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

CE 0123

CE 0476

33259

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 multilanguage 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

iHealth
Bluetooth *ECG see page 4*

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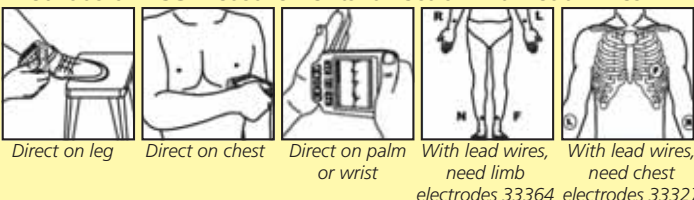• **33364 SET OF 4 LIMB CLAMP ELECTRODES (4 COLOURS) - adult**
• **33327 DISPOSABLE TNT ELECTRODES Ø 55 mm**

Methods of ECG measurements: direct or with lead wires

Direct on leg | *Direct on chest* | *Direct on palm or wrist* | *With lead wires, need limb electrodes 33364* | *With lead wires, need chest electrodes 33327*

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

Internal software in GB, IT, FR

CARDIOPOCKET ECG - 3 CHANNELS

• 33232 CARDIOPOCKET 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 distorsion 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

Size: 207x96x62 mm
Net weight: 500 g

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 termal paper	
Paper speed:	6.25, 12.5, 25, 50 mm/s ±5%	
Safety standard:	IEC class I, type CF defibrillation-proof applied part	
Input mode:	floating and defibrillation protection	
Input circuit current:	≤0.1 µA	Input impedance: ≥50 M Ω

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

CARDIOPOCKET ECG - 1 CHANNEL

Integrated thermal printer

• 33257 CARDIOPOCKET 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

Weight 800 g with rechargeable battery

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

60x35 mm wide display

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		

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.

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: 100x45xh 15 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

4 MEASUREMENT MODES

Limb leads I   *Chest leads V*   *Limb leads I*   *Limb leads II*

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**

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

CONTEC™

33220

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

33221

• **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)		
	Time constant	≥ 3.2s		
	CMRR	>60dB, >100dB(Add filter)		
	Enduring polarization voltage	±500mV		
	Noise level	<15µVp-p		
Dispose Wave Data	EMG interference filter	35Hz (-3dB)	25Hz/35Hz (-3dB)	
	AC filter	50Hz/60Hz (-20dB)		
Waveform output	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	
	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)	
Power supply	AC	110-220V, 50/60 Hz		
	DC - Lithium battery	7.4V, 2000 mAh	7.4V, 3500 mAh	
Fuse		2 pcs ɸ5×20mm AC time lag; T250mA/250V(Power Supply:220V)		
Form	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

CE 0068

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

CE 0068

• **33329 CARDIOGIMA 1 M - 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**

3 YEARS WARRANTY
made in Italy

33329

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*

CE 0123

TÜV ISO 9001

FDA

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:	Standard 12 leads	
Acquisition mode:	One lead	12 leads simultaneously
Sensitivity:	2.5, 5, 10, 20 mm/mV	
Input impedance:	> 50 MΩ (10 Hz)	
Filter:	EMG Filter 35 Hz (-3 dB)	EMG Filter 25/35/45 Hz off
	AC/DFT Filter 50 Hz/60Hz	DFT Filter 0.05/0.15/0.25/0.32/0.5/0.67 Hz
	(-20 dB)	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,	GB, IT, FR, ES, RU, PL, CZ,
	PL, RU, TR, UA	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)	

mindray

TECHNICAL SPECIFICATIONS

Power
AC power: 100 to 240 VAC ± 10% 60 VA
Battery-type: rechargeable Lithium ion battery 11.1 V typical, 2,500 mAh
- 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
- charge time: 3.5 hours with power off
Processing
ECG analysis 500 samples/second (sps)
Digital 1,000 samples/second/channel
Pacer detection 16,000 samples/second/channel
Acquisition mode: Pre-acquisition or post-acquisition provide 10 seconds of instantaneous ECG acquisition

ECG amplifier: DC-coupled
Input impedance: 50 MD at 10 Hz, defib protected
Patient leakage: < 10 µA
Heart rate meter: 30 to 300 BPM ± 10% or ± 5 BPM, whichever is greater
Sensitivity/gain: 5, 10, 20 mm/mV, Auto
Colour display TFT LCD with LED graphics backlit
Resolution: 800x400
Display data: Patient ID, gender, age, heart rate, clock, battery power indicator, waveforms, lead labels, speed, gain, filter settings, warning messages, information messages, network status and USB

Thermal printer: Dot array/Width 80 mm/speed 5, 12.5, 25, 50 mm/s
Software
Resting ECG mode: Records and prints 12-lead resting ECG with 10-second duration
Patient information: Patient ID, secondary ID, age, date of birth, gender, race, medication class and V3 electrode placement
Internal storage: 800 ECGs in internal memory
ECG Storage format: PDF and Mindray storage format
internal software: GB, FR, IT, ES, DE, PL, PT, TR, RU, HU, RO, CZ, CN
Report formats Thermal printer/PDF/A4/letter
Size/Weight: 250x194xh 56 mm/1.2 kg including battery

MULTI CHANNEL ECG WITH INTERPRETATION ON PAPER

CE 0123 FDA

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

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

• **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**

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

FDA CE 0123

Long term ECG recording and automatic arrhythmia detection

Touch screen operation full alphanumeric keyboard support

Optional spirometer function

USB function

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

• **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 (Hearth 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**

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

33356
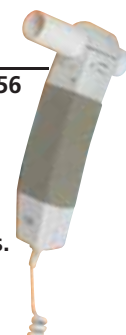
ECG CABLE COMPATIBLE WITH MOST ECG BRANDS

• **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;
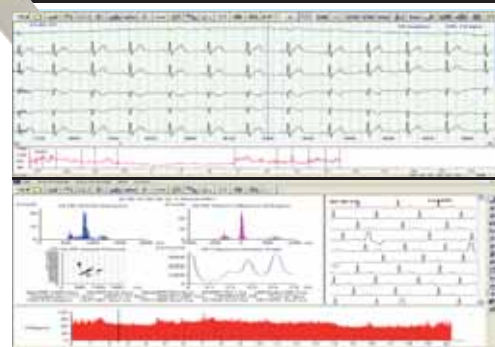Also have the functions of VCG, VLP, TVCG, HRT, TWA

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%	**Least measure signal:** 50μV p-p
Noise level: ≤30μV	**Interference between channels:**
CMRR: ≥60dB	scan track deflection (result from inter-
Frequency response:	ference between channels) <0.5mm
10Hz as benchmark, 0.5Hz~55Hz; -3dB	**Product safety type:** type B (internally
Time constant: >3.2s	powered)
Scan speed: 25mm/s ±5%	**Size:** 111 (L) x60 (W) x25 (H) mm
Enduring polarization voltage: ±300mV	**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   - multi ECG report formats
- standard or thermal paper print, B&W or colour
- auto interpretation On or Off   - measurement table
- tests comparison   - 90s resting ECG full disclosure
- 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   - hour ECG
- High Frequency ECG (HFECG)
- Frequency Cardiogram (FCECG)   - simple exercise ECG
• 33322 CARDIOLOGY SOFTWARE to upgrade 33320 into 33321

FCG CAD gram to locate coronary artery disease and ischemia

3-VCG analysis
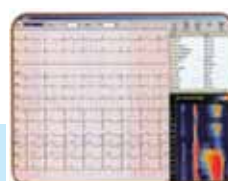
QT Dispersion QTD analysis with chroma map

Above 3 pictures refers to code 33321

0197

PC not included

Only 550 g

4 mm pins

TECHNICAL SPECIFICATIONS		STANDARD ACCESSORIES
Communication port:	USB - Support HL7, Dicom interface	4 limb electrodes
Size:	120x85x28 mm - 190 g	6 chest electrodes
Power source:	5V DC (from PC USB port)	Patient cable 10 leads,
Patient insulation:	4000 V AC	10 electrodes
Defibrillation protection:	built-in patient cable	USB pen driver
Sample rate:	10240Hz - Sample accuracy: 16 bit	CD software
PC minimum requirements:	Windows 2000, XP Vista and Windows 7	Banana plug
	CPU ≥ 1 GHz - HD ≥ 40 G - RAM ≥ 256 M	

FIAB ECG UNIVERSAL ELECTRODES

33313 **33314** **33371** **33344** **33327**

Medical adhesive solid gel, biocompatible with SSC conductive material

1 mm thick

1 mm thick

33373

4 mm plug

4 mm socket

33341 **33372**

All with silver cloride sensor and S/S snap
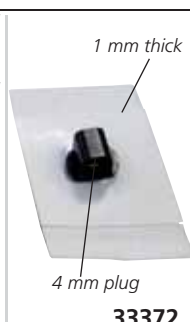
GIMA code	FIAB code	UNIVERSAL DISPOSABLE ECG ELECTRODES - latex free						Minimum order
		Material	Size	Gel	Shape	Connection	Application	
33313	F9089P-100	Foam	Ø 32x36 mm	Solid	Oval	Snap	Pediatric - rest, long term, stress and ECG holter	box of 2,000 pcs (20 bags of 100)
33370	F9060P	PE-Foam	Ø 40 mm	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

Female 4 mm pin

33375

Alligator connector

Male snap 4 mm

33376

Alligator connector
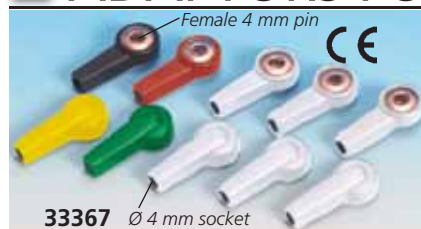
4 mm socket

33367 *Ø 4 mm socket*
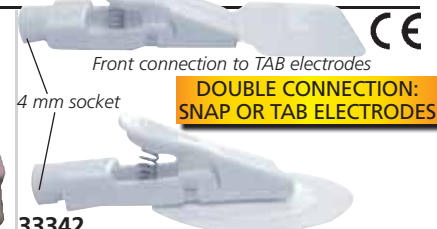
33374

Front connection to TAB electrodes

4 mm socket

DOUBLE CONNECTION: SNAP OR TAB ELECTRODES

4 mm socket

33342 *Bottom connection to snap 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

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
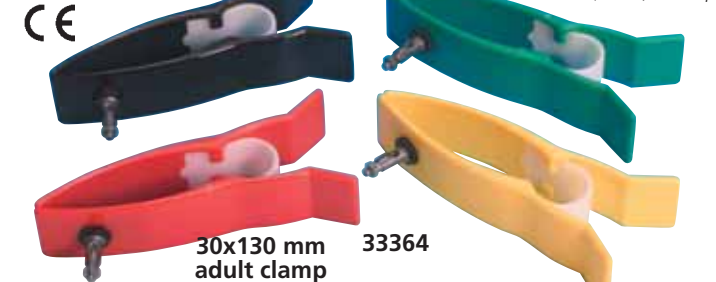
30x130 mm adult clamp

33364

20x90 mm pediatric clamp

33363

PVC blue balls Ø 33 mm

PVC balls Ø 25 mm

33324 Ø 30 mm

Electrode Ø 14 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
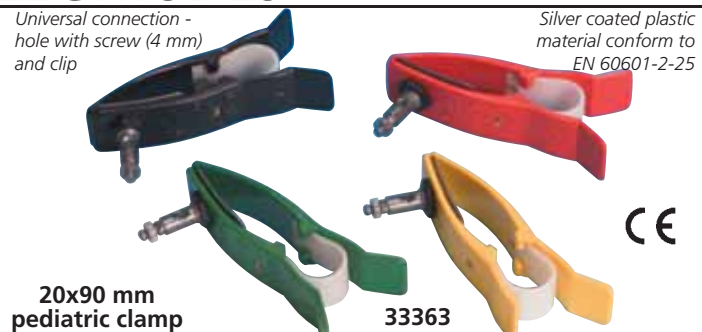
GIMA code	UNIVERSAL REUSABLE ECG ELECTRODES LATEX FREE - NICKEL FREE	Minimum order
33363	Set of 4 limb clamp electrodes (4 colours) pediatric	1 set
33364	Set of 4 limb clamp electrodes (4 colours) adult	1 set
33368	Set of 6 chest electrodes Ø 15 mm - silver coated	1 set
33365	Set of 6 chest electrodes 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

33378

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*

*20 bags of 50 pieces

33378

3M 2330 resting ECG electrode with adhesive gel

33300

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

33293

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

33299

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

33294

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

33297

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

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)	Radiolu-cent	Connector type	Minimum order	Packaging
		33200 33201	SU-00-A/60 SU-00-C/100	Blue sensor SU	Resting	Wet	Polymer	49x33	Teadrop	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	Micropo-rous	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	Micropo-rous	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 conve-nience 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
- high quality Ag/AgCl sensor
AMBU BLUE SENSOR VL
- highly conductive wet gel
- combination of instant and long-term adhesives
- breathable microporous material
- unique offset connector
- high quality Ag/AgCl sensor
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 formaldheyde 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

33263   **33266**   **33268**

GIMA ECG THERMAL PAPERS FOR DIFFERENT ECG BRANDS

ECG papers

GIMA code	ECG MANUFACTURER AND MODEL	Type	Width mm	Length m	Sheet	Marker	Grid*	Min. order
	ASPEL							
32951	Ascard A4, B56, Mr. Blue, Mr. Silver 3 Topaz, grey, v.07.204, orange, red, v.07.303	roll	112	25	-	no	or/red	10
32996	Ascard B5 eco, Mr. Green, mint	roll	58	25	-	no	or/red	20
32952	Ascard, Mr. Gold, Gold/3	roll	210	25	-	no	or/red	5
	BIOCARE							
32968	101G	roll	50	20	-	no	or/red	20
32989	300G, 3010	roll	63	30	-	no	or/red	20
32969	iE3	roll	80	20	-	no	or/red	10
33002	3030, 6010	roll	112	27	-	no	or/red	10
32992	1200	roll	210	30	-	no	or/red	5
32962	1210, 1215	pack	210	140	215	yes	or/red	10
33004	iE12, iE15	pack	210	150	200	yes	or/red	10
	BIOLIGHT							
32969	BLT, 1203A, E 30	roll	80	20	-	no	or/red	10
32966	E70, E80	pack	210	295	150	yes	or/red	1
	BIONET							
32950	Cardiocare/Cardiotouch	roll	215	25	-	no	or/red	5
	BIOSET-HORMAN							
32969	3800	roll	80	20	-	no	or/red	10
33050	Bioset 3600/3601/3700	pack	110	100	200	yes	or/red	10
33051	Bioset 8000 - 8100 - 9000 - 9100	pack	210	150	400	yes	or/red	5
	BTL							
32996	BTL 08/MT, 08/MD, 08/MD3	roll	58	25	-	no	or/red	20
32953	08 MT, MD	roll	112	23	-	no	or/red	10
32952	BTL 08/LC, 08/LT	roll	210	25	-	no	or/red	5
	BURDICK							
32954	Atria 3100/6100, quest	pack	210	300	200	yes	or/red	1
	CARDIOLINE							
32955	Elan 100	pack	112	100	300	yes	or/red	25
32956	Delta 1 plus	pack	60	100	300	yes	or/red	25
32957	Delta 1 plus	roll	60	30	-	no	or/red	20
32958	Delta 3 plus	pack	112	100	300	yes	or/red	25
32959	Delta 30	roll	183	30	-	no	or/red	5
32960	Delta 60 plus	roll	210	30	-	no	or/red	5
32961	Elan 2100, Delta 612	pack	210	280	200	yes	or/red	1
33053	ECG 100+	pack	100	150	200	yes	or/red	10
33054	AR/2100 (VIEW/ADV) - 66010042	pack	210	140	200	yes	or/red	8
33055	ECG 200+	pack	210	295	180	yes	or/red	1
	CAREWELL							
32963	ECG-1101B, 1101C, 1101G	roll	50	25	-	no	or/red	20
33025	ECG-1103B, 1103G, 1103L	roll	63	30	-	no	or/red	20
33058	ECG-1103GW, 1103LW	roll	80	30	-	no	or/red	10
33059	ECG-1106G, 1106L	roll	112	25	-	no	or/red	10
32950	ECG-1112L, 112M, T/12	roll	215	25	-	no	or/red	5
	COMEN							
32969	CM300	roll	80	20	-	no	or/red	10
32965	CM600	roll	110	20	-	no	or/red	20
32992	CM 1200 A/B	roll	210	30	-	no	or/red	5
32966	CM 1200 A/B	pack	210	295	150	yes	or/red	1
	CONTEC							
32968	90A, 100G	roll	50	20	-	no	or/red	20
32969	300G, 300GT	roll	80	20	-	no	or/red	10
32970	600G	roll	110	20	-	no	or/red	10
32967	1200, 1201	roll	210	30	-	no	or/red	5
	DIMED							
32963	LTD400	roll	50	25	-	no	or/red	20
32996	LTD410, Heartscreen 60G	roll	58	25	-	no	or/red	20
32964	LTD405S, LTD405W, LTD415 Heartscr. 80G	roll	80	25	-	no	or/red	10
32951	LTD418, Heartscreen 112	roll	112	25	-	no	or/red	10
32965	LTD440, LTD445/S	pack	110	140	143	yes	or/red	20
32960	LTD450, LTD455/S, LTD455/W	roll	210	30	-	no	or/red	5
32966	LTD450, LTD455/S, LTD455/W	pack	210	295	150	yes	or/red	1
	EDAN							
32963	SE-1	roll	50	25	-	no	or/red	20
32964	SE-3	roll	80	25	-	no	or/red	10
32965	SE-601	pack	110	140	143	yes	or/red	20
32966	SE-6, 12, 1200 EXP	pack	210	295	150	yes	or/red	1
32960	SE-6, 12, 1200 EXP	roll	210	30	-	no	or/red	5
32962	SE/1201	pack	210	140	215	yes	or/red	10
	ELETTRONICA TRENTINA/CARDIETTE/CARDIOLINE							
32971	Autoruler 12/1, comp. 1x12	roll	50	30	-	yes	blue	20
32972	Start 100	roll	130	27	-	yes	blue	10
32973	AR 600	roll	60	15	-	yes	blue	25

GIMA code	ECG MANUFACTURER AND MODEL	Type	Width mm	Length m	Sheet	Marker	Grid*	Min. order
32977	AR 600 Adv	pack	60	75	250	yes	blue	25
32974	AR 1200	roll	120	18	-	yes	blue	10
32978	AR 1200 (View/Adv)	pack	120	100	300	yes	blue	10
32975	Daedalus, AR2100	roll	210	20	-	yes	blue	5
32976	Daedalus, Start 200, AR2100	pack	210	150	200	yes	blue	8
	ESAOTE BIOMEDICA							
32980	P 80 base	roll	90	28	-	no	or/red	10
32981	P 80 base	pack	90	70	400	yes	or/red	25
32982	P 80 Power, P 80 SIX	pack	210	280	215	yes	or/red	1
32983	P8000 base	pack	80	70	300	yes	or/red	20
32984	P8000 Power	pack	210	280	200	yes	or/red	1
32985	Archimed 4240, Archiwin	pack	210	300	200	yes	or/red	1
32986	Personal 120	pack	126	150	170	yes	white	20
32987	My Cardiopad base	pack	114	90	200	yes	or/red	20
33040	Esaote my Cardiopad 2157036	pack	210	140	180	yes	or/red	5
	FUKUDA ME - FUKUDA DENSHI							
32988	501A, FX121, FCP-500, OP18TE	roll	50	30	-	no	or/red	20
32989	FCP15, FCP11, OP110TE, OP119TE FCP2101, 2155, FX 2111, CASE10, FCP 7101, FX 7102	roll	63	30	-	no	or/red	20
32994	OP/358TE, FCP/131, FX3010, FX3101, FX-8822	roll	145	30	-	no	or/red	10
32990	OP 111 TE, OP 115 TE, FX102	pack	50	75	400	yes	or/red	20
32991	OP 112 TE, FX 2111, FX 7101, FX 7102, FCP 2201 G	pack	63	75	400	yes	or/red	25
32992	FCP231, OP69TE, FX7402, FX7542, FX 8322	roll	210	30	-	no	or/red	5
32993	OP/382TE, FX-3010, FX-8222	pack	145	75	400	yes	or/red	10
32965	OP222TE, FX7202	pack	110	140	143	yes	or/red	20
	GIMA							
32996	Cardiogima 1M, 3M	roll	58	25	-	no	or/red	20
32953	Cardiogima 6M, colour	roll	112	23	-	no	or/red	10
32950	Cardiogima 12, 12M	roll	215	25	-	no	or/red	5
	HEWLETT PACKARD							
32999	Page Writer 100/200, M1709A, M2483A	pack	210	300	200	hole	or/red	1
32988	40453 A, 43120	roll	50	30	-	no	or/red	20
	INNOMED							
32996	HearthMirror IKO 3, HeartScreen 60 IKO, 60 G	roll	58	25	-	no	or/red	20
32964	HeartScreen IKO 80G-L, 80C-L	roll	80	25	-	no	or/red	10
32953	HeartScreen 112 C-D	roll	112	23	-	no	or/red	10
	KENZ - SUZUKEN							
33002	Cardico 302/601	roll	112	27	-	no	or/red	10
33003	Cardico 302/601	pack	112	90	200	yes	or/red	20
32960	Kenz-Cardico 1210, 1211	roll	210	30	-	no	or/red	5
32988	103, R50-30R, TEC 8300	roll	50	30	-	no	or/red	20
	MARQUETTE - HELLIGE - GE							
33010	MAC PC	roll	108	23	-	no	or/red	10
33011	Case 10-12-15, MAC 3000-5000	pack	215	280	300	hole	or/red	1
32966	Cardiosmart, MAC 1200/1600	pack	210	295	150	yes	or/red	1
33012	MAC 400, MAC 600	pack	80	90	280	yes	or/red	25
33013	MAC 800	pack	110	140	200	yes	or/red	25
	MINDRAY							
33014	Beneheart R3	roll	80	20	-	no	or/red	10
33016	Beneheart R3	pack	80	70	200	yes	or/red	25
32966	BeneHeart R12	pack	210	295	150	yes	or/red	1
	MORTARA							
33017	Eli 50	pack	50	70	200	yes	or/red	25
33010	Eli 100	roll	108	23	-	no	or/red	10
33019	Eli 210, 250, 280, 350, 380	pack	210	300	250	yes	or/red	1
33020	Eli 150	pack	108	140	200	yes	or/red	25
33021	Eli 230	roll	210	20	-	no	or/red	5
	NIHON KOHDEN							
33025	CARDIOFAX 8110, 9620, 1150K	roll	63	30	-	no	or/red	20
33026	Cardio-fax GEM/1250/1950, ECG-9010/9020/9022	pack	210	140	215	yes	white	10
32962	Cardio-fax GEM/1250/1950, ECG-9010/9020/9022	pack	210	140	215	yes	or/red	10
33027	GEM 9010, 9020, 9022, 1250, 1950	pack	110	140	143	yes	white	20
33028	1500, 1550, 9110, 9130, 9132, 9320, 2250	pack	210	295	170	yes	white	1
	PHILIPS							
32998	Page Writer TC/10	roll	110	25	-	no	or/red	10
32999	Page Writer TC/50 - TC/70	pack	210	300	200	hole	or/red	1
32997	Touch, TRIM I / II / III, Page Writer TC/20, TC/30	pack	210	300	100	hole	or/red	1
	PROGETTI							
32953	EPG 612	roll	112	23	-	no	or/red	10
32996	EPG Basik-pocket	roll	58	25	-	no	or/red	20
	SCHILLER							
33037	AT 1, AT 4	pack	90	90	390	yes	green	25
32982	AT 2, CS 200	pack	210	280	215	yes	or/red	1
33038	AT 10	pack	210	140	250	yes	green	10
32983	AT 101	pack	80	70	300	yes	or/red	20
32984	AT 102	pack	210	280	200	yes	or/red	1
33039	AT110, AT 10 Plus, AT 2 Plus	pack	210	140	150	yes	green	5
32987	Cardiopad, MS 2010	pack	114	90	200	yes	green	20
33040	Esaote mys Cardiopad 2157036	pack	210	140	180	yes	or/red	5
	SIEMENS							
32990	Cardiostat 1	pack	50	75	400	yes	or/red	20
32991	Cardiostat 11	pack	63	75	400	yes	or/red	25
	TRISMED							
32989	Cardipia 201N	roll	63	30	-	no	or/red	20
33046	Cardipia 400, 406RS	roll	110	30	-	no	or/red	25
33047	Cardipia 800, 812RS	roll	215	30	-	no	or/red	5

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

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**
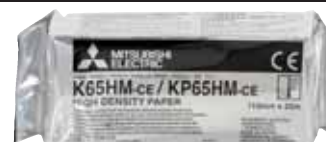• **72729 SONY PAPER UPP-110HA - box of 10 rolls**
• **72735 SONY COLOUR PAPER UPC-21L
(4 ink rolls + 200 supports 144x100 mm)**

MITSUBISHI ORIGINAL PAPER

• **72740 MITSUBISHI PAPER
K65HM-CE - box of 4**

COMPATIBLE PAPERS FOR SONY AND MITSUBISHI PRINTERS

DURICO

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	Compatibility SONY	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
	CORPLUS							
33100	Corplus 3	roll	106	20	-	no	or/red	10
	MINDRAY							
32968	Beneheart D3, D6	roll	50	20	-	no	or/red	20
	HEWLETT PACKARD							
33103	40457C/D, Codemaster 100, XL	roll	50	30	-	no	or/red	20
	NIHON KOHDEN							
33029	Def. TEC 5521, 5531, BSM 2300, 3000	pack	50	100	200	no	or/red	25
32988	Tech-8300	roll	50	30	-	no	or/red	20

GIMA code	MANUFACTURER AND MODEL	Type	Width mm	Length m	Sheet	Marker	Grid*	Min. order
	PHILIPS							
33102	Defibrillator MRX	roll	75	25	-	no	or/red	10
33103	Heartstart XL	roll	50	30	-	no	or/red	20
	PHYSIO CONTROL							
33032	Life Pack 8-9-10	roll	50	23	-	no	or/red	20
33033	Life pack 11-12-15	roll	107	25	-	no	or/red	10
	SCHILLER							
32983	Defigard 6002	pack	80	70	300	yes	or/red	20
	ZOLL							
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

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.

■ TECARTHERAPY CREAM

• 33251 TECARTHERAPY CREAM 1 l
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.

33251

■ EEG PASTE

• 33262 EEG PASTE - 400 g
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.

33262

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

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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

High definition thermal printer: 192 dots
Light, only 1.8 kg, and compact (24 x 23 x 8 cm)
33230
Probe selection
Main functions are available from footswitch or Key-pad

• 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

TOP QUALITY: MADE IN UK
2 MHz *5 MHz* *8 MHz*
Lightweight only 350 g
0120
33123
33126 **33127** **33128**

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.

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

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

Large backlight LCD display (29493 only)
0123
Up to 4 hours continuous use
Interchangeable waterproof probe
29493

TECHNICAL SPECIFICATIONS
Size: 32x85x138 mm
Weight: 290 g (including battery)
Heart rate range: 50-210 bpm
Resolution: 1 bpm
LCD display: 45x25 mm (only code 29491-93)
Auto average and manual mode
Recording length: 480 s / 240 s
Auto power-off to save power
Manual: GB, IT - on request: DE, ES, FR, PT.

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 backlighted 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

29499

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		

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■ 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)
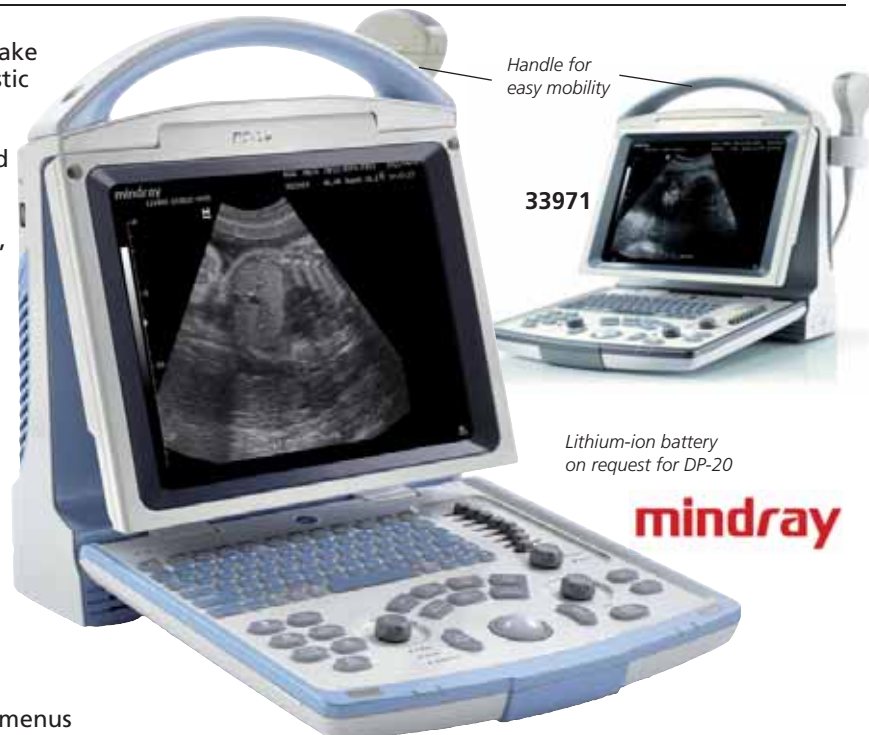- exam managing: activate exam

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).

Handle for easy mobility

33971

Lithium-ion battery on request for DP-20

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

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

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

33976 **33977** **33978**

33979 **33980** **33983**

		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	●			●		●	●	●		●

MINDRAY DP-50 DIGITAL ULTRASOUND DIAGNOSTIC SYSTEM
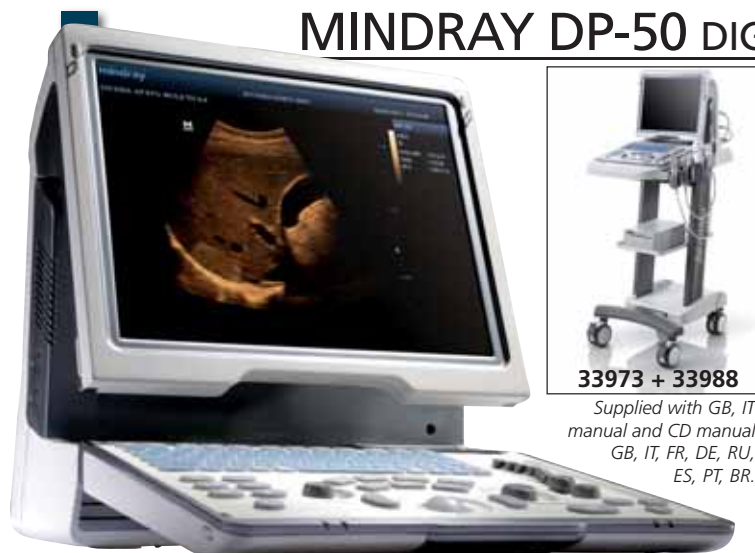
33973 + 33988

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 PHY-SIOTHERAPY 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

33987

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

Height selectable (2 levels) when installing

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	MSK	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

33982 **33983** **34004**

33978 **33984** **33990**

33988

CHISON ECO1 AND ECO3EXP. DIGITAL ULTRASOUND SYSTEMS

Adjustable monitor with 30° rotation

CE 0197
FDA

ECO3EXP.
With PW (pulse doppler)

CHISON
Value Beyond Imaging

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)   - Make report
- save still image and CINE loop   - Measure
- print to PC printer* (laser or inkject) or video printer
  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)

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	●	●						●	

CHISON ECO5 COLOUR DOPPLER DIGITAL ULTRASOUND SYSTEM

12" LED monitor (0-30°)

USB

VGA

CE 0197
FDA

CHISON
Value Beyond Imaging

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	ORTHOPAED.
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)

33865
+
33867

CHISON QBit5 AND i8 ECOCOLOURDOPPLERS

15" LED monitor: rotable -90° +90° foldable 0-90°

Luxury stereo audio

Replaceable probe holders

Rotable keyboard -45° - +45°

33877

CHISON Value Beyond Imaging

0197

FDA

Two probe connectors

Hepatic vein, C mode

33965

4 probe connectors

ADVISED FOR CARDIAC USE

Fetal face, virtual HD

• **33877 QBit5 ECOCOLOURDOPPLER - 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
- trapezoidal on linear probe
Image processing technology:
- Speckle Reduction Algorithm (SRA)
- direct print to PC or video printer
- automatic image optimizaton (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

Four chambers view, B/BC mode

• **33965 i8 ECOCOLOURDOPPLER - 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 ECOCOLOURDOPPLER+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

		PROBES	FREQUENCY (MHz)			● Main application								
GIMA code for QBit5	GIMA code for i8	Scanning Method	Main freq.	Probe band width QBit5	Probe band width i8	ABDOMINAL	OB/GYN	UROLOGY	SMALL PARTS	CARDIOLOGY	TCD	PROCTOLOGY	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

33953	33955	33956
33964	33958	33959

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

Ergonomic keyboard

0197

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

- 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**

	PROBES		FREQUENCY (MHZ)		● Main application ○ Alternative application					
GIMA code	Outlook	Scanning Method	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				●	○	●

286

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.

CHISON Value Beyond Imaging

CE 0197 FDA

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

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

33922

33923

33924

33926

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

Adjustable angle stand converts into carrying handle

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 colourdoppler with high professional features:

CHISON Value Beyond Imaging

CE 0197 FDA

Imaging mode:
- B, 2B, 4B, B/M, M
- CFM
- PW mode
- Instant Triplex, Duplex
- 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

33901

33952

33954 **33955** **33956**

33957 **33958** **33959**

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	ENDOCAVITY	CARDIOLOGY	PEDIATRICS	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	●	●						

For probes purchased separately from ultrasound it is necessary to supply the serial number of the device

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 (SpO_2), 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 SpO_2 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

CE 0476

SpO₂+NIBP+ECG+TEMP

SpO₂ 35120

SpO₂+NIBP+TEMP 35121

SpO₂+NIBP+ECG+TEMP 35122

Optional printer

35124

GIMA code	MONITOR	SpO₂	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 SpO₂ probe - spare				
35136	Pediatric SpO₂ 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				

35120 + 35128

Rail /clamp

STANDARD ACCESSORIES	35120	35121	35122	35124
- Adult SpO₂ probe	•	•	•	•
- NIBP adult cuff		•	•	•
- Temperature probe - skin type		•	•	•
- ECG cable + 10 ECG electrodes			•	•
- Lead acid battery	•	•	•	
- Lithium battery				•
- Manual (English)	•	•	•	•

35127

TECHNICAL SPECIFICATIONS

NIBP
Technology: Oscillometric method
Standard measurement range:
Systolic: Adult: 50 - 240 mmHg
Diastolic: Adult: 15 - 180 mmHg
MAP: Adult: 25 - 200 mmHg
Measurement mode: Manual, Auto, STAT
SpO₂
SpO_2 measurement range: 0 - 99%
SpO_2 measurement accuracy:
75 - 99% ±2%
50 - 74% ±3%
Low perfusion performance: 0.4%
Pulse rate measurement range:
30bpm~240bpm

Pulse rate measurement accuracy:
± 2 bpm or 2% whichever is greater
Size: 18.5 x 18 x h 29 cm   Weight: 2.4 kg
ECG and TEMP
Heart rate range: 20 - 300 bpm
TEMP measurement range: 25 - 45 °C
Accuracy: ±2 bpm or 1% whichever is greater (ECG) ±0.2 °C (TEMP)
Power
AC power supply: 100 - 250V, 50/60 Hz
Internal power supply: 12 VDC (rechargeable)
Battery:
12V 2,3AH (lead-acid battery) (35120-2)
11.1 V, 4,400 mAh liuthium battery (35124)

PC-3000 MULTI-PARAMETER PATIENT MONITOR

ECG, RESP, SpO₂, NIBP, 2-TEMP, PR

Weight: 2.5 kg

• **35134 PC 3000 MULTI-PARAMETER PATIENT MONITOR**
- 7'' high resolution colour TFT display, 5-channel waveform display
- standard parameters: ECG, RESP, SpO_2, 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.

GIMA code	ACCESSORIES - SPARES
35135	Adult SpO₂ probe - spare
35136	Pediatric SpO₂ 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
Measuring method: Automatic measurement by oscillating 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, ×1/2, ×1, ×2, ×4   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

Wide option of screen views available

STANDARD ACCESSORIES		
1 ECG cable	1 NIBP cuff	10 Disposable electrodes
1 SpO₂ probe	1 Li-ion battery	1 Body surface temperature transducer
1 AC power Adapter	1 Power cable	User manual

UP 7000 MULTI-PARAMETER PATIENT MONITOR

ECG+RESP+SpO$_2$+ 2 TEMP+PR

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

35150

STANDARD ACCESSORIES
- Adult SpO$_2$ probe
- NIBP adult cuff
- Temperature probe - skin
- Temperature probe - rectal
- Re-chargeable battery
- Printer
- Power supply cable
- ECG cable 5 leads (RA - LA - LL - PL - C)
- Disposable electrode
- Dust-protective mantle
- Manual (GB, IT)

0123

FDA

• **35145 MULTI-PARAMETER PATIENT MONITOR**
ECG, RESP, SpO$_2$, 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

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
SpO$_2$ & 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+SpO$_2$+ NIBP+2 TEMP+PR

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   **35158**

STANDARD ACCESSORIES
- Adult SpO$_2$ probe
- NIBP adult cuff
- NIBP extension tube
- Temperature probe - skin
- Rechargeable lithium battery
- ECG cable
- power supply cable
- manual (GB, IT, ES) on request (PT, TR)
- ECG electrodes

• **35151 CMS 8000 PATIENT MONITOR**
ECG, RESP, SpO$_2$, 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 SpO$_2$ technology
- AC/DC rechargeable lithium battery
- manual/AUTO/continuous NIBP measurement mode
- standard/OXY- graph/Trend-graph/big characters and view bed interfaces

TECHNICAL SPECIFICATIONS
ECG
5-lead, dual channel, 3-lead, single channel
Scan speed: 12.5 mm/s, 50 mm/s
ST segment monitoring
Measurement and alarm range: -2.0 mV ±2.0 mV
RESP
Method: R-F (RA-LL) impedance
Measurement and alarm range: 0-150 rpm
Apnea alarm: 10-40 sec
NIBP
Method: oscillometry
Mode: manual/AUTO/continuous
Measurement interval in AUTO mode:
1/2/3/4/5/10/15/30/60/90/120/240/480/960 min

Measurement period in CONT mode: 5 min
Measurement alarm: 10-270 mmHg
SpO$_2$
Measurement and alarm range: 0-100%
Measurement accuracy: 70-100% ±2%
PR
Measurement and alarm range: 30-250 bpm
TEMP
Channel: dual channel
Measurement and alarm range: 0-50 °C
Power supply: 110-240 V - 50/60 Hz
Safety classification: Classe I type CF
Defibrillation-proof applied part

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, SpO_2, NIBP, Respiration, 2 Temp, 2 IBP
- Sidestream $EtCO_2$ - 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))	Reusable Pediatric Cuff	Li-ion 11.1 V battery
Electrodes - box of 10	SpO_2 extension cable (2m)	Thermal printer
NIBP extension tube (3m)	Reusable Adult SpO_2 probe	2 paper roll
Reusable Adult Cuff (25-35 cm)	DC adapter (18 VDC, 2.5A)	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, SpO_2, RR or $EtCO_2$, 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 & SpO_2 pulse beep
SpO_2 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
ECG waveform 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% wichever 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, TRIGMINY, 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
SpO_2 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
Blood pressure: 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
33738	**NIBP**	Extension cable, 3 m (necessary for all cuffs)
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
33739		Metal connector (necessary for mini cuff)
33771	**Temp**	Temperature sensor 3.0 m, skin type
		Compatible with Drager MM15114, MM15822, GE 21733601, Philips HP21059B, Nihon Kohden P242A, Datascope 0206-02-0003
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
33715		Ni-MH 12V battery - Since january 2006** - BM3, BM3 Plus
33717		Li-ion battery - Since Sept. 2007** - new BM3, Plus, BM5
33798		Li-ion battery 11.1 V - 6 cell for $EtCO_2$ - for 33782 only
33710		Li-ion battery 11.1 V for BM1
33709		Li-ion ba ttery 11.1 V for BM7
33747	**Adapter**	AC adapter for BM3, BM5, BM7

33736
33735
32810
32811
33738
33771
33772
33742
33715
33717

**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

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

ECG+SpO$_2$+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
- SpO$_2$ 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
  • pacemaker detection function
- 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).
• **33725 CART** Adjustable height, basket included
See temperature sensors, cuffs, batteries and accessories at page 290, 293

Angle of plate adjustable

Height of cart is adjustable

CE 0123

33725

Moving cart increase flexibility around the ward or department.

58 mm built-in printer for both real time and trend date (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

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	•	•

Display modes

ST analysis display mode

Large parameter display mode

Trend display mode

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.

33745

TECHNICAL SPECIFICATIONS

GENERAL
Display:	7" colour TFT 800x480 pixels
Dimensions - Weight:	238x250xh 163 mm - 3.1 kg
Trace	4 waveforms: 2*ECG, SpO$_2$, Respiration
	Sweep speed: 6.25, 12.5, 25, 50 mm/sec
Indicators	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)
Protection:	Against electrosurgical interference and defibrillation

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

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
- SpO$_2$ technology with very low-perfusion detection
- SpO$_2$ 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.

CE 0123

ECG+SPO$_2$+NIBP+RESP+ 2 TEMP, optional 2 IBP + ETCO$_2$ MODULE

TÜV ISO 9001

Visible alarm lamp handle

12 Channel display

33777

Arrhytmia 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

33790
Airway adapter set with dehumidification tubing for intubated adult Suitable also for VET (dog, horse)

33791
Airway adapter set with dehumidification tubing for intubated Infants Suitable also for VET (cat, puppy)

33792
CO$_2$ nasal cannula - adult

33793
CO$_2$ nasal cannula - pediatric

33794
CO$_2$+O$_2$ nasal cannula - adult

33795
CO$_2$+O$_2$ nasal cannula - pediatric

TECHNICAL SPECIFICATIONS FOR MONITOR 33777 - 33779

GENERAL
Dimensions/Weight: 270x185xh 250 mm/4 kg
Trace: 6 waveform (ECGx2, SpO$_2$, RR or EtCO$_2$ IBPx2)
Indicators: categorized alarms (3 priority levels), visual alarm lamp handle, heart rate, SpO$_2$ pulse pitch tone battery status, external power LED
Thermal printer: 25, 50 mm/sec (paper width 58 mm)
Battery: Li-ion (2 hours operating time)
Interfaces: LAN digital output for transferring data Nurse call system connection defibrillator sync. output
DC input connector: 12 to 18 VDC, 2.5A max
Operating voltage: 100-240 V, 50-60 Hz
SpO$_2$
% Saturation Range: 0% to 100%
Pulse Rate Range: 0 to 254 bpm
SpO$_2$ Accuracy: 70% to 100% ±2 digits
Pulse Rate Accuracy: ± 2 bpm
ECG
Lead type: 3-lead, 5-lead (33777), 10-lead(33779)
Lead selection: 3-lead: I, II, III (33777/79)
10-lead: I, II, III aVR, aVL, aVF, V1, V2, V3, V4, V5, V6 (33779 only)
ECG Waveforms: 3-lead 1 channel (33777/79)
5-lead: 3/7 channels (33777/79)
10-lead: 3/12 channels (33779 only)

Heart rate range: Adult: 30-300 bpm
Neonate/pediatric: 30-350 bpm
Heart rate accuracy: ± 1 bpm or ± 1%, wichever is greater
Sweep speed: 6.25, 12.5, 25, 50 mm/sec.
Filter: Diagnostic mode: 0,67-150 Hz
Monitoring mode 0,67-40 Hz
Surgical mode: 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, Trigeminy, Vbrady, Shortrun
Diagnostic analysis: 120 kinds (33779 only)
Pacemaker detection mode: Indicator on waveform display (user selectable)
Protecion: against electrosurgical interference and defibrillation
NIBP
Technique: Oscillometric with linear deflation
Measurement Modes: Manual-Automatic-Continuous
Measurement range: Adult pressure: 20 to 260 mmHg
Pediatric pressure: 20 to 230 mmHg
Neonate pressure: 20 to 120 mmHg
Cuff pressure display: 0 to 300 mmHg
B.P. measurement range: Systolic: 40 to 270 mmHg
Mean: 20 to 230 mmHg
Diastolic: 10 to 210 mmHg
Adjustable Cuff Inflation Pressure

Respirations
Range: 5 to 120 breaths/min
Accuracy: ±1 breath/min
Apnea alarm: yes
Temperature Unit
Range: 15° to 45°C (59°F to 113°F)
Accuracy: ± 0.1°C
Compatible with: YSI Series 400 Temperature Probes
IBP - option
Channels: 2
Measuring range: -50 to 300 mmHg
Measuring accuracy: ± 1 mmHg (<100 mmHg)
± 1 % of reading(>100 mmHg)
Pulse rate counting range: 0 to 300 beats/min
Zero balancing: range ± 200 mmHg
accuracy ± 1 mmHg
drift ± 1 mmHg over 24 hours
Transducer sensitivity: 5µV/V mmHg
EtCO$_2$ - option
Measurement mode: Sidestream
Measurement range: 0~150 mmHg, 0 to 19%
Respiration range: 2~150 bpm
Accuracy: ± 2 mmHg, 0~40 mmHg
± 5%, 41~70 mmHg
± 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 SpO$_2$+NIBP**
optional Temp. and EtCO$_2$
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 CO$_2$ monitoring technology
- plug and play EtCO$_2$ module
Same accessories of BM line. SpO$_2$, TEMP, EtCO$_2$, NIBP technical specifications same as BM5.
- **33710 Li-Ion RECHARGEABLE BATTERY - spare**

SpO$_2$+ NIBP optional TEMP and EtCO$_2$

Supplied with NIBP adult cuff (25-35 cm) with 3 m extension hose, SpO$_2$ adult finger probe with extension cable (2 m) DC adapter (15 VDC, 2.0 A) pole mount bracket, shoulder strap, rechargeable battery.
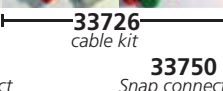
CE 0123
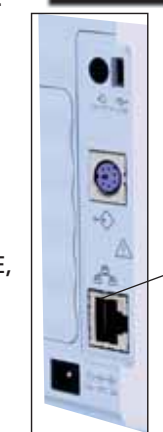
*Size: 190x125x60 mm
Weight: 1 kg*

ECG CABLES FOR BM GIMA AND BIONET MONITORS

GIMA code	ECG CABLES FOR BM3 (33718, 33719, 33720, 33721, 33722, 33723, 33724, 33780, 33781)
33711	3-lead patient cable kit (cable+snap connectors 33748)
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)
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
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
ECG CABLES FOR BM5-BM7 (33777, 33778, 33779)	
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)

ACCESSORIES FOR MONITOR BM3, BM5, BM7

NEW (after 6/2006)

3 Lead

Vet cable kit
33713

33711
cable kit

33760 — Vet clip connect
33762 — Cable
33748 — Snap connect

OLD (before 6/2006)

Vet cable kit
33727

33726
cable kit

33752 — Vet clip connect
33750 — Snap connect.

5 Lead

33712
cable kit

33761 — Vet clip connect
33763 — Cable
33749 — Snap connect

33728
cable kit

33753 — Vet clip connect
33751 — Snap connector

BM1, BM3, BM5, BM7 SpO$_2$ SENSORS - NELLCOR COMPATIBLE

GIMA code	SpO$_2$ SENSORS FOR ALL BM MONITORS
33730**	Adult reusable finger sensor (> 45 kg) Nellcor comp. - 7 pin
33731	Pediatric reusable finger sensor (15-45 kg) - Nellcor comp.
33732	Vet reusable sensor - clip **Not compatible with Nellcor NPB40 and N65

AVAILABLE OTHER NELLCOR AND NELLCOR OXITECH REUSABLE COMPATIBLE SpO$_2$ SENSORS - see page 295

GIMA code	EXTENSION CABLES FOR BM SpO$_2$ SENSORS
33733	Extension cable*, 2 m (7 pin small SpO$_2$ connector) up to 2005
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
	*Necessary for all probes. Please select correct one

SpO$_2$ REUSABLE PROBES

7 pin
33730   33731   33732

SpO$_2$ EXTENSION CABLES

33716   33734
33733
for units sold before Oct. 2005

NELLCOR COMPATIBLE DISPOSABLE SpO$_2$ SENSOR

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

Nellcor compatible connector

33755
33756
33754
33757

| 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 SpO$_2$ and pulse rate (PR).
- audible and visual alarm with adjustable alarm limits
- trend review function of SpO$_2$ and PR
- selectable storage modes: 1 group/1s, 1 group/4s, and 1 group/8s
- up to 500 hours storage for SpO$_2$ 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

CE 0123
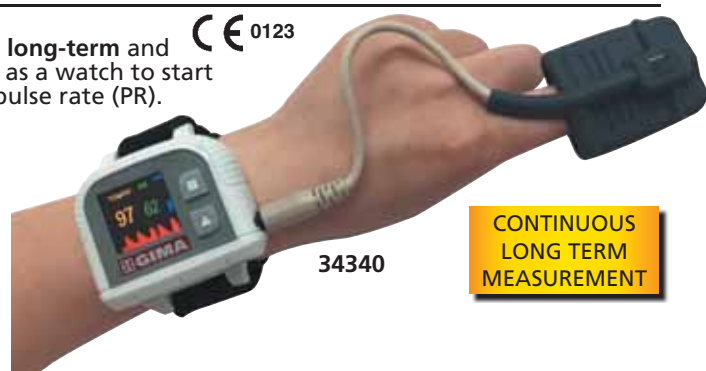
34340

CONTINUOUS LONG TERM MEASUREMENT

PC-300 SPOT CHECK BLUETOOTH MONITOR

Standard:
SpO$_2$, 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 SpO$_2$, 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 SpO$_2$ pediatric probe
- optional ECG and Glucometer
- built-in rechargeable lithium battery
- communication protocols available on request

35162

STANDARD ACCESSORIES

SpO$_2$ 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
35167	NIBP adult cuff 22-30 cm - spare
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	33248

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

TECHNICAL SPECIFICATIONS

SpO$_2$
Measuring range: 35%-100%
Accuracy: ±3% (70-100%)
Pluse 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

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.

Bright LED display of SpO$_2$ and pulse rate

Audible and visible alarms

Made in USA

Easy 2 button operation

CE 0123

Three-coloured signal quality indicator

Blinking alarm silence indicator
Low battery indicator

Rugged rubberized case with IPX 2 level of liquid ingress protection

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

35086   35086 + 35089