)</p>	<p>33793</p> <p>33795</p>

TECHNICAL SPECIFICATIONS FOR MONITOR 33777 - 33779

GENERAL	Heart rate range:	Adult: 30-300 bpm	Respirations
Dimensions/Weight: 270x185xh 250 mm/4 kg	Heart rate accuracy:	Neonate/pediatric: 30-350 bpm	Range: 5 to 120 breaths/min
Trace: 6 waveform (ECGx2, SpO ₂ , RR or EtCO ₂ IBPx2)	Sweep speed:	± 1 bpm or ± 1%, whichever is greater	Accuracy: ±1 breath/min
Indicators: categorized alarms (3 priority levels), visual alarm lamp handle, heart rate, SpO ₂ pulse pitch tone, battery status, external power LED	Filter:	6.25, 12.5, 25, 50 mm/sec.	Apnea alarm: yes
Thermal printer: 25, 50 mm/sec (paper width 58 mm)	S-T Segment detection range:	Diagnostic mode: 0,67-150 Hz	Temperature Unit
Battery: Li-ion (2 hours operating time)	Arrhythmia analysis:	Monitoring mode: 0,67-40 Hz	Range: 15° to 45°C (59°F to 113°F)
Interfaces: LAN digital output for transferring data, Nurse call system connection, defibrillator sync. output	Diagnostic analysis:	Surgical mode: 5-25 Hz	Accuracy: ± 0.1°C
DC input connector: 12 to 18 VDC, 2.5A max	Pacemaker detection mode:	- 2.0 to 2.0 mV	Compatible with: YSI Series 400 Temperature Probes
Operating voltage: 100-240 V, 50-60 Hz	Protection: against electro-surgical interference and defibrillation		IBP - option
SpO ₂	NIBP		Channels: 2
% Saturation Range: 0% to 100%	Technique: Oscillometric with linear deflation		Measuring range: -50 to 300 mmHg
Pulse Rate Range: 0 to 254 bpm	Measurement Modes: Manual-Automatic-Continuous		Measuring accuracy: ± 1 mmHg (<100 mmHg)
SpO ₂ Accuracy: 70% to 100% ±2 digits	Measurement range: Adult pressure: 20 to 260 mmHg		Measuring accuracy: ± 1 % of reading (>100 mmHg)
Pulse Rate Accuracy: ± 2 bpm	Pediatric pressure: 20 to 230 mmHg		Pulse rate counting range: 0 to 300 beats/min
ECG	Neonate pressure: 20 to 120 mmHg		Zero balancing: accuracy ± 1 mmHg drift ± 1 mmHg over 24 hours
Lead type: 3-lead, 5-lead (33777), 10-lead(33779)	Cuff pressure display: 0 to 300 mmHg		Transducer sensitivity: 5µV/V mmHg
Lead selection: 3-lead: I, II, III (33777/79)	B.P. measurement range: Systolic: 40 to 270 mmHg		EtCO ₂ - option
10-lead: I, II, III aVR, aVL, aVF, V1, V2, V3, V4, V5, V6 (33779 only)	Mean: 20 to 230 mmHg		Measurement mode: Sidestream
ECG Waveforms: 3-lead 1 channel (33777/79)	Diastolic: 10 to 210 mmHg		Measurement range: 0~150 mmHg, 0 to 19%
5-lead: 3/7 channels (33777/79)	Adjustable Cuff Inflation Pressure		Respiration range: 2~150 bpm
10-lead: 3/12 channels (33779 only)			Accuracy: ± 2 mmHg, 0~40 mmHg
			Respiration accuracy: ± 5%, 41~70 mmHg
			Accuracy: ± 8%, 71~100 mmHg
			± 10%, 101~150 mmHg
			Respiration accuracy: ± 1 breath per minute

BM1: SLIM AND LIGHT MONITOR WITH STRONG MOBILITY

- 33714 GIMA BM1 MONITOR SpO₂+NIBP optional Temp. and EtCO₂
 - Professional multiparameter monitor in compact size:
 - only 60 mm (2.36 inch) thick and 1.0 kg (2.2 lb)
 - easy mounting to an IV pole
 - 4.5 hours battery operation (rechargeable Li-ion)
 - top handle and rear grip
 - monitoring mode and spot check mode
 - 4.3" color TFT monitor for clear view 480x272 pixels
 - touch key and wheel navigation
 - external VGA output for large LCD monitor (option)
 - saves 128 hours trend and 400 cases
 - multilanguage selectable software (GB, FR, IT, ES, DE, PL, PT, RO, BG, HU, CZ, RU, TR, CN, KR)
 - highly advanced CO₂ monitoring technology
 - plug and play EtCO₂ module
- Same accessories of BM line. SpO₂, TEMP, EtCO₂, NIBP technical specifications same as BM5.
- 33710 Li-Ion RECHARGEABLE BATTERY - spare

SpO₂ + NIBP optional TEMP and EtCO₂



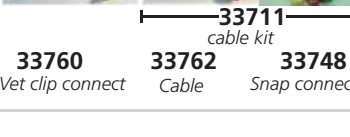
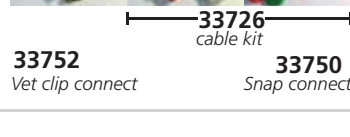


Supplied with NIBP adult cuff (25-35 cm) with 3 m extension hose, SpO₂ adult finger probe with extension cable (2 m) DC adapter (15 VDC, 2.0 A) pole mount bracket, shoulder strap, rechargeable battery.








Size: 190x125x60 mm
Weight: 1 kg



ECG CABLES FOR BM GIMA AND BIONET MONITORS

GIMA code	ECG CABLES FOR BM3 (33718, 33719, 33720, 33721, 33722, 33723, 33724, 33780, 33781)	ACCESSORIES FOR MONITOR BM3, BM5, BM7					
		NEW (after 6/2006)	OLD (before 6/2006)				
33711	3-lead patient cable kit (cable+snap connectors 33748)	 33713 Vet cable kit	 33727 Vet cable kit				
33712	5-lead patient cable kit (cable+snap connectors 33749)						
33726	3-lead patient cable kit (cable+snap connectors 33750)						
33728	5-lead patient cable kit (cable+snap connectors 33751)						
33727	3-lead veterinary cable kit (cable+3 clips connectors)						
33713	3-lead veterinary cable kit (cable+3 clips connectors)	 33711 cable kit	 33726 cable kit				
33748	3-lead snap connectors for 33711 - spare - new						
33749	5-lead snap connectors for 33712 - spare - new						
33750	3-lead snap type connectors for 33726 - spare - old						
33751	5-lead snap type connectors for 33728 - spare - old						
33752	Vet 3-lead clip type connectors for 33726-7 - spare - old	 33712 cable kit	 33728 cable kit				
33753	Vet 5-lead clip type connectors for 33728 - spare - old						
33760	Vet 3-lead clip type connectors for 33713 - spare - new						
33761	Vet 5-lead clip type connectors for 33712 - spare - new						
33762	3-lead patient cable						
33763	5-lead patient cable	33760 Vet clip connect	33762 Cable	33748 Snap connect	33752 Vet clip connect	33750 Snap connect.	
ECG CABLES FOR BM5-BM7 (33777, 33778, 33779)		33761 Vet clip connect	33763 Cable	33749 Snap connect	33753 Vet clip connect	33751 Snap connector	
33764	3-lead patient cable kit (cable + snap connector)						
33765	10-lead patient cable kit (cable + snap connector) only 33778						
33766	3-lead veterinary cable kit (cable + clip connector)						

BM1, BM3, BM5, BM7 SpO₂ SENSORS - NELLCOR COMPATIBLE

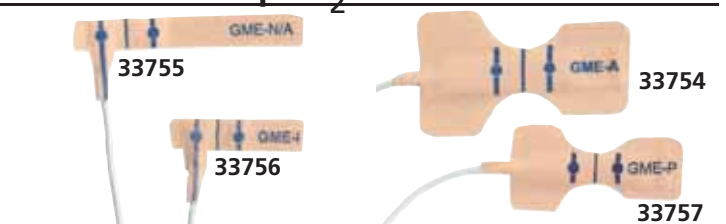
GIMA code	SpO ₂ SENSORS FOR ALL BM MONITORS	SpO ₂ REUSABLE PROBES	
33730**	Adult reusable finger sensor (> 45 kg) Nellcor comp. - 7 pin	 7 pin	 33731
33731	Pediatric reusable finger sensor (15-45 kg) - Nellcor comp.		
33732	Vet reusable sensor - clip <i>**Not compatible with Nellcor NPB40 and N65</i>		
AVAILABLE OTHER NELLCOR AND NELLCOR OXITECH REUSABLE COMPATIBLE SpO₂ SENSORS - see page 295		SpO₂ EXTENSION CABLES	
GIMA code	EXTENSION CABLES FOR BM SpO ₂ SENSORS	 33733 for units sold before Oct. 2005	 33716
33733	Extension cable*, 2 m (7 pin small SpO ₂ connector) up to 2005		 33734
33734	Extension cable*, 2 m (6 pin SpO ₂ connector) sold in 2005/6/7		
33716	Extension cable*, 2 m (7 pin big SpO ₂ connector) since 2007 <i>*Necessary for all probes. Please select correct one</i>		

NELLCOR COMPATIBLE DISPOSABLE SpO₂ SENSOR

All probes are supplied in sterile pack with 70 cm cable.



GIMA code	NELLCOR COMPATIBLE DISPOSABLE SpO ₂ PROBES (not compatible with Nellcor Oximax)
33755	Disposable neonate/adult probe - under 3 kg (neonate foot) - over 40 kg (adult finger)
33756	Disposable infant probe - 3-20 kg
33757	Disposable pediatric probe - 10-50 kg
33754	Disposable adult probe - over 30 kg



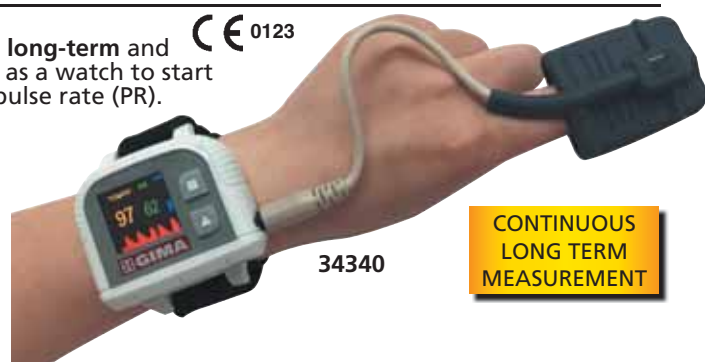
TECHNICAL SPECIFICATION SpO ₂ SENSORS	
Range of SpO ₂ measurement:	70%~100%
Accuracy:	70%~100% ±2%; below 70%: unspecified
Range of pulse measurement:	30~250 bpm
Accuracy:	±2 bpm of 2% (select larger)
Optical Sensor:	red light (wavelength is 650~670 nm, 6.65 mW) infrared (wavelength is 880~910 nm, 6.75 mW)

WRIST OXIMETER

• 34340 WRIST PULSE OXIMETER - with software

Small and lightweight wrist Oximeter available for home and clinical long-term and comfortable monitoring. It can be simply worn on the patient's wrist as a watch to start the monitoring and can be used during sports to measure SpO₂ and pulse rate (PR).

- audible and visual alarm with adjustable alarm limits
- trend review function of SpO₂ and PR
- selectable storage modes: 1 group/1s, 1 group/4s, and 1 group/8s
- up to 500 hours storage for SpO₂ and PR data in default mode (1 group/8s)
- clock setting and date display function
- software to download and store all measurements on PC integrated
- removable finger probe
- not suitable for pediatric use



CONTINUOUS LONG TERM MEASUREMENT

PC-300 SPOT CHECK BLUETOOTH MONITOR

Standard:
SpO₂, PR, NIBP,
TEMP

**Optional ECG,
GLUCOMETER**

35162



FDA 510 (K)
CE 0476



Bluetooth 2.0
and 4.0 standard

Memory of
6,000 NIBP measures








• **35162 PC-300 SPOT CHECK MONITOR**
PC-300 handheld Spot-check monitor measures SpO₂, Pulse Rate, NIBP and TEMP. Widely used in hospitals, clinics and family daily measurement. Equipped with Bluetooth and USB interface, allows to transfer data to PC, tablets and smartphone (Android and iOS).

- up to 6000 groups NIBP data storage, up to 100 different patients (each user can store 999 measurement records)
- quick ear probe TEMP measurement result in 5 seconds
- data transfer to PC/Smartphone by USB or Bluetooth
- optional NIBP pediatric cuff and SpO₂ pediatric probe
- optional ECG and Glucometer
- built-in rechargeable lithium battery
- communication protocols available on request

STANDARD ACCESSORIES

- SpO₂ adult probe
- NIBP adult cuff
- Ear thermometer (probe covers not included)
- Lithium battery with charger
- Carrying bag
- User manual: GB, FR, IT, ES



GIMA code	PC-300 ACCESSORIES	
35164	SpO ₂ pediatric probe - optional	
35165	SpO ₂ adult probe - spare	 35165
35166	NIBP pediatric cuff 10-19 cm - with extension cable - optional	
35167	NIBP adult cuff 22-30 cm - spare	 35167
35170	Ear infrared thermometer	
35171	Ear probe cover - box of 500	 35170
35172	Lithium battery - spare	
PC-300 ACCESSORIES: glucose and ECG (optional)		
23890	Glucose monitor On Call Plus II* - IT, GR	 23890
23891	Glucose monitor On Call Plus II* - GB, FR	
23892	Glucose monitor On Call Plus II* - ES, PT	
23895	Glucose monitor Kit On Call Plus II* - IT, GR	
23896	Glucose monitor Kit On Call Plus II* - GB, FR	
23897	Glucose monitor Kit On Call Plus II* - ES, PT	
23910	Glucose strips - box of 25	
23912	Glucose strips - box of 50	
23913	Glucose strips - box of 100	
35176	Glucose monitor USB cable	
35178	ECG module** needs 33248	 35178
33248	ECG pin lead cable 3 leads	

TECHNICAL SPECIFICATIONS

SpO₂
Measuring range: 35%-100%
Accuracy: ±3% (70-100%)

Pulse Rate
Measuring range: 30-240 bpm
Accuracy*: ±2% or ±2 bpm (whichever is greater)
**Root-mean-square value of deviation according to ISO 1919*

NIBP
Pressure range: 0-300 mmHg (0-39.9kpa)
Accuracy: ±3 mmHg
Measuring range: Systolic pressure: 60-240 mmHg
Diastolic pressure: 30-180 mmHg

TEMP
Measuring range: 32-43.0°C
Accuracy: ±0.2°C (35-42°C) - ±0.3°C (other)
Measuring time: <5 s

ECG (Optional)
Heart Rate measuring range: 30-240 bpm
Heart Rate accuracy: ±2 bpm or ±2% whichever is greater
Display scale: 5.0 mm/mV ±10%
Common-mode rejection ratio (CMRR): ≥60 dB

Blood Glucose (Optional)
Measuring range: 20 to 600 mg/DL
SEE other specification at page 5

Power Supply
Battery: 3.7 V built-in Li-ion battery
Operating voltage: 3.6-4.2 VDC
Operating current: ≤800 mA
Charger: 100 - 240 VAC, 50/60 Hz, 5 VDC or USB

See glucose monitor accessories at page 5
*Needs USB cable 35176 to connect to PC-300 **ECG module can be used without 3 leads cable in palm mode
See electrodes at page 277-278

PALM SAT® 2500A NONIN PULSE OXIMETER

• **35086 PALM SAT® 2500A PULSE OXIMETER with rubber reusable adult probe and alarm.**

A compact versatile and reliable pulse oximeter designed and tested to exceed all durability requirements.

Main features:

- Pure Sat® technology offers accuracy & speed in getting a reading, even with varying skin pigmentations or polish and is able to monitor, with declared accuracy in challenging conditions, such as motion & low perfusion, for all patients
- it is tested to assure performance in challenging conditions, such as drop and liquid ingress (IPX 2). Granted by US Army/Air Force Aeromedical certification
- It also features: audible and visual alarms, 72 hour memory, long battery life (60 hours) or rechargeable battery for 40 hours
- Supplied with multilanguage cd-rom manual: GB, FR, IT, DE, ES, PT, GR, NL, PL, NO, FI, DK, SE.

TECHNICAL SPECIFICATIONS

SpO₂ range: 0% to 100% ±2 (70-100% without movement)
Pulse rate range: 18 to 321 bpm ±3 (18-300% without movement)
Power: 4AA alkaline batteries 1.5 V (for 60 hours use)
optional NiMH rechargeable battery (for 40 hours use)
Size: 7x13.8x3.2 cm Weight: 213 g

GIMA code	ACCESSORIES SAT 2500
35087	Adult reusable rubber probe (12.5-25.5 mm) - 1 m cable
35088	Pediatric reusable rubber probe (10-19 mm) - 1 m cable
35089	Charger stand with NiMH battery pack, plug kit
35082	NVISION software for data management (GB)
35083	Adaptor for USB - PC connection

