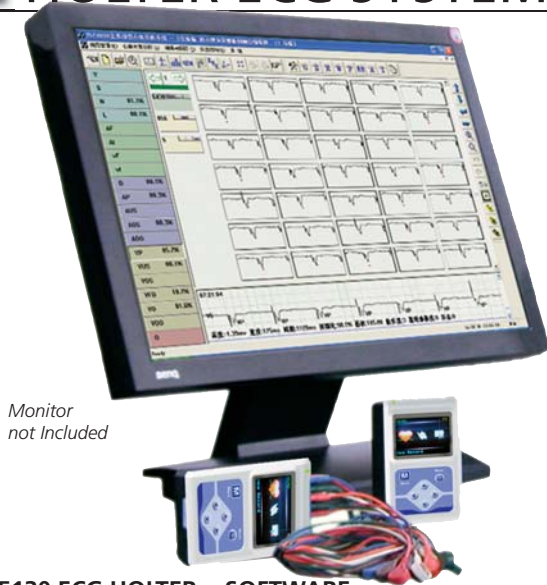


HOLTER ECG SYSTEM - 24 HOURS MONITORING



35130

• 35130 ECG HOLTER + SOFTWARE

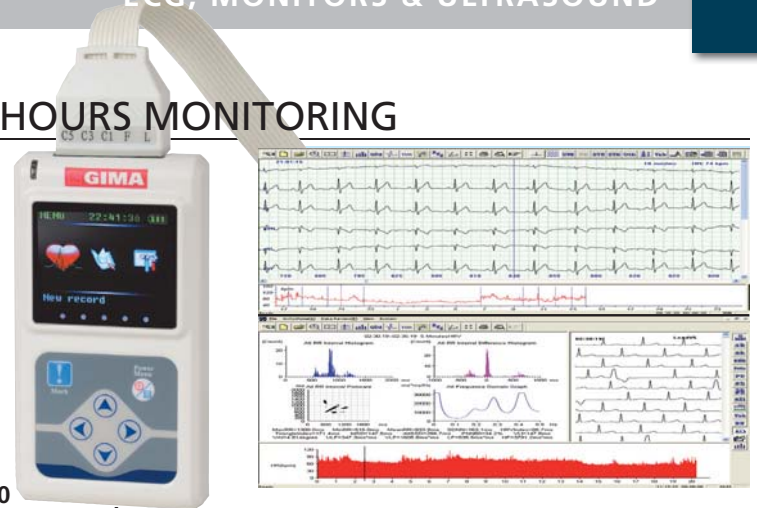
ECG Holter system includes ECG recorder and software connectable to a computer system or laser printer. The recorder has industrial media storage to increase memory capacity. Recorder is an easy-to-use unit, which collects 12-lead ECG waveform synchronously and records continuously for 24 hours.

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

Features:

- windows software interface (GB, IT, PL, PT, RU)
- 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
- QTD analysis

Functions of VCG, VLP, TVCG, HRT, TWA



Recorder:

- 12 channel Synchronized ECG Acquisition
- small ECG recorder with TFT colour screen to display real time ECG waveform and review storage data.
- capacity up to 1G
- sampling rate: 250 sampling/sec
- sampling accuracy: 24 bit
- industrial grade micro SD storage media
- USB interface
- operating system: Win 98, 2000, XP, 7, 8, 10, 11

• 35131 ECG CABLE - spare • 35184 CARRYING BAG

TECHNICAL SPECIFICATIONS

Scale voltage:	1mV±5%	Least measure signal:	50µV p-p
Standard sensitivity:	10mm/mV ±5%	Interference between channels:	scan track deflection (result from interference between channels) <0.2mm
Noise level:	≤50µV	Product safety type:	type BF (internally powered)
CMRR:	≥60dB	Size:	111 x 60 x 25 mm
Frequency response:	5 Hz as benchmark, 0.05Hz~40Hz; -3dB	Net weight:	105 g (without battery)
Time constant:	>3.2s		
Scan speed:	25mm/s ±5%		
Enduring polarization voltage:	±300mV		

35130



STANDARD ACCESSORIES

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

CONTEC 8000 WIRELESS ECG WORKSTATION - 12 CHANNELS

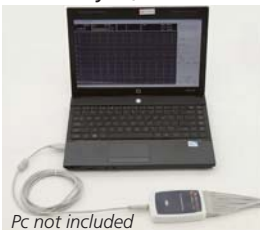
• 33316 CONTEC 8000 WIRELESS ECG WORKSTATION

Compact and portable device with an advanced ECG analysis algorithm which ensures reliable detection of arrhythmia. High sampling frequency (1000Hz) ensures correct waveform, high resolution display and printout. It includes wireless transmission of data to a PC in order to analyse, manage and save patients' reports. It acquires multiple functions including: 12-lead ECG collection, frequency cardiogram, high frequency ECG, QT internal dispersion analysis, Heart rate variability analysis, Pacing ECG analysis, Myocardium ischemia analysis, Heart rate turbulence analysis, Vectorcardiogram, Timed Vectorcardiogram and Ventricular late potential analysis.

Built-in rechargeable lithium battery, continuous working for more than 7 h.

• 33317 ECG CABLE - spare

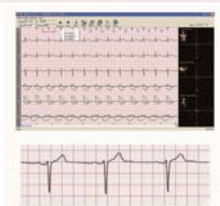
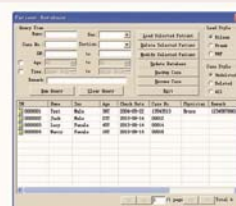
PC not included



CE 0123

TECHNICAL SPECIFICATIONS

Lead:	standard 12-lead		
Input mode:	floating and defibrillation protection		
CMRR:	> 60dB, >100dB (add filter)		
Time constant:	≥ 3.2s		
Patient leak current:	< 10 µA		
Calibration voltage:	1mV		
Sampling:	frequency: up to 1000Hz	Accuracy:	up to 24-bit
Input circuit current:	≤ 50nA	Input impedance:	≥ 50MΩ
Noise level:	≤ 15µVp-p		
Frequency response:	0.05~150 Hz (-3 ~ + 0.4dB)	Polarizing voltage:	± 500mV
Polarizing voltage:	± 500mV		
Printing format:	A4, B5		
Report format:	BMP, PNG, PDF, JPG		
Operating system:	Windows 2000 / XP / Vista / 7 / 10 / 11		



STANDARD ACCESSORIES

- 1 ECG lead cable
- 2 Extension cables (to electrode)
- 1 CD software
- 1 ECG workstation installation user manual: GB, IT
- 6 Chest electrodes
- 4 Limb electrode clamp
- 2 Lead cable clamps

Size: 100x45x15 mm
Weight: about 60g

PM10 PALM ECG WITH SOFTWARE AND BLUETOOTH

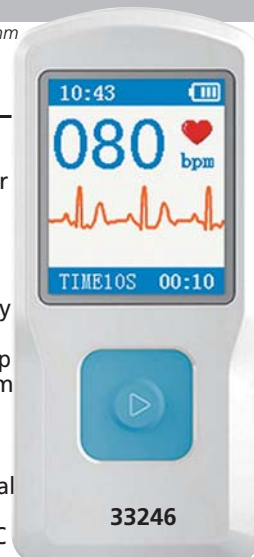
• **33246 PM10 PALM ECG - with software and Bluetooth**
PM10 is a homecare device to check ECG parameters. It can be used as a reference for patient to take further medical treatment and for doctor to diagnose. It can help to early prevent from cardiovascular diseases and reduce risks. Intelligent design, remote health management through mobile application; it can automatically start measurement, store ECG, upload data, download health results. Suitable for patients with chronic diseases, especially coronary heart disease, diabetes, hypertension, myocarditis, obesity, chest pain, palpitations and dyspnea.

4 MEASUREMENT MODES



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 data transmission to free PHMS App
 - 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
- Supplied with a carrying bag, a multilingual manual (GB, FR, IT, ES, DE, PT) and a CD software to visualize data on PC



CARDIO-B SINGLE CHANNEL PALM ECG

CE 0123

Multilingual manual and box (GB, FR, IT, ES).



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
- 1200 ECG waveform can be saved
- 10 hours ECG continuous measurement data storage
- analysis and report of 17 types of ECG waveform
- USB 2.0 interface with optional data cable and ECG 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.

- **33249 ECG VIEWER SOFTWARE + US B 2.0 CABLE** for 33261 since SN: XXS02JL01044 - Jan 2014
- **33248 ECG 3 PIN LEAD CABLE - 3 LEADS 75 cm - opt.** for 33261 since SN: XXS02HL01709 - 2012 and for 33259
- **33264 OLD ECG BANANA LEAD CABLE - 3 LEADS - optional**

TECHNICAL SPECIFICATIONS

ECG bandwidth:	1 Hz - 40 Hz
Heart rate measuring range:	30 - 240 bpm \pm 2 bpm
LCD back light display:	240x160 dot matrix
Display size:	57.6x40 mm
Power:	2xAAA batteries
Dimensions - Weight:	125x70x21.5 mm - 106 g

- **33261 CARDIO-B PALM ECG - COLOUR DISPLAY**
 - **33259 CARDIO-B BLUETOOTH PALM ECG+VIEWER SOFTWARE**
- 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 for clinical applications.

CARDIO-C 3 CHANNEL POCKET ECG



4 pins lead ECG cable

True colour 3.5" TFT display

Pocket size: 13x9.5x3.2 cm

32 MB memory inside

CE 0123

FDA 510 (K)

• 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

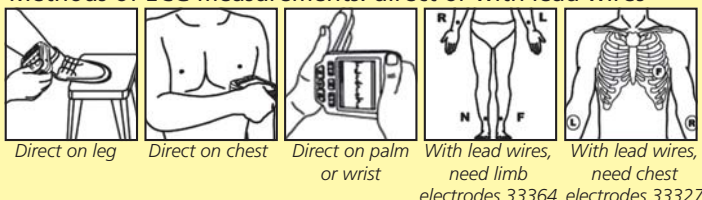
Supplied with ECG viewer software, USB cable, power transformer, ECG 4 pins lead wire, 10 disposable electrodes, manual (GB, FR, IT, ES, PT, SE).

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

TECHNICAL SPECIFICATIONS

Heart rate measuring range:	30 bpm ~ 240 bpm
Heart rate measuring accuracy:	\pm 2 bpm or \pm 2% whichever is greater
ECG bandwidth:	0.5 Hz ~ 40 Hz
Display scale:	5.0 mm/mV \pm 10%
Common-mode rejection ratio (CMRR):	\geq 60 dB
Waveform sweeping speed:	20 mm/s \pm 10%
Input impedance:	\geq 5 M Ω
Power:	4 AA alkaline batteries
Supply voltage range:	4.4 ~ 6 VDC
Max average working current:	\leq 160 mA
Auto power-off:	can be adjustable between 1-5 mins
Low battery indication:	4.4 VDC \pm 0.2 VDC

Methods of ECG measurements: direct or with lead wires



D-HEART 8-12 CHANNEL PORTABLE ECG FOR SMARTPHONE OR TABLET

• 33247 D-HEART 8-12 CHANNEL ECG

D-Heart is an 8 or 12 leads

smartphone/tablet ECG that enables the acquisition of high quality 12 second ECGs in any place and condition.

- designed for patients, no medical background needed and health professionals
- as clinically reliable as a hospital electrocardiograph
- certified system to get a perfect ECG
- easy to share with your cardiologist
- telecardiology service available 24 hours / 7 days with subscription

Supplied with lanyard, 60 disposable electrodes, electrode cables 27 cm, soft case with incorporated wireless charger and multilingual user manual (GB, FR, IT, ES, PT, DE, GR, RU, TR, JP, CN, TH, Arabic).



Four easy steps

- 1- Connect the device with bluetooth
- 2- Place D-Heart on your chest
- 3- The App will guide you to make the ECG
- 4- Get immediate feedback from a cardiologist

Free D-Heart App required (GB, FR, IT, ES, PT, DE, GR)



See Apple and Android compatibility on www.gimaitaly.com

TECHNICAL SPECIFICATIONS

Channels/leads:	8 for patient use, 12 for health professional use
A/D resolution:	12 bit
Measurement range:	> ±5 mV
Frequency response:	0.05 Hz ~ 150 Hz (-3 db)
Recording velocity:	25 mm/s (std) / 50 mm/s
Acquisition length:	from 12 s to 60 s (8 channels) 12 s (12 channels)
Filters:	AC 50/60 Hz (digital) Muscular 25/40 Hz (digital)
Recording frequency:	Acquisition 640 Hz / ch Transmission 640 at 4 intervals on average (160 Hz / ch)

Wireless charging within the case

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

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

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

• 32963 THERMAL PAPER 50 mm x 20 m - box of 20 rolls

• 33328 10 LEADS ECG CABLE - spare

• 33233 RECHARGEABLE Li-Ion BATTERY

Power:	AC: 100-240 V, 50/60 Hz - DC 12V rechargeable lithium battery 2,000 mAh
Noise level:	≤15 µVp-p
EMG filter:	25/35 Hz CMRR: >60 dB, > 100 dB (add filter)
Frequency response:	0.05-150 Hz (-3 dB - 0.4 dB)
Patient leakage current:	<10 µA
Recording paper:	50 mm x 20 m, high speed thermal paper
Paper speed:	6.25, 12.5, 25, 50 mm/s ±5%
Safety standard:	IEC class I, type CF defibrillation-proof applied part
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 adapter 12 V
- 1 user manual (GB, IT, FR, ES)
- 1 CD software (GB, FR, IT, ES, DE, TR) and cable for connection to PC

Size: 207x96x62 mm
Net weight: 500 g



DuoEK™ S PORTABLE ECG MONITOR

• 33238 DuoEK™ S PORTABLE ECG MONITOR

Portable ECG monitor for instant ECG analysis and measurement. Compact and lightweight, it easily performs medical-grade ECG examinations anytime, anywhere.

3 measurement leads: hand-hand, hand-leg and chest.

- OLED screen for clear ECG display

- one-touch measurement

- 500 measurements on a single charge

Suitable for people with high stress, irregular schedules, heart disease and heart discomfort (palpitations, panic, dizziness, chest tightness, etc.).

Free ViHealth App on iOS and Android

Automatically upload data and share PDF report with doctor.

Supplied with charger and multilingual manual (GB, FR, IT, ES, DE).

TECHNICAL SPECIFICATIONS

ECG length:	30 seconds to 5 minutes recording
Heart rate range:	30 to 250 bpm
Battery:	rechargeable lithium polymer battery > 500 checks
Charging time:	2-3 hours
Display:	0.96" OLED display
Connection:	micro-USB connector
Wireless:	Bluetooth 4.0 BLE
Built-in memory:	10 sessions, if ECG length < 1 minute 4 sessions, if ECG length is 5 minutes
App storage:	unlimited
Size - weight:	92x32x8.2 mm - 26.8 g

3 MEASUREMENT MODES



Hand-hand (Lead I)



Hand-leg (Lead II)



Chest



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, FR, IT, ES, DE, TR
- manual: GB, FR, 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, BG, YU, RU, KZ, CN
- PC software ECG Synchronous: GB, FR, IT, ES, PL, SI, TR, RO
- manual: GB, FR, IT, ES.
- 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 ECG Synchronous: GB, FR, IT, ES, PL, SI, TR, RO
- manual: GB, FR, IT, ES.
- 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	Class I, type CF applied part, which has defibrillation-proof applied part	Class I, type CF applied part, which has defibrillation-proof applied part
	Lead	Standard 12 leads	Standard 12 leads	Standard 12 leads
	Input way	Floating and defibrillation protection	Floating and defibrillation protection	Floating and defibrillation protection
	Patient leak current	<10µA	<10µA	<10µA
	Sampling rate	800 Hz	1,000 Hz	1,000 Hz
	A/D conversion	12bit	12bit	12bit
	Frequency response	0.05Hz~150Hz (-3dB, + 0.4dB)	0.05Hz~150Hz (-3dB, + 0.4dB)	0.05Hz~150Hz (-3dB, + 0.4dB)
	Time constant	≥ 3.2s	≥ 3.2s	≥ 3.2s
Dispose Wave Data	CMRR	>60dB, >100dB(Add filter)	>60dB, >100dB(Add filter)	>60dB, >100dB(Add filter)
	Enduring polarization voltage	±500mV	±500mV	±500mV
	Noise level	<15µVp-p	<15µVp-p	<15µVp-p
	EMG interference filter	35Hz (-3dB)	25Hz/35Hz (-3dB)	25Hz/35Hz (-3dB)
Waveform output	AC filter	50Hz/60Hz (-20dB)	50Hz/60Hz (-20dB)	50Hz/60Hz (-20dB)
	Recording way	Thermal printing system	Thermal printing system (32spots/mm)	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	2.5, 5, 10, 20, 40 mm/mV
	Paper speed	Auto-record: auto leads changing Manual-record: 25 mm/s, 50 mm/s	Auto-record: 25mm/s, 50mm/s Rhythm record: 25 mm/s, 50 mm/s Manual-record: 5, 6.25, 10, 12.5, 25, 50 (only 33221), 100 mm/s (only 33222)	Auto-record: 25mm/s, 50mm/s Rhythm 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	110-220V, 50/60 Hz	110-220V, 50/60 Hz
	DC - Lithium battery	7.4V, 2000 mAh	7.4V, 3500 mAh	7.4V, 3500 mAh
Fuse		2 pcs φ5×20mm AC time lag; T250mA/250V(Power Supply:220V)	2 pcs φ5×20mm AC time lag; T250mA/250V(Power Supply:220V)	2 pcs φ5×20mm AC time lag; T250mA/250V(Power Supply:220V)
Form	Size	315 x 215 x 77 mm	315 x 215 x 77 mm	315 x 215 x 77 mm
	Net Weight	1.5 kg	1.6 kg	1.7 kg



STANDARD ACCESSORIES

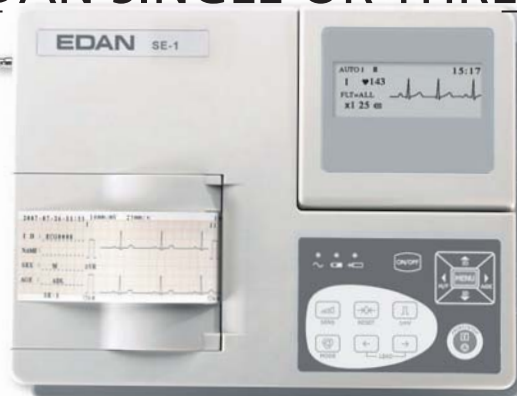
- ECG cable - 1 set
- Limb electrode clamp - 1 set
- chest electrodes - 1 set
- Ground wire
- Power connection
- Paper roll
- USB connection and PC software (only 33221 and 33222)

• 33228 CARRYING BAG 39x29x14 cm



EDAN SINGLE OR THREE CHANNEL ECG

33330



CE 0123



33333

Single and three channel
with 12 channel display

INTERPRETATION

COLOUR DISPLAY

EDAN PORTABLE ECG - 1 and 3 channel

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

SE-3 Three channel colour ECG also features

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

ECG Viewer Software: PC based ECG data management software

- compatible with Windows XP, 7, 8, 8.1, 10, 11, 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 79

TECHNICAL SPECIFICATIONS

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

STANDARD ACCESSORIES

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

MINDRAY BENEHEART R3 ELECTROCARDIOGRAPH

• 33301 MINDRAY BENEHEART R3 ELECTROCARDIOGRAPH 3 channels

Lightweight portable cardiograph for resting ECG diagnosis.

Reliable analysis - Glasgow algorithm

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

Great Portability - only 1.2 kg

Weighs only 1.2 kg with battery, easy to carry.

5" clear colour display

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

Convenient operations

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

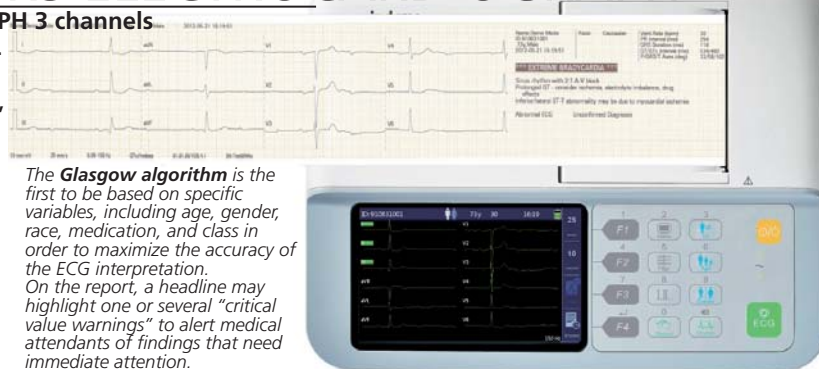
Unique recorder - Z-folded or rolling paper

Compatible with both rolling paper and Z-fold paper.

Easily switchable without dismantling the pressure lever.

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

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



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

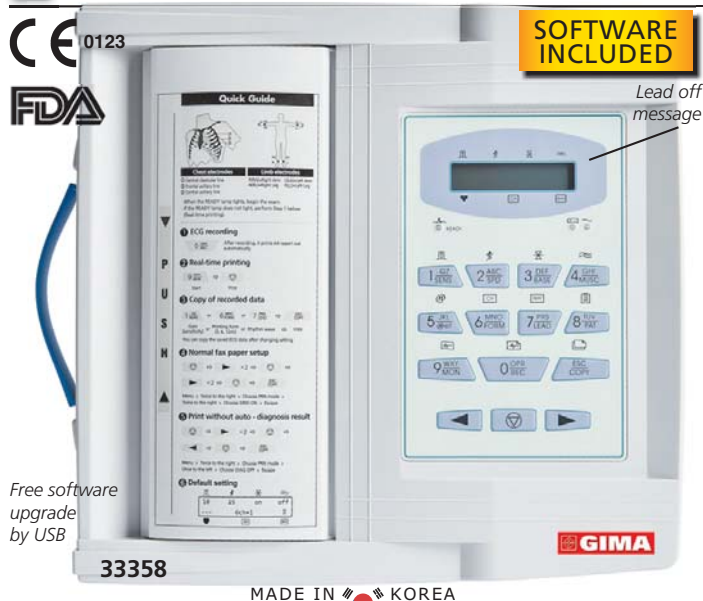
STANDARD ACCESSORIES

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

mindray

Power	100 to 240 VAC ± 10% 60 VA	ECG amplifier: DC-coupled	Thermal printer: Dot array/Width 80 mm/speed 5, 12.5, 25, 50 mm/s
AC power:	rechargeable Lithium ion battery	Input impedance: 50 MD at 10 Hz, defib protected	Software
Battery-type:	11.1 V typical, 2,500 mAh	Patient leakage: < 10 µA	Resting ECG mode: Records and prints 12-lead resting ECG with 10-second duration
- 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	Heart rate meter: 30 to 300 BPM ± 10% or ± 5 BPM, whichever is greater	Patient information: Patient ID, secondary ID, age, date of birth, gender, race, medication class and V3 electrode placement
- charge time:	3.5 hours with power off	Sensitivity/gain: 5, 10, 20 mm/mV, Auto	Internal storage: 800 ECGs in internal memory
Processing		Colour display	ECG Storage format: PDF and Mindray storage format
ECG analysis	500 samples/second (sps)	Resolution: TFT LCD with LED graphics backlit 800x400	internal software: GB, FR, IT, ES, DE, PL, PT, TR, RU, HU, RO, CZ, CN
Digital	1,000 samples/second/channel	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	Report formats
Pacer detection	16,000 samples/second/channel		Size/Weight: Thermal printer/PDF/A4/letter 250x194xh 56 mm/1.2 kg including battery
Acquisition mode:	Pre-acquisition or post-acquisition provide 10 seconds of instantaneous ECG acquisition		

MULTI CHANNEL ECG WITH INTERPRETATION ON PAPER



Free software
upgrade
by USB

• 33358 NEW 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.

- one touch operation for analyzing, storing and printing result
- 12 leads simultaneous 10-second resting ECG
- over 130 kinds of interpretation results based on Minnesota code
- Internal software+print in GB, FR, IT, ES, DE, RU, TR, PL, PT, RO, KR.
- 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 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 JPEG, PDF, XML format, which ensure compatibility with most EMR package.

- rechargeable battery (optional) with 6 hour capacity

TECHNICAL SPECIFICATIONS	
ECG Leads:	3-6-12 channel illustration of ECG signals in continuous recording or 10 sec. recording with interpretation.
Size - weight:	200x300x97.5 mm - approx 3 kg
Recording channel:	3, 6, 12 channel and 1 channel (60 sec.)
Sensitivity:	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) Base line drift (off 0.05, 0.1, 0.2 Hz - 3 dB or better) Low pass filter (off, 40 Hz, 100 Hz, 150 Hz)
Sampling rate:	analysis 500 samples/sec, digital 8,000 samples/sec
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 μ V (p-p) max input impedance: >50M Ω Input voltage range: \pm 5 mV CMRR: greater than 105 dB DC offset voltage: $\geq \pm$ 400mV Patient leakage current: < 10 μ A Frequency response 0,05-150 Hz within -3 dB Isolated, defibrillation and ESU protected
Power supply:	AC or rechargeable lithium-ion 11.1 V 2600 mA battery (optional) Power requirement: 100-240 Vac, 50/60 Hz, 1.0-0.5 A Power consumption: 60 W max
Battery capacity:	6 hour of normal use (approx. 200 automatic ECG printouts)
Communication:	LAN
Safety:	Class I, Type CF
Conformity:	CE, FDA, KFDA, CFDA, NCC

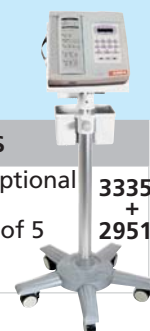
STANDARD ACCESSORIES

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

CARDIOGIMA 12 ACCESSORIES

GIMA code	
29536	Rechargeable lithium battery for 33358 - optional
29534	Rechargeable battery for old 33354/33355
32950	Thermal paper A4 - for 33354-5-7-8 - box of 5
33328	ECG cable for 33354-5-7-8
29519	Trolley for 33354-5-7-8

33358
+
29519



DIGITAL 12 CHANNEL COLOUR ECG

Supplied with
standard USB
configuration

33224



• 33224 12 CHANNEL ECG 1200G

- 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
- 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
- Multilingual internal software: GB, FR, IT, ES, PT, PL, SI, TR, RU, KZ, CN.
- 33227 RECHARGEABLE BATTERY - spare up to S.N. 19120300473
- 33229 RECHARGEABLE BATTERY since S.N. 20030100001 - spare
- 32967 PAPER ROLL 210 mm x 30 m
- 33328 ECG CABLE - 10 leads - spare

TECHNICAL SPECIFICATIONS

Input way	Floating and defibrillation protection
Lead	Standard 12 leads
Patient leak current	< 10 μ A
Input impedance	\geq 50 M Ω
Frequency response	0.05 - 150 Hz (-3 - + 0,4 dB)
Time constant	\geq 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, \pm 5% Manual record: 5, 6,25, 10, 12,5, 25, 50 mm/s, \pm 5%
Sensitivity selections	2,5, 5, 10, 20, 40 mm/mV, \pm 5% Standard sensitivity is 10 mm/mV \pm 0.2 mm/mV.
Auto record	Record setup according to auto record format and mode, automatically changing leads, measuring and analyzing.
Rhythm record	Record setup according to rhythm record format and mode, automatically measuring and analyzing.
Manual record	Record setup according to manual record format, manually changing leads.
Measurement parameters	HR, P-R interval, P Duration, QRS Duration, T Duration, Q-T interval, Q-Tc, P Axis, QRS Axis, T Axis, R(V5), S(V1), R(V5)+S(V1)
Product safety type	Class I CF defibrillation and pacing protection
Size	334x320x85 mm
Power	AC: 100-240 V, 50/60 Hz DC: 14.8 V, 3700mAh rechargeable lithium battery

STANDARD ACCESSORIES

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



NEO ECG - TABLET ECG

54230



• 54230 NEO ECG S120 - ECG TABLET

• 54231 NEO ECG T180 - ECG TABLET with printer

Light and portable ECG tablets for acquisition and displaying of 9/12 lead waveform, as well as heart rate detection. 7" (54230) or 10.1" (54231) high resolution colour touch screen, easy to operate. It can store, preview, review, edit and upload patient data through wireless transmission of ECG data via WiFi and mobile networks. Patient data can be exported to USB flash disk via USB connector.

- Glasgow algorithm
- 4 sampling modes: pre-sampling, real-time sampling, periodic sampling, and trigger sampling
- automatic pacing detection and marking
- auto RR analysis, HRV, medicine test, ECG event mode
- files in multiple formats: Carewell ECG, PDF, BMP, HL7, DICOM, SCP
- freezing of ECG waveform on the screen
- virtual keyboard and barcode scanning to insert patient information
- built-in thermal printer (54231 only)
- external DC power supply and built-in rechargeable battery

ECG leads:	9,12 synchronous acquisition
A/D resolution:	24 bits
Heart rate range:	30 bpm-300bpm ± 1
Sensitivity:	auto, 2.5, 5, 10, 20, 40 mm/mV, less than $\pm 5\%$ error
Printing speed:	5, 6.25, 10, 12.5, 25, 50 mm/s, less than $\pm 3\%$ error
Sampling rate:	32000 samples/sec
Filters:	AC (50-60 Hz, off), EMG (25-35-45 Hz off) ADS (0.01-0.05-0.32-0.67 Hz) Low pass filter (75-100-150-300 Hz off)
Frequency response:	0.01-350 Hz (+ 0.4-3.0 db)
Minimum detectable signal:	20 μ Vp-p

TECHNICAL SPECIFICATIONS

Electrical:	Internal noise: $\leq 12.5 \mu$ V Input impedance: $\geq 100 \text{ M}\Omega$ (10 Hz) Input circuit current: $\leq 10 \text{ nA}$ Calibration voltage: $1 \text{ mV} \pm 2\%$ Depolarization voltage: $\pm 900 \text{ mV}$, $\pm 5\%$ Commode mode rejection: $\geq 140 \text{ dB}$ (AC filter on) $\geq 120 \text{ dB}$ (AC filter off)
Amplitude quantisation:	0.95 μ V/LSB
Recovery time after discharge:	$< 10 \text{ s}$
Display:	7" (54230) or 10.1" (54231) colour touch screen
Size - weight:	19.7x11.2x h 2.6 cm - 0.8 kg (54230) 27.4x28.8x h 11.1 cm - 2.5 kg (54231)



54231

WITH BUILT-IN
PRINTER

- recorder charging port (54231 only)
- multilingual selectable software: GB, FR, IT, ES, PT, DE, GR, PL.

GIMA code	ACCESSORIES
54233	Rechargeable battery 5000 mAh for 54230, 54231 - spare
33328	ECG cable - spare
32950	Thermal paper 20mx216mm for 54231 - spare
54234	Bluetooth thermal printer - 3 channels for 54230
32969	Thermal paper 20m x 80mm for 54234 - spare
54235	Carrying bag for 54230



STANDARD ACCESSORIES

1 ECG cable (IEC, $\varnothing 4 \text{ mm}$, banana connector)
6 pcs adult precordial suction electrodes ($\varnothing 4 \text{ mm}$)
4 pcs adult limb clamp electrodes
1 thermal roll paper - 20mx216 mm (54231 only)
1 rechargeable lithium battery
1 power adapter
Multilingual manual: GB, IT (FR, ES, PT, DE, GR, PL, RU on www.gimaitaly.com).
Carrying bag for 54230 and 54234

12 CHANNEL ECG WITH PC SOFTWARE

• 33219 12 CHANNEL ECG - 1212G - with software

It can collect 12-lead ECG signal simultaneously and print ECG waveform with built-in thermal printing system. It features in recording and displaying ECG waveform in auto/manual mode; measuring, analyzing and diagnosing ECG waveform parameters automatically.

- 1280x800 dots, 10.1" high resolution colour LCD display
- display of 3/6/12-lead ECG to observe abnormal heart rhythm
- powered by AC/DC or built-in rechargeable lithium battery
- up to 10-hour standby and continuous print over 3-hours
- record up to 1,000 ECG waveforms
- auto-measurement and auto-interpretation of routine ECG provide measurement results and auto-diagnosis conclusion
- auto-diagnosis conclusion for HR, PR Interval, P Duration, QRS Duration, T Duration, QT/QTc Interval, P/QRS/T Axis, R(V5), S(V1), R(V5)+S(V1) amplitude
- built-in large memory can store at least 4000 medical records,
- functions of LAN, USB cable transmission. Automatically upload cases, download reports and print them
- historical medical records can be exported to other electronic file formats (dat, pdf, xml, bmp, jpeg, png etc.)

CD software in GB, FR, IT, ES, PL, RO, SI, TR.

• 33218 RECHARGEABLE BATTERY - spare

• 32967 PAPER ROLL 210 mm x 30 m - spare

• 33328 ECG CABLE - 10 leads - spare

	STANDARD ACCESSORIES	
1 lead cable	1 Power cord	User manual (GB, IT)
1 set limb electrodes	Thermal paper 210 mm x 20 m	1 Ground wire
1 set chest electrodes	Rechargeable battery	CD software

33219

Size:
34x32xh 8.6 cm
Weight: 5 kg

CONTEC™

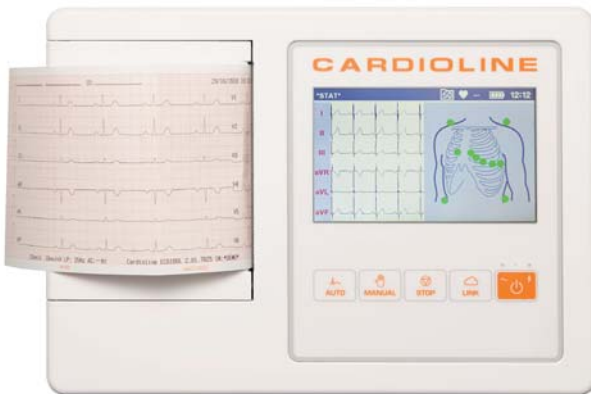


TECHNICAL SPECIFICATIONS	
Input way:	Floating and defibrillation protection
Lead:	standard 12 leads
Patient leakage current:	$< 10 \mu\text{A}$ Time constant: $\geq 3.2 \text{ s}$
Input impedance:	$\geq 2.5 \text{ M}\Omega$ CMRR: $> 105 \text{ dB}$
Paper speed:	12.5 mm/s, 25 mm/s, 50 mm/s, $\pm 5\%$
Sensitivity selection:	5, 10, 20 mm/mV, accuracy is $\pm 2\%$; standard sensitivity: $10 \text{ mm/mV} \pm 0.2 \text{ mm/mV}$
Auto record:	record setup according to auto record format and mode, automatically change leads, automatically measure and analyze
Rhythm record:	record setup according to rhythm record format and mode, automatically measure and analyze
Manual record:	record according to manual record format
Product safety type:	Class I type CF defibrillation-proof function applied part
Power supply:	rechargeable lithium battery, 14.8 V 5200 mAh
Frequency:	100-240 V, 50/60 Hz, $\leq 150 \text{ VA}$

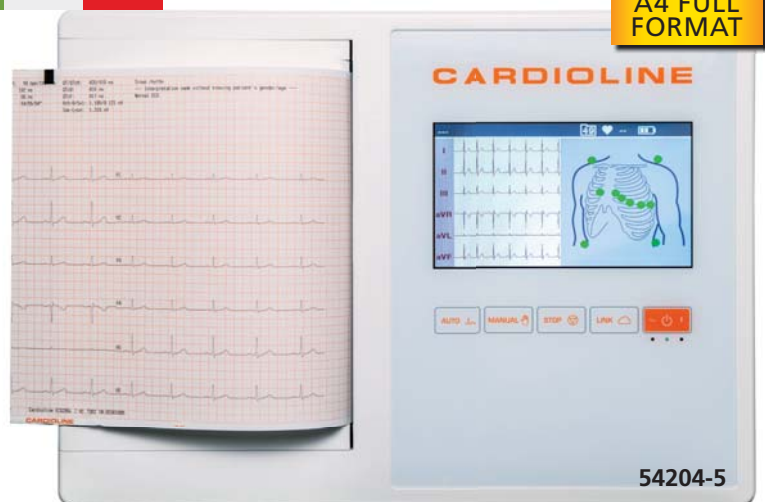
CARDIOLINE COLOUR TOUCH SCREEN 12 LEAD ECG

PORTABLE

MADE IN ITALY

A4 FULL
FORMAT

54200-1-2



54204-5

- 54200 CARDIOLINE ECG 100L BASIC - 5" screen
- 54201 CARDIOLINE ECG 100L GLASGOW - 5" screen
- 54202 CARDIOLINE ECG 100L FULL (Glasgow + EasyApp) - 5" screen
- 54204 CARDIOLINE ECG 200L GLASGOW - 7" screen
- 54205 CARDIOLINE ECG 200L FULL (Glasgow + EasyApp) - 7" screen

The Cardioline ECG have been designed to provide simple and fast 12 lead resting ECG acquisition for the private practice. Particular attention has been dedicated to device usability using a brilliant 5" (54200-2) or 7" (54204-5) colour touch screen display, as well as dedicated keys for fast operation. User is guided through ECG acquisition step by step, from electrode placement, to quality checking, acquisition, printing and storage. Automatic, manual, Stat or rhythm ECGs can alternatively be acquired at the simple touch of a key. The new Rhythm ECG function allows for rhythm analysis of 3 minutes of ECG, including HR trending and Variability. ECG files can be stored on the device or exported, through USB connection to a PC or a memory stick.

Support most printing formats

Standard or Cabrera 3, 3+1, 3+3, 6, 12 (12 only 54204-5) channels in automatic mode and 3, 6 or 12 printout channels in continuous mode, as well as printout of the rhythm strip.

Multilingual switchable internal software in 16 languages

GB, FR, IT, ES, PT, DE, RO, RU, CZ, HR, BR, HU, NL, TR, RS, PL.

STANDARD ACCESSORIES

Patient cable	2 rolls of paper (for 54200-2)
Battery	1 pack of 180 sheets (for 54204-5)
Power cable	Adaptor for snap connector 4 mm (box of 10)
Glasgow interpretation (54201-5)	Disposable tab electrodes (box of 100)
CD Manual (GB, FR, IT, ES, PT, DE, NL, CZ, HR, HU, PL, RO, RU)	

TECHNICAL SPECIFICATIONS

ECG acquisition	
ECG channels:	12-lead (I, II, III, aVR-L-F, V1-6)
Patient cable:	Standard 15D, 10-wires
CMRR:	>100 dB
Input impedance:	100 MΩ
Sampling rate of the input stage:	32000 samples/second/channel
ECG resolution:	5μV/LSB; 500 s/s
Dynamic range:	± 325 mV
Bandwidth:	Performance equivalent to 0,05-150 Hz
Pacemaker detection:	Hardware detection coupled with convolution digital filtering
Filters:	Linear phase digital diagnostic high-pass filter (acc. to 60601-2-25 2nd ed.) 50/60 Hz AC interference adaptive digital filter Digital low pass filters at 25/40 Hz, for display and printing only
Defibrillation protection:	AAMI/IEC standards
Front-end performance:	ANSI/AAMI IEC 60601-2-25:2011
Acquisition mode:	Automatic (12-leads), Manual (3/6-leads only 54200-2), Manual (3/6/12-leads only 54204-5) Stat (12-leads), Rhythm (1/3-leads)
Configuration:	Standard or Cabrera
Lead fail detection:	Independent on all leads
Heart rate meter:	30-300 bpm
ECG measurements:	All leads, average, corrected; HR; Average RR; PR interval, QRS duration QT interval and QTc interval, with Hodges, Bazette and Fridericia's formula max R[V5] or [V6] and S[V1] Sokolow-Lyon index; P, R, T axis

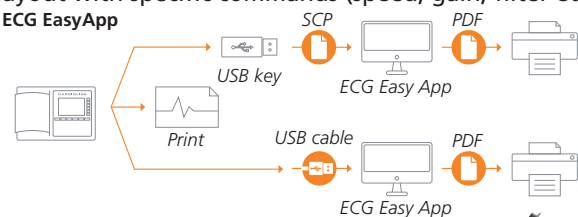
Glasgow algorithm for pediatric and adult interpretation (only 54201 - 54205)

The algorithm can diagnose any abnormality, usually recognizable through ECG: myocardial infarction, including AMI, ventricular hypertrophy, ST-T and common rhythm anomalies. Furthermore, the program detects conduction and QT interval prolongation malfunctions.

ECG EasyApp to manage patient ECGs (included with 54202, 54205, optional for 54200-1, 54204)

Through this App, ECG acquisitions can be received in SCP format on PC (via USB) and printed. Patient data and automatic interpretations, provided by ECG, can be modified, including test results. The operator can also customize rhythm strips layout with specific commands (speed, gain, filter etc.).

ECG EasyApp



GIMA code	CARDIOLINE ACCESSORIES
54210	Cardioline ECG cable 12 leads - spare
54211	Battery for 54200-5 - spare
54212	Carrying bag ready for use for 54200-2
33052	Thermal paper 100 mm x 20 m (100 L) - box of 10
33055	Thermal paper 210x295 mm (200 L) - box of 180 sheets



NEW CARDIO 7: 12 CHANNEL RESTING ECG WITH TOUCH SCREEN

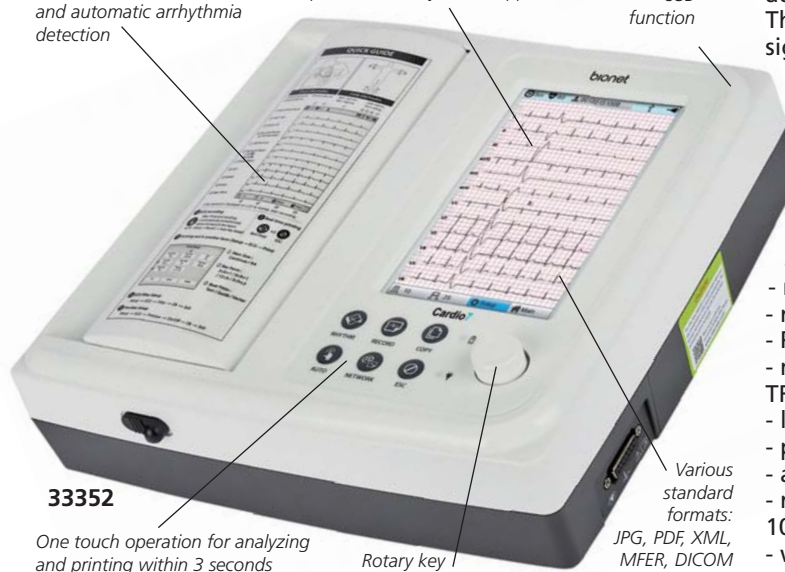
SOFTWARE BMS PLUS
for data storage on PC

FDA CE 1434

Long term ECG recording
and automatic arrhythmia
detection

Touch screen operation full
alphanumeric keyboard support

USB
function



33352

One touch operation for analyzing
and printing within 3 seconds

Rotary key
access to all menus

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

STANDARD ACCESSORIES

Patient cable - 10 leads
LAN cable
1 bottle of ECG gel (70 g)
1 power cord
manual (GB, IT)
1 paper roll
4 limb electrodes
6 chest limb electrodes
BMS Plus (GB, IT)
Rechargeable Li-ion battery



TECHNICAL SPECIFICATIONS

ECG leads: 10 lead, 12 channel simultaneous ECG and acquisition
Dimension: 300x200xh 97.5 mm, approx. 3.5 kg
Recording channel: 3 channels + 1 rhythm, 3 channels + 3 rhythm, 6 channels + 1 rhythm, 12 channels, 6 channels + st map 1 channel
Gain: 2.5, 5, 10, 20, auto (I-aVF: 10, V1-V6: 5) mm/mV
Printing speed: 5, 12.5, 25, 50, 100 mm/s
Sampling rate: Analysis - 500 s Digital - 8,000 s
Filters: AC (50/60 Hz, -20 dB or better)
Muscle (25-35 Hz, -3dB or better)
Base line drift (0.05, 0.1, 0.2 Hz, -3 dB or better)
Low pass filter: off, 40 Hz, 100 Hz, 150 Hz
Display: 7" color TFT LCD display (800x480), 12 channels preview ID, HR, gain, speed, power status
Monitor display: ID, date, sensitivity, speed, filter, form, rhythm lead
User interface: Touch screen (alphanumeric and symbol available), Keyboard, rotary push-knob (pop-up menu)
Patient data: ID, name, age, sex, height, weight, smoke, race, department, room number, study...etc.
Basic measurement: Heart rate (30~300 bpm, ± 3 bpm), PR/RR int., QRS dur., QT/QTc int., P-R-T axis, SV1/RV5/R+S amp.
Recorder: Thermal print head, roll paper width: A4/Letter 215 mm (8.5")

Resolution:
Electrical:

Signal quality control: Lead fault detection, signal saturation detection
Pacemaker pulse detection

ECG data storage: storage for 200 ECGs, built-in memory
Power: input: 100-240 V, 1.5-0.75 A, 50-60 Hz
output: 15 V, 4.2 A

Battery (Li-ion): Replaceable and rechargeable, lithium ion, 10.8V, 3250mA
6 hours of normal use or print 200 ECG pages
(12 channel format at 25 mm/s and 10 mm/mV)
Battery complete charge in 3 hours with power off

Communication: PC connection with LAN, WiFi (option), USB flash drive, USB barcode scanner (option)
Safety conformity: Class I, Type CF, CE, CSA, FDA, KFDA, CFDA, CCC

• 33352 NEW ECG CARDIO 7: 12 CHANNEL ECG WITH TOUCH SCREEN

The new Cardio 7 is an electrocardiogram (ECG) device capable of measuring and recording 12 channels of cardiac signals in adult and pediatric patients.

The device enables operators to record and print cardiac signals, review them using various viewing modes, perform automatic detection of cardiac conditions.

It is also possible to manage the digital files by transferring the stored data to a networked PC. This equipment is protected against the effects of cardiac defibrillator discharge.

- over 120 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 USB flash drive
- multilingual selectable software (GB, FR, IT, ES, DE, PT, PL, RO, TR, RU, KR)
- lead fault message
- pace maker detection
- automatic arrhythmia detection
- record rhythm from 1 channel for an extended time (1, 5 and 10 minutes) then print it on A4 or letter size printing 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 for old model 33357 (up to S.N. T7xxxxxxx) - optional

• 29536 RECHARGEABLE Li-Ion BATTERY for 33357 (since S.N. T8xxxxxxx) and 33352 - spare

• 29519 TROLLEY

• 33328 ECG CABLE

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, Cardio 7
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, 1200G

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.



GIMA ECG THERMAL PAPERS FOR DIFFERENT ECG BRANDS



GIMA code	ECG MANUFACTURER AND MODEL	Type	Width mm	Length m	Sheet	Marker	Grid*	Min. order	GIMA code	ECG MANUFACTURER AND MODEL	Type	Width mm	Length m	Sheet	Marker	Grid*	Min. order
32951	ASPEL 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	32966	LTD450, LTD455/S, LTD455/W EDAN	pack	210	295	150	yes	or/red	1
32996	Ascard B5 eco, Mr. Green, mint	roll	58	25	-	no	or/red	20	32963	SE-1	roll	50	25	-	no	or/red	20
32952	Ascard, Mr. Gold, Gold/3 BIO CARE	roll	210	25	-	no	or/red	5	32964	SE-3	roll	80	25	-	no	or/red	10
32968	101G	roll	50	20	-	no	or/red	20	32965	SE-601	pack	110	140	143	yes	or/red	20
32989	300G, 3010	roll	63	30	-	no	or/red	20	32966	SE-6, 12, 1200 EXP	pack	210	295	150	yes	or/red	1
32969	IE3, IE300	roll	80	20	-	no	or/red	10	32960	SE-6, 12, 1200 EXP	roll	210	30	-	no	or/red	5
33002	3030, 6010	roll	112	27	-	no	or/red	10	32962	SE/1201	pack	210	140	215	yes	or/red	10
32992	1200	roll	210	30	-	no	or/red	5	ELETTRONICA TRENTINA/CARDIETTE/CARDIOLINE								
32962	1210, 1215	pack	210	140	215	yes	or/red	10	32971	Autoruler 12/1, comp. 1x12	roll	50	30	-	yes	blue	20
33004	IE12A, IE-15, IE-20	pack	210	150	200	yes	or/red	10	32972	Start 100	roll	130	27	-	yes	blue	10
33005	ECG-1260	pack	210	140	140	orange	or/red	10	32973	AR 600, AR 600 Adv	roll	60	15	-	yes	blue	25
33007	IE6, ECG 3030, ECG 6010	pack	112	140	142	orange	or/red	20	32977	AR 600 Adv, AR 600	pack	60	75	250	yes	blue	25
32969	BIOLIGHT BLT, 1203A, E 30	roll	80	20	-	no	or/red	10	32974	AR 1200	roll	120	18	-	yes	blue	10
32992	BLT-1212	roll	210	30	-	orange	or/red	5	32978	AR 1200 (View/Adv)	pack	120	100	300	yes	blue	10
32966	E70, E80	pack	210	295	150	yes	or/red	1	32975	Daedalus, AR2100	roll	210	20	-	yes	blue	5
32950	BIONET Cardiocare/Cardiotouch	roll	215	25	-	no	or/red	5	32976	Daedalus, Start 200, AR2100	pack	210	150	200	yes	blue	8
33046	BIOSET-HORMAN Bioset 3500	roll	110	30	-	orange	or/red	10	ESAOTE BIOMEDICA								
32969	3800	roll	80	20	-	no	or/red	10	32980	P 80 base	roll	90	28	-	no	or/red	10
32951	BTL BTL 08/MT, 08/MD, 08/MD3	roll	112	25	-	orange	or/red	10	32981	P 80 base	pack	90	70	400	yes	or/red	25
32996	BTL 08/MT, 08/MD, 08/MD3	roll	58	25	-	no	or/red	20	32982	P 80 Power, P 80 SIX	pack	210	280	215	yes	or/red	1
32953	08 MT, MD	roll	112	23	-	no	or/red	10	32983	P8000 base	pack	80	70	300	yes	or/red	20
32952	BTL 08/LC, 08/LT	roll	210	25	-	no	or/red	5	32984	P8000 Power	pack	210	280	200	yes	or/red	1
32954	Atria 3100/6100, quest CARDIOLINE	pack	210	300	200	yes	or/red	1	32985	Archimed 4240, Archiwin	pack	210	300	200	yes	or/red	1
32955	Elan 100	pack	112	100	300	yes	or/red	25	32987	My Cardiopad base	pack	114	90	200	yes	or/red	20
32956	Delta 1 plus	pack	60	100	300	yes	or/red	25	33040	ESAOTE My Cardiopad 2157036	pack	210	140	180	yes	or/red	5
32957	Delta 1 plus	roll	60	30	-	no	or/red	20	FUKUDA ME - FUKUDA DENSHI								
32958	Delta 3 plus	pack	112	100	300	yes	or/red	25	32988	501A, FX121, FCP-500, OP18TE	roll	50	30	-	no	or/red	20
32960	Delta 60 plus, ECG 200L	roll	210	30	-	no	or/red	5	32989	FCP15, FCP11, OP110TE, OP119TE	roll	63	30	-	no	or/red	20
32961	Elan 2100, Delta 612	pack	210	280	200	yes	or/red	1	FCP2101, 2155, FX 2111, CASE10, FCP 7101, FX 7102								
33053	ECG 100+, ECG 100S	pack	100	150	200	yes	or/red	10	32994	OP/358TE, FCP/131, FX3010, FX3101, FX-8822	roll	145	30	-	no	or/red	10
33052	ECG 100/L	roll	100	20	-	orange	or/red	10	32990	OP 111 TE, OP 115 TE, FX102	pack	50	75	400	yes	or/red	20
33054	AR2100 (VIEW/ADV) - 66010042	pack	210	140	200	yes	or/red	8	32991	OP 112 TE, FX2111, FX7101, FX 7102, FCP 2201 G	pack	63	75	400	yes	or/red	25
33055	ECG 200+	pack	210	295	180	yes	or/red	1	32992	FCP231, FCP4101, FX4010 FX7402, FX7542, FX8322, FDX4510	roll	210	30	-	no	or/red	5
32963	CAREWELL ECG-1101B, 1101C, 1101G	roll	50	25	-	no	or/red	20	32965	OP222TE, FX7202	pack	110	140	143	yes	or/red	20
33025	ECG-1103B, 1103G, 1103L	roll	63	30	-	no	or/red	20	GIMA								
33058	ECG-1103GW, 1103LW	roll	80	30	-	no	or/red	10	32996	Cardiogima 1M, 3M	roll	58	25	-	no	or/red	20
33059	ECG-1106G, 1106L	roll	112	25	-	no	or/red	10	32953	Cardiogima 6M, colour	roll	112	23	-	no	or/red	10
32950	ECG-1112L, 112M, T/12	roll	215	25	-	no	or/red	5	32950	Cardiogima 12, 12M	roll	215	25	-	no	or/red	5
32963	COMEN CM100	roll	50	25	-	orange	or/red	20	HEWLETT PACKARD								
32969	CM300, H3	roll	80	20	-	no	or/red	10	32999	Page Writer 100/200, M1709A, M2483A	pack	210	300	200	hole	or/red	1
32965	CM600	roll	110	20	-	no	or/red	20	32988	40453 A, 43120	roll	50	30	-	no	or/red	20
32992	CM 1200 A/B	roll	210	30	-	no	or/red	5	INNOMED								
32966	CM 1200 A/B	pack	210	295	150	yes	or/red	1	32996	HearthMirror IKO 3, HeartScreen 60 IKO, 60 G	roll	58	25	-	no	or/red	20
32963	CONTEC CMS80 Cardiopoket	roll	50	25	-	orange	or/red	20	32964	HeartScreen IKO 80G-L, 80C-L	roll	80	25	-	no	or/red	10
32968	90A, 100G	roll	50	20	-	no	or/red	20	32953	HeartScreen 112 C-D	roll	112	23	-	no	or/red	10
32969	300G, 300GA, 300GT	roll	80	20	-	no	or/red	10	33004	HeartScreen 210	pack	210	150	200	orange	or/red	10
32970	600G	roll	110	20	-	no	or/red	10	33059	ECG-1106G - ECG-1106L	roll	112	25	-	orange	or/red	10
32967	1200, 1201, 1212G	roll	210	30	-	no	or/red	5	KENZ - SUZUKEN								
32963	LTD400	roll	50	25	-	no	or/red	20	33002	Cardico 302/601	roll	112	27	-	no	or/red	10
32996	LTD410, Heartscreen 60G	roll	58	25	-	no	or/red	20	33003	Cardico 302/601	pack	112	90	200	yes	or/red	20
32964	LTD405S, LTD405W, LTD415 Heartscr. 80G	roll	80	25	-	no	or/red	10	33058	Cardico 306	roll	80	30	-	orange	or/red	10
32951	LTD418, Heartscreen 112	roll	112	25	-	no	or/red	10	32960	Kenz-Cardico 1210, 1211	roll	210	30	-	no	or/red	5
32965	LTD440, LTD445/S	pack	110	140	143	yes	or/red	20	33025	ECG 305	roll	63	30	-	orange	or/red	20
32960	LTD450, LTD455/S, LTD455/W	roll	210	30	-	no	or/red	5	32988	103, R50-30R, TEC 8300	roll	50	30	-	no	or/red	20
*or/red: grid could be orange or red colour									LUMED								
									33058	EUROECG 3view	roll	80	30	-	orange	or/red	10
									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

GIMA ECG THERMAL PAPERS FOR DIFFERENT ECG BRANDS

GIMA code	ECG MANUFACTURER AND MODEL	Type	Width mm	Length m	Sheet	Marker	Grid*	Min. order	GIMA code	ECG MANUFACTURER AND MODEL	Type	Width mm	Length m	Sheet	Marker	Grid*	Min. order
33012	MAC 400, MAC 600	pack	80	90	280	yes	or/red	25	32999	Page Writer TC/50 - TC/70	pack	210	300	200	hole	or/red	1
33013	MAC 800	pack	110	140	200	yes	or/red	25	32997	Touch, TRIM I / II / III, Page Writer TC/20, TC/30	pack	210	300	100	hole	or/red	1
33058	MEDIANA YM-303	roll	80	30	-		orange	10	32953	EPG 612	roll	112	23	-	no	or/red	10
29528	MEDICAL ECONET SMART - 3		152	25	-		green	10	32960	EPG 12 view	roll	210	30	-		orange	5
32950	Cardio M - Cardio M Plus	roll	215	25	-		orange	5	32964	EPG Project	roll	80	25	-		orange	10
29522	SMART - 1	roll	215	23	-		green	5	32996	EPG Basic-pocket	roll	58	25	-	no	or/red	20
33058	MEDIGATE MeCA 303i	roll	80	30	-		orange	10	33037	SCHILLER AT 1, AT 4	pack	90	90	390	yes	green	25
33014	MINDRAY Beneheart R3	roll	80	20	-	no	or/red	10	32982	AT 2, CS 200	pack	210	280	215	yes	or/red	1
33016	Beneheart R3	pack	80	70	200	yes	or/red	25	33038	AT 10	pack	210	140	250	yes	green	10
32966	BeneHeart R12	pack	210	295	150	yes	or/red	1	32983	AT 101	pack	80	70	300	yes	or/red	20
33018	Mindray D60	roll	112	20	-	no	orange	10	32984	AT 102	pack	210	280	200	yes	or/red	1
33017	MORTARA Eli 50	pack	50	70	200	yes	or/red	25	33039	AT110, AT 10 Plus, AT 2 Plus	pack	210	140	150	yes	green	5
33010	Eli 100	roll	108	23	-	no	or/red	10	32987	Cardiopad, MS 2010	pack	114	90	200	yes	green	20
33019	Eli 210, 250, 280, 350, 380	pack	210	300	250	yes	or/red	1	33040	MS-2015	pack	210	140	180	yes	or/red	5
33020	Eli 150	pack	108	140	200	yes	or/red	25	33041	Cardioart FT/1	pack	114	150	64	yes	orange	20
33021	Eli 230	roll	210	20	-	no	or/red	5	33042	Cardioart AT/1	pack	80	70	300	yes	orange	20
32988	NIHON KOHDEN ECG-6651 - Def. Series TEC 7100 / 7200/ 7300	roll	50	30	-		orange	20	33043	Cardioart AT/102-G2	pack	210	280	100	yes	orange	1
32994	Cardiofax 5403 - ECG-8240		145	30	-		orange	10	32990	SIEMENS Cardiostat 1	pack	50	75	400	yes	or/red	20
33025	Cardiofax 8110, 9620, 1150K	roll	63	30	-	no	or/red	20	32991	Cardiostat 11	pack	63	75	400	yes	or/red	25
33026	Cardio-fax GEM/1250/1950, ECG-9010/9020/9022	pack	210	140	215	yes	white	10	32988	TRISMED Cardipia 200 / 201N	roll	50	30	-		orange	20
32962	Cardio-fax GEM/1250/1950, ECG-9010/9020/9022	pack	210	140	215	yes	or/red	10	32989	Cardipia 200, 203N	roll	63	30	-	no	or/red	20
33027	GEM 9010, 9020, 9022, 1250, 1950	pack	110	140	143	yes	white	20	33045	Cardipia 400, 406RS	roll	110	30	-	no	or/red	10
33028	1500, 1550, 9110, 9130, 9132, 9320, 2250	pack	210	295	170	yes	white	1	33047	Cardipia 800, 812RS	roll	215	30	-	no	or/red	5
32998	PHILIPS Page Writer TC/10	roll	110	25	-	no	or/red	10	33647	ZOLL R-Series, X-Series	roll	80	25	-		white	10
									32964	X-Series	roll	80	25	-		orange	10
									32962	ZONCARE iMac 120 / iMac 1500 / iMac 1800	pack	210	140	215		orange	10
									32964	ZQ-1203G / iMac 300 / iMac 30	roll	80	25	-		orange	10

FIAB ECG ELECTRODES WITH OFF-CENTERED SNAP CONNECTION

DISPOSABLE ELECTRODES WITH OFF-CENTERED SNAP CONNECTOR						
GIMA code	FIAB code	Material	Size	Gel	Patient	Minimum order
33308	F2017P	PE-Foam	42 mm	Liquid	Pediatric	box of 1,000 (20 bags of 50)
33309	F2017	PE-Foam	50 mm	Liquid	Adult	box of 1,000 (20 bags of 50)
33310	F2017H	PE-Foam	60 mm	Liquid	Adult large	box of 750 (25 bags of 30)

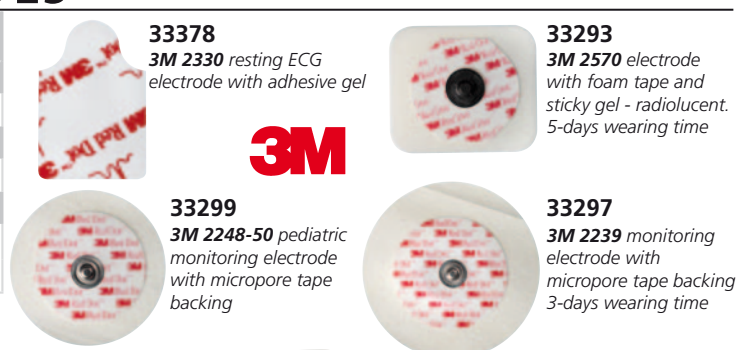
All electrodes have silver chloride sensor



3M™ RED DOT™ ELECTRODES

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

*20 bags of 50 pieces



ECG GEL AND SPRAY

- 33266 ECG GEL - 250 ml - box of 40 tubes
- 33267 ECG GEL - 5 l - box of 2 bags**
- 33268 ECG SPRAY GEL - 250 ml - box of 20 tubes

Suitable for non pre-gelled electrodes, ECG latches and pendant switches in any ECG and exertional applications. Allows ECG waves clear transfer to equipment.

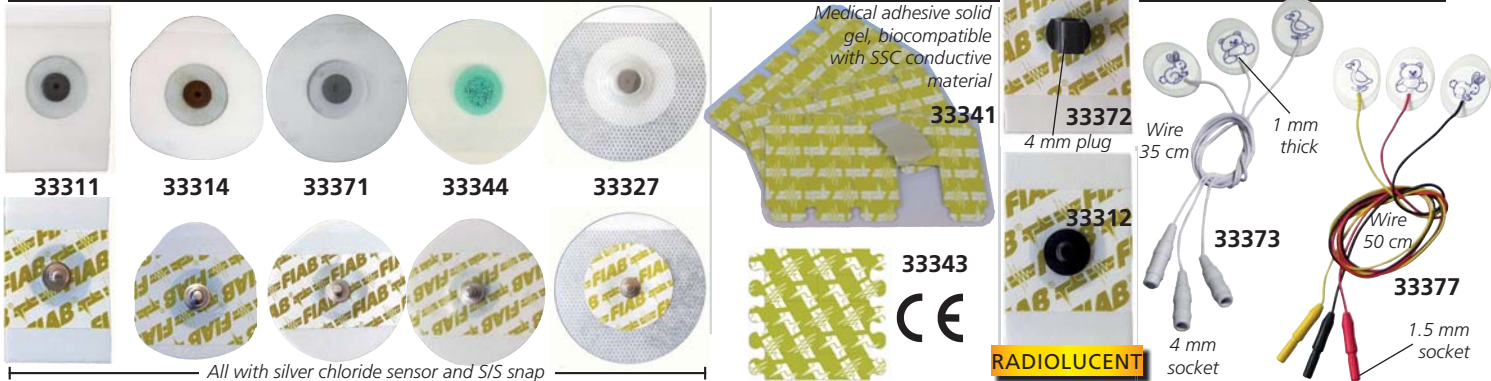
It is hypoallergenic, does not irritate skin, does not contain oil and oily substances, does not contain formaldehyde and salt, has no toxic effects and is odourless.

- 33283 PUMP FOR BAG 5 l

**Includes 1 empty bottle 250 ml and 1 nozzle for easy refill



FIAB ECG UNIVERSAL ELECTRODES



All with silver chloride sensor and S/S snap

GIMA code	FIAB code	Material	Size	Gel	Shape	Connection	Patient	Application	Minimum order
33311	F9046	PE-Foam	28x44 mm	Solid	Rectang.	Snap	Adult, Pediatric	rest, stress, ECG holter	box of 2,000 (20 bags of 100)
33312	F9046 RM	PE-Foam	28x44 mm	Solid	Rectang.	Carbon Snap	Adult, Pediatric	rest, stress, ECG holter, MRI	box of 2,000 (20 bags of 100)
33313	F9089P-100	Foam	Ø 32x36 mm	Solid	Oval	Snap	Pediatric	rest, stress, ECG holter	box of 2,000 (20 bags of 100)
33314	F9089-100	Foam	Ø 36x40 mm	Solid	Oval	Snap	Adult	rest, stress, ECG holter	box of 2,000 (20 bags of 100)
33370	F9060P	PE-Foam	Ø 40 mm	Solid	Round	Snap	Pediatric	rest, long term, stress, ECG holter	bag of 50
33371	F9060	PE-Foam	Ø 48x50 mm	Solid	Oval	Snap	Adult	rest, long term, stress, ECG holter	bag of 50
33344	F9067	PE-Foam	Ø 48x50 mm	Liquid	Oval	Snap	Adult	rest, stress and ECG holter	box of 1,200 (24 bags of 50)
33326	F2080P	Non woven	Ø 40 mm	Solid	Round	Snap	Pediatric	rest, long term, stress, ECG holter	box of 1,200 (24 bags of 50)
33327	F2080	Non woven	Ø 50 mm	Solid	Round	Snap	Adult	rest, long term, stress, ECG holter	box of 1,200 (24 bags of 50)
33341	F3001ECG	Gelled	34x23 mm	Solid	TAB	Alligator	Adult	rest ECG	bag of 100
33346	F3001ECG	Gelled	34x23 mm	Solid	TAB	Alligator	Adult	rest ECG	box of 5,000 (50 bags of 100)
33343	F3001NECG	Gelled	34x13 mm	Solid	TAB	Alligator	Pediatric, neonatal	rest ECG	box of 520 (13 bags of 40)
33372	F9047/4FL	PE-Foam	28x44 mm	Liquid	Rectang.	Plug 4 mm	Adult	rest ECG	box of 1,000 (20 bags of 50)
33373	F9053N	Foam	Ø 23x30 mm	Solid	Oval	4 mm socket	Pediatric, neonatal	monitoring ECG recording	box of 150 (5 bags of 30)
33377	F9058N	Foam	Ø 23x30 mm	Solid	Oval	1.5 mm socket	Pediatric, neonatal	long monitoring ECG recording	box of 150 (50 bags of 3)

*Radiolucent and amagnetic











ADAPTORS FOR ECG 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

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
33366	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

AMBU BLUESENSOR ECG ELECTRODES

4 mm	Tab or snap	GIMA code	AMBU code	Description	Application	Gel type	Backing material	Size (mm)	Shape	Shelf life* (month)	Radiolucent	Connector type	Minimum order	Packaging
		33200 33201	SU-00-A/60 SU-00-C/100	BlueSensor SU	Resting	Wet	Polymer	49x33	Teardrop	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	BlueSensor L	Long-term	Wet	Microporous	68.2x55	Round w/offset	24	No	Snap	box of 500	20 pouches of 25
		33204 33205 33206	VL-00-S/25 VL-00-S/25 VL-00-A/25	BlueSensor VL	Long-term	Wet	Microporous	72x68	Round w/offset	24	No	Snap Snap 4mm	box of 25 box of 500 box of 500	1 pouch of 25 20 pouches of 25 20 pouches of 25
		33208 33209	R-00-A/25 R-00-S/25	BlueSensor 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	BlueSensor 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

AMBU® BlueSensor

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

Exact monitoring - clear picture

BlueSensor 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® BLUESENSOR SU
 - highly conductive wet gel
 - superior quick adhesion
 - unique offset connector
 - fitting or tab
 - occlusive backing material
 - high quality Ag/AgCl sensor






AMBU® BLUESENSOR L
 - highly conductive wet gel
 - combination of instant and long-term adhesives
 - breathable microporous material
 - unique offset connector
 - high quality Ag/AgCl sensor

AMBU® BLUESENSOR VL
 - highly conductive wet gel
 - combination of instant and long-term adhesives
 - breathable microporous material
 - unique offset connector
 - high quality Ag/AgCl sensor

AMBU® BLUESENSOR R
 - highly conductive wet gel
 - superior adhesion
 - comfortable foam backing
 - large measuring area
 - unique offset connector
 - high quality Ag/AgCl sensor

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

AMBU WHITESENSOR ECG ELECTRODES

	GIMA code	AMBU code	Description	Application	Gel type	Backing material	Size (mm)	Shape	Shelf life* (month)	Radiolucent	Connector type	Minimum order	Packaging
	53900	4540	WhiteSensor 4540	Resting	Wet	Foam	32x44	Rectangular	24	Yes	4 mm	box of 300	5 pouches of 60
	53902	4200	WhiteSensor 4200	Short-term	Solid	Foam	28x44	Rectangular	30	No	Snap	box of 1200	12 pouches of 100
	53904	WS-00-S/50	WhiteSensor WS-00-S/50	Short-term	Solid	Foam	36x40	Teardrop	30	No	Snap	box of 600	12 pouches of 50
	53906	0315M	WhiteSensor 0315M	Short-term	Solid	Polymer	35x21	Tab	24	Yes	Tab	box of 500	10 pouches of 100
	53910	4500M-H	WhiteSensor 4500M-H	Stress-test Short-term	Wet	Foam	50x48	Round	24	No	Snap	box of 300	5 pouches of 60
	53912	4500M	WhiteSensor 4500M	Stress-test Short-term	Wet	Foam	50x48	Round	24	Yes	Snap	box of 300	10 pouches of 30

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

AMBU® WhiteSensor

WhiteSensor electrodes combine versatility with quality and functionality. The wide range of sizes, shapes, gel types and backing materials makes it easy to choose the optimal device for every situation.

Carefully selected features to match each individual situation, covering all patient needs in monitoring. Flexible and reliable materials and adhesives, able to follow skin movements without lifting off, allow both patient comfort and signal quality.

AMBU® WHITESENSOR 4540
 Highly conductive wet gel system which guarantees a fast and accurate trace during 12-lead ECG procedures. Thanks to the strong high-tack adhesive foam, time wasted due to electrode drop-off will be reduced. The radiolucent 4 mm slot connector allows the patient to undergo X-ray and scanner procedures.
 5 pieces per card.

AMBU® WHITESENSOR 4200
 Conductive solid gel to ensure a good signal quality during short-term ECG monitoring applications. Thanks to the flexible foam backing material, the electrode ensures ease of use and comfort during application.

AMBU® WHITESENSOR WS-00-S/50
 Highly conductive solid gel with strong adhesion to ensure a good signal quality during short-term ECG monitoring applications. Thanks to the flexible foam backing material, the electrode ensures ease of use and comfort during application.

AMBU® WHITESENSOR 4500M-H, 4500M
 It features a wet gel with good adhesion to ensure a good signal quality during short-term ECG monitoring applications. Thanks to the flexible foam backing material, the electrode ensures ease of use and comfort during application.



AMBU® WHITESENSOR 0315M
 Small size tab electrode with solid gel for 12-lead ECG. The fish tail tab design prevents electrode lift-offs even if the adapter kinks.
 10 pieces per card.

ECG PATIENT CABLES - COMPATIBLE WITH MOST BRANDS



ECG PATIENT CABLES 10 LEADS

Compatible patient cables for electrocardiography and exercise stress tests. In order to ensure the patient's safety under any circumstance, all our cables have independent defibrillation protection.

Quality is ensured by the design, the manufacturing process and the final tests performed through computerised workstations. Standard cable length 2.2 m (from connector to yoke), chest leads 0.76 m, limb leads 1.2 m. Few cables with 3.5 m length to improve usability in exercise stress tests.

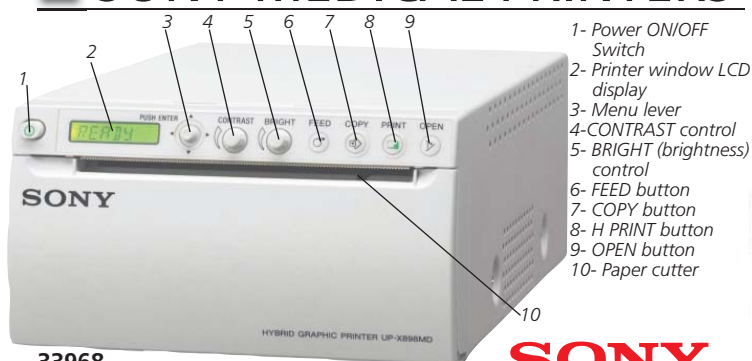
Multilingual instructions: GB, FR, IT, ES, PT, DE, NL, DK, SE, FI, LT, LV, EE, PL, CZ, SK, HU, SI, HR, RO, BG, GR.



CONNECTORS TO ECG					LEADS	
1	2	3	4	5	BANANA	SNAP
Banana	Leads	Snap	Connect.	BRAND	COMPATIBLE MODEL	
2.2 m	2.2 m	3.5 m				
54000	54001	54022	1	ASPEL	All models with Dsub connector 15 pins and screws	
54002	54003	-	2	BIOCARE	ECG101, 101G, 300, 300G, 6010, 8080, 3030, 9801, 9803, 9803G, 1200, 3000, 3010, 3030, 6010, 1210, 1216, 1230 (12 channels), 9803, iE101, iE300.	
54002	54003	-	2	BIOLIGHT	BLT-1203, E12A, E12, E65, E70, E80	
54000	54001	54022	1	BIONET	Cardiocare 2000, Cardiotouch 3000, Cardio 7, Cardio 7_S, Cardiocare 3000_S	
54000	54001	54022	1	BTL	BTL-08 L, M, S series, CardioPoint-ECG C300 and C600, CardioPoint-ERGO C300 and C600	
54004	54005	54020	1	CAMINA-EUROCAMINA	Cardiorapid and CardioSwift series	
54004	54005	54020	1	CARDIETTE-ELETTRONICA TRENTINA	AR600, 600adv, 600view; AR1200, 1200adv, 1200view; AR2100, 2100adv, 2100view. Start 100P, 100H, 200, 200HV. Daedalus View, View HES, View Ergo. DOC 101,103; micro, microruler and microtel series; Autoruler series; Excel series: Daedalus 346.	
54006	54007	-	3	CARDIOLINE	Delta 1, 3, 30, 30D, 60, 60D, 1plus, 3plus, 3/6plus. Elan, Elan1100. Delta 60plus, ElanStress	
54004	54005	54020	1		ECG100 and ECG200 series. All models AR600, 1200, 2100; E1, E1R, E3	
54002	54003	-	2	CAREWELL	ECG-1101B/G, -1103B/G/W/L/LW, PCECG-50 and all models with Dsub connector 15 pins (except -1106L, -1112L/M, T10, T12)	
54004	54005	54020	1	COLSON - DUPONT	Cardi-3, E1, E3 Cardiopraticque, Daedalus 346. All models of the series: AR, Cardipocket, Cardio, Excel, Autoruler, Microruler. All models with Dsub connector 15 pins	
54002	54003	-	2	COMEN	H3, H12, CM100, 300, 600, 1200, 1200A, 1200B and all models with Dsub connector 15 pins	
54002	54003	-	2	EDAN	SE-1, -3, -3VVS, -100, -300, -6, -600, -12, -12 express, -1200, -1200 express, -1010 (not wireless). SE-601A-B-C, -1201, ST-1212, SE-12 express	
54011	54012	54021	1	ESAOTE	P80, P80six, P80power, P8000, P8000power, P8000 tele, MyCardiopad, MyCardiopad XL, AT-10 plus, AT-102 plus, Cardiovit M2015 ecc	
54004	54005	54020	1	FARUM	All models with Dsub connector 15 pins	
54002	54003	-	2	FAZZINI	All models with Dsub connector 15 pins	
54008	54009	-	4	FUKUDA DENSHI	Autocardiner & Cardimax. FCP11, FCP2101A, FCP2155, FCP2201A, FCP4101A, FX101, MCP302, FX2111, FCP2155, FCP7101, FX3010. FX328UY, FX4010, FX7102, FX7202, FX7302, FX7402, FX7542, FX8222, FX8322, FX8328, FX328U	
54010	-	-	5	GE MARQUETTE	MAC 400, 500, 600, 800, 1000, 1100, 1200, 1600, 2000, 3500	
54000	54001	54022	2	GIMA	Cardiopocket, Smart SE-1, -3, -6, -12 Express, Gimaplay 1, Cardiogima 1M, 3M, 6M, 12, 12M, Colour ECG, PC-ECG 33320, 33321; Acquisition box series MGY. All models with Dsub connector 15 pins	
54000	54001	54022	1	INNOMED	Heart Mirror & Heart Screen series. Cardio PC/E.	
54002	54003	-	2	INTERMED	ECG-1101B/G, -1103B/G/W/L/LW, PCECG-50, all models with Dsub connector 15 pins (except 1106L, -1112L/M, T10, T12)	
54000	54001	54022	1	M4MEDICAL	M-trace PC, EX, 5.7", mini	
54000	54001	54022	1	MACQUAIRE	CT-100, -200, -200i, -200CV	
54000	54001	54022	1	MEDICAL ECONET	Cardio-M, Cardio-M plus, Cardio-MPC, Cardio E3	
54004	54005	54020	1	MEGOS	3/12b, 3/12i; Comp1x12, Comp3x12, Comp6x12, Comp3, Comp12, Comp60 and models with Dsub connector 15 pins	
54002	54003	-	2	MINDRAY	DECG-Q3A, BeneHeart R3, BeneHeart R12.	
54000	54001	54022	2	MORETTI DIMED	Pc-ecg Seiva and all models with Dsub connector 15 pins	
54002	54003	-	2	NIHON KOHDEN	Cardiofax C, Cardiofax M, Cardiofax Q, Cardiofax S, Cardiofax V. ECG-1150, ECG-1250, ECG-1250A, ECG-1250K, ECG-1350, ECG-1350A, ECG-135DK, ECG-2150, ECG-2250, ECG-2350, ECG-9010, ECG-9020, ECG-9022, ECG-9110, ECG-9110K, ECG-9130, ECG-9130K, ECG-9132, ECG-9620, ECG-9620L, PEA-1110, ECG-651.	
54000	54001	54022	1	PROGETTI	MyECG, PG ECG and all models with Dsub connector 15 pins	
54011	54012	54021	1	SCHILLER	AT-1, 1G2, -2, -2plus, -2light, -4, -101, -104, -110, -5, -6, -10, -10+, -10plus, -102, -102G2, -60, -100, -104PC. CS-6, -6/12, -12, -100, series -200 MS-2007, -2010, -2015	
54002	54003	-	2	SINOHERO	SE101, SE505, SE508, SE600, SE1200, SE1200 Light and models with Dsub connector 15 pins	
54002	54003	-	2	SONOSCAPE	All models with Dsub connector 15 pins	
54002	54003	-	2	SONOSTAR	SE-1, -1A, -3, -3B, -3C, -6, -6A, 12A, -12B, -12P, Ebox-1 and models with Dsub connector 15 pins	
54000	54001	54022	1	SPACELABS	CardioDirect C012 US8, CD12-S USB; Cardiotrack 12, Cardiocollect, Voyager V6, V12.	
54002	54003	-	2		CardioExpress SL3, SL6, SL12.	
54000	54001	54022	1	SPENGLER	Cardiomate 3, Cardiomate 6, Cardiomate 12	
54004	54005	54020	1	ST ELECTROMEDICINA	531, 531i, 563, 563i. ar600adv, ar600view, ar1200adv, ar1200view	
54002	54003	-	2	ZONCARE	ZQ-1201, -1201G, -1203, -1203G, -1203S, -1206, -1212, IMAC730, IMAC 300	

*Length from connector to yoke

SONY MEDICAL PRINTERS



33968

• 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. Space saving design: 154x240x88 mm, for flexible integration into medical carts. Multilingual manual: GB, FR, IT, PT.



33961

• 33993 SONY COLOUR PRINTER UP-25 MD

• 33961 SONY COLOUR PRINTER UP-D25 MD - 21x9.8x39.8 cm
High quality analogue A6 Dye. Sublimation Printer for use in medical applications. An ideal technology for making high quality, accurate photographic prints. USB port (only 33961)
See www.gimaitaly.com

It incorporates two types of colour adjustment function: RGB and HSV function

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

High density, high contrast thermal paper, approximately 215 prints per roll.

COMPATIBLE PAPERS FOR SONY AND MITSUBISHI PRINTERS

ULTRASOUND COMPATIBLE PAPER FOR VIDEOPRINTERS

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

Long lasting image durability for high storage durability

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

Precise, high resolution image reproduction

- first class colour intensity for highest black colour density
- outstanding, bright, sharp and detailed medical image
- high glossy, brilliant, photorealistic reproduction

Trouble-free printing and long-term use of printer

- easy tearing along the cross direction
- minimum curling for flat photo media and easy filing
- built-in anti-electrostatic layer preventing thermal head damage.



72745

72751

GIMA code	SONY	Compatibility MITSUBISHI	Paper grade	Size mm x m	Minimum order
72745	UPP-110HG	K91HG/KP91HG	high glossy	110x18	box of 5
72746	UPP-84HG	-		84x12.5	box of 10
72747	UPP-110HD	-	high density	110x20	box of 5
72748	-	K65HM/KP65HM		110x20	box of 5
72749	UPP-210HD	-	standard	210x25	box of 5
72750	UPP110S	-		110x20	box of 5
72751	-	K61S/KP61S/KP61B	high density	110x20	box of 5
72752	UPP-84S	-		84x13.5	box of 10
72753	ULSTAR-110HD	-		110x20	box of 5

GIMA ULTRASOUND GEL



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
33288	Ultrasound gel - bottle 1 l - blue	box of 18
33289	Ultrasound gel - bottle 1 l - transparent	box of 18
33276	Ultrasound gel - tank 5 l - blue	box of 2*
33277	Ultrasound gel - tank 5 l - transparent	box of 2*
33286	Ultrasound gel - bag 5 l - blue	box of 2**
33287	Ultrasound gel - bag 5 l - transparent	box of 2**
33283	Pump for tank 5 l and bag 5 l	

*Includes 2 empty bottles 250 ml **Includes 1 empty bottle 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.



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

33252

33253



33256

TECARTHERAPY CREAM

• 33251 TECARTHERAPY CREAM 1 l

33251

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



EEG PASTE

• 33262 EEG PASTE - 400 g

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

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 preserve probe from damages. It is not affected by the body salt during the use, ensures an easy application.

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

GIMA code	COSMETIC LASER & CAVITATION GEL	Minimum order
33253	Cosmetic gel - tube 250 ml	box of 40
33252	Cosmetic gel - bottle 1 l	box of 18
33256	Cosmetic gel - bag 5 l	box of 2**
33283	Pump for bag 5 l	

**Includes 1 empty bottle 250 ml and 1 nozzle for easy refill

POCKET DOPPLER WITH INTERCHANGEABLE OR FIXED PROBES



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

GIMA POCKET DOPPLERS

Small, lightweight, high sensitivity pocket Doppler. Its probes are ideal for use by a General Practitioner, vascular specialist for routine vascular examination in ER for vessel location, or by specialists in diabetes, urology and gynaecology.

Vascular flow signals and FHR are easily located using the transducer while internal signal processing minimizes noise artefacts.

The flow signal is also available to the user via the built-in loudspeaker with output level controlled by rotary volume control.

2 years warranty.

Supplied in a nice bag with probe, cable, gel tube and 7 languages user manual: GB, FR, DE, IT, ES, GR, PT.



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

SONOTRAX DOPPLERS

Large backlit LCD display (29493 only)

Up to 4 hours continuous use

SUPPORT 2MHz, 3MHz, 4MHz, 8 MHz WATERPROOF PROBES

Interchangeable, water proof probes

29496 Probe not included

29493

MDR certified

TECHNICAL SPECIFICATIONS

Size: 32x85x138 mm

Weight: 290 g (including battery)

Heart rate range: 50-210 bpm

Resolution: 1 bpm

Accuracy: ± 3 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 backlit display built-in audio recorder and rechargeable batteries with battery charger - without probe - with carrying bag
29496	2MHz waterproof probe - gynaecology
29497	3MHz waterproof probe - gynaecology
29498	4MHz waterproof probe - vascular
29499	8MHz waterproof probe - vascular
29500	Rechargeable Ni-Mh battery for 29493 - spare

GIMASONIC COLOUR DOPPLER

COLOUR SCREEN POCKET DOPPLER - without probe

- 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
- indication for probe-off and low battery
- range of probes for foetal or vascular use: 2, 3, 8 MHz probe

Suitable for use after the 12th week of pregnancy

Multilingual box and manual:

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



TECHNICAL SPECIFICATIONS	
Ultrasound working frequency:	2 MHz $\pm 10\%$
Fetal heart rate:	range: 50-240 bpm
	resolution: 1 bpm
	accuracy: ± 2 bpm
Alarm:	high limit: 160 bpm
	low limit: 120 bpm
Ultrasound intensity:	< 5 mm/cm ²
Auto power off after	1 minute no signal
Size - weight:	135x92x29 mm - 245 g
Power supply:	2 AA Batteries LR6 - 1.5 V DC
Probe:	prevent from water splashing, degree of protection IPX4

GIMA code	GIMASONIC COLOUR SCREEN DOPPLER
29480	GIMASONIC Colour screen doppler - without probe
29481	2 MHz probe - gynaecology
29482	3 MHz probe - gynaecology
29484	8 MHz probe - vascular

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 allows to discover better diagnostic information.

- iTouch (Auto image optimization)
- colour map

User interface

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

iStation™ intelligent workflow

Intelligent patient data management system

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

Storage/review mode:

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

B mode: 11959 frames M mode: 110.0 s

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

GIMA code DIGITAL ULTRASONIC DIAGNOSTIC IMAGING SYSTEM

33989 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

33991 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 - optional for old models

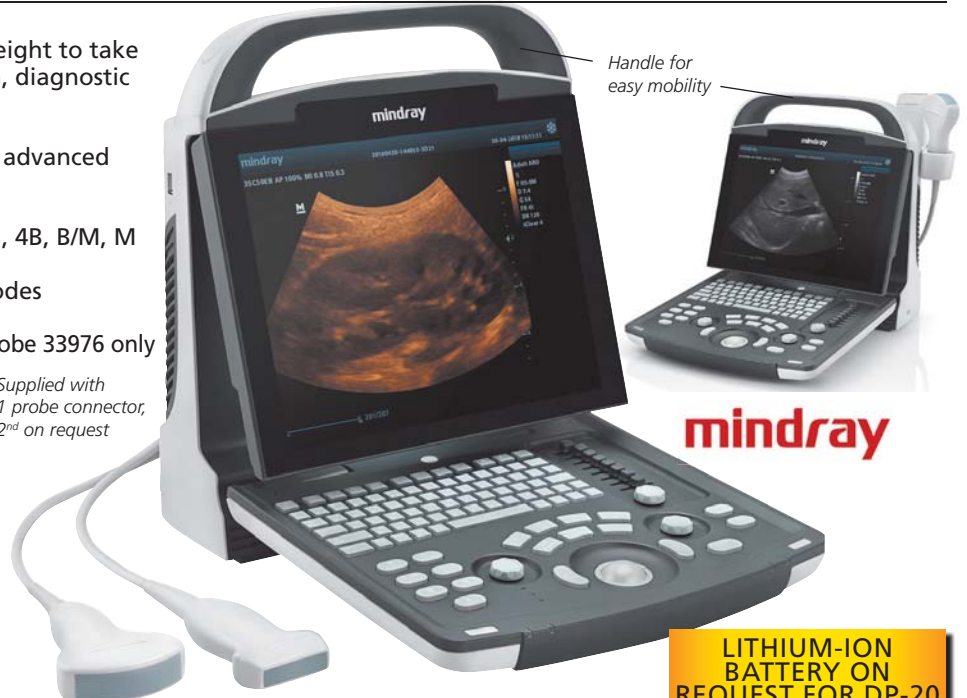
33969 PW (Pulse Wave) doppler for 33970, 33971 (usable with probes 33976, 33977 only)

ACCESSORIES

- 33875** Needle guided brackets for Linear probe (33977)
- 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 UP-X898 MD

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

Supplied with
1 probe connector,
2nd on request



iScanHelper function

Dedicated inbuilt tutorial function to enhance ultrasound experience.

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

Standard PW doppler imaging usable with all probes

It allows 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

System configured with DICOM modules

It allows to perform storage, print, Worklist, storage commitment, retrieve applications when it is connected to the relevant DICOM servers.

Features

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

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

MDR certified.

TECHNICAL SPECIFICATIONS

Dimension:	16.7x29x35.4 cm (6.57"x11.4"x13.8")
Weight:	5.4 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

Size: 40 x 24 x 42 cm



CHISON ECO2, ECO3EXP. DIGITAL ULTRASOUND SYSTEMS



GIMA code	DIGITAL ULTRASOUND B&W DIAGNOSTIC IMAGING SYSTEM
33862	CHISON ECO2 with 1 probe connector without probe
33864	CHISON ECO3EXP. with 2 probe connectors without probe

	STANDARD PACKAGE	ECO2	ECO3EXP.	ECO5/6
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: 33.5x15.5x35 cm (13.2"x6.1"x13.8"); 6 kg											
Display: 12" LED, high resolution 1024x768											
Power: AC 100-240 V - 50/60 Hz											
rechargeable lithium-ion battery (ECO2 optional, ECO3EXP. standard)											
LANGUAGE - switchable by user											
	GB	IT	FR	ES	PT	DE	PL	CZ	TR	CN	RU
Software	•	•	•	•	•	•	•	•	•	•	•
User manual	•	•								•	

ECO2 Powerful and affordable B/W system**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 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
- Chroma
- AIO (Automatic Image Optimization)

User interface

- fold-up control panel and alphanumeric keyboard
- back-lit keyboard for good visibility in dark room
- 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
- interactive back-lighting
- user defined preset

Streamlined workflow, one key to:

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

*See list of compatible printers on our websites

EASYVIEW™ Archive system

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

PW (Pulse Wave) included**Norms**

IEC 60601-1, IEC 60601-1-1 Electrical medical equipment,
IEC 60601-1-2 Electromagnetic compatibility,
IEC 60601-1-4 Programmable medical systems,
IEC 60601-2-37

PROBES AND ACCESSORIES FOR CHISON ECO SERIES



PROBES ECO1 - 2 - 3 - 5 - 6			FREQUENCY(MHz)		● Main application									
GIMA code	CHISON code	Scanning method	Main freq.	Probe band width	ABDOMINAL	OB&GYN	UROLOGY	SMALL PARTS	BASIC CARDIOL	CARDIOLOGY	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	Micro-convex	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	●			●	●					
33859**	P3-A	Phased Array	3.0	2.5 - 4.5						●				

*For ECO3EXP., ECO5 and ECO6 only **For ECO6 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 only)



PRINTERS	
33968	SONY UP-X898 MD B&W printer (for ECO1, ECO2, ECO3EXP.)
33993	SONY UP25MD colour printer (for ECO5, ECO6)
33961	SONY UPD25MD colour printer (for ECO5, ECO6)

CHISON ECO5 AND ECO6 COLOUR DIGITAL ULTRASOUND SYSTEMS



**ECO5
33865**

- **33865 CHISON ECO5 Colour Doppler 12" high resolution LED monitor, 8G high speed memory, 3 USB ports, 2 probe connectors, EASYVIEW™ archive system, without probe**
- **33858 CHISON ECO6 Colour Doppler 12" high resolution LED monitor, 8G high speed memory, 3 USB ports, 2 probe connectors, EASYVIEW™ archive system, without probe, with optional cardiac package, Super Needle, Auto IMT.**

Imaging modes:

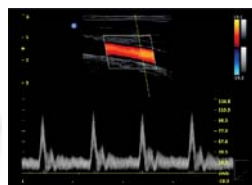
B, B/B, 4B, B/M, M, CFM, PW (ECO 5 and ECO6)
PD, DPD, B/BC, Triplex (only ECO6)

Imaging processing:

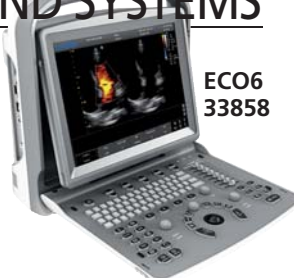
- MCI (Multiple Compound Imaging)
- i-image intelligent image optimization
- THI (Tissue Harmonic Imaging)
- SRA (Speckle Reduction Algorithm)
- full digital beam-former
- AIO (Automatic Image Optimization)
- trapezoidal
- Chroma
- full screen display mode
- automatic PW trace

Other specifications as ECO3EXP.

ECO6 EXCLUSIVE FEATURES

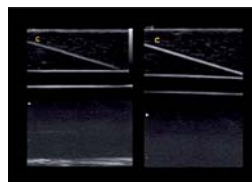


Triplex - standard
Triplex combines B, colour, with PW to help the user make diagnosis more convenient and accurate, improving efficiency.



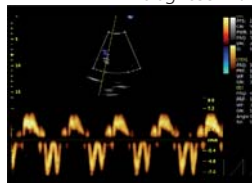
**ECO6
33858**

Auto IMT Function - optional (code 33861)
Automatically traces the intima and measures its thickness faster, more easily and more accurately.

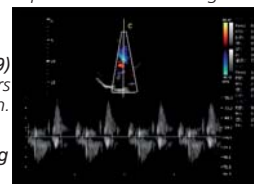
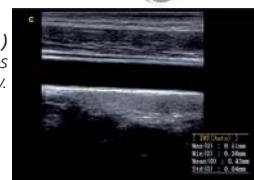


Super Needle - optional (code 33860)
With Super Needle, clinicians can see needle inside tissue more clearly during medical procedures. Needle angle up to $\pm 30^\circ$.

Continuous Wave (CW) Doppler - optional (code 33859)
Detect blood flow with high velocity and help doctors diagnose with more clinical information.



Tissue Doppler Imaging (TDI) - optional (code 33859)
New echocardiography technique that directly measures myocardial velocity. Systolic TD measurements assess left and right ventricular myocardial contractile function. Diastolic TD values reflect myocardial relaxation.



- **33859 CARDIAC PACKAGE: PROBE + CW + TDI - optional**
- **33860 SUPER NEEDLE - optional**
- **33861 AUTO IMT - optional**

ACCESSORIES AND PROBE see page 341

Accessories and Model see page 37

	LANGUAGE - switchable by user										
	GB	IT	FR	ES	PT	DE	PL	CZ	TR	CN	RU
Software	•	•	•	•	•	•	•	•	•	•	•
User manual	•	•								•	

TECHNICAL SPECIFICATIONS

Size - weight:	33.5x15.5x35 cm (13.2"x6.1"x13.8") - 6.5 kg
Display:	12" LED, high-resolution colour 1024x768
Power:	AC 100-240 V, 50-60 Hz; Rechargeable Li-ion battery 14.8 V 4400 mAh

CHISON QBit5 ECOCOLOURDOPPLER

- **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.**

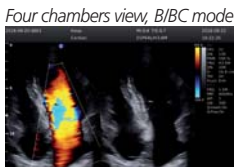
Affordable and reliable colour doppler with advanced technologies: compound imaging, quad beam former imaging, Q-image, Q-flow, X-contrast providing superb images. The Streamlined workflow and ergonomic outlook design improve work efficiency.

Imaging modes:

- Power Doppler / Directional PD
- PW mode
- duplex, triplex
- chroma B/M/PW/CW
- trapezoidal on linear probe
- B/BC
- CFM
- full screen
- B, 2B, 4B, B/M, M

Image processing technology:

- Speckle Reduction Algorithm (SRA)
- direct print to PC or video printer



GIMA code for QBit5	PROBES		FREQUENCY (MHz)		PROBE MODEL	Main application					
	Scanning Method	Main freq.	Probe band width QBit5			ABDOMINAL	OB/GYN	UROLOGY	SMALL PARTS	CARDIOLOGY	PEDIATRICS
33953	CONVEX	3.5	2-6.8			•	•	•			
33878	LINEAR	7.5	4-15						•		•
33956	MICRO-CONVEX (TRANSVAGINAL)	6.0	4-12			•					
33964	MICRO CONVEX (BASIC CARDIAC)	3.0	2-6.8							•	•
33879	CARDIAC (PHASED ARRAY)	2.5	1.5-5.3							•	•
33958	PEDIATRIC	5.0	4-10.7								•

- Automatic Image Optimization (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

- **33993 SONY UP - 25 MD COLOUR PRINTER A6 for i3, i8, QBit5**
- **33961 SONY UP-D25 MD COLOUR PRINTER for i3, i8, QBit5**



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

Size: 747x517x1283 mm
Net weight: 50 kg



SONOEYE: 4 DIGITAL COLOUR DOPPLER PALM ULTRASOUND SYSTEMS

SonoEye hand-held ultrasounds help healthcare professionals to provide high quality patient care in any location. System works connected to smartphones or tablets. Adaptable design, similar to a pad or mobile phone, increases its portability.

- light: half weight of a phone, small volume
- multiple devices: connection with smartphones or tablets
- waterproof: IPX7, free cleaning and sterilization
- use anywhere: multiple fast solution
- thumb-play: one touch to start and finish the operation, easy to use.

SonoEye is intended for diagnostic ultrasound imaging in B-Mode, M-Mode, Colour Doppler, Power Doppler, Directional Power Doppler, Pulsed Wave and Fusion Harmonic Imaging modes. Available in 4 different models:

SonoEye P2 Linear Array indicated for Small Organ, Musculoskeletal (MSK), Nerve, Lung, EM, Vascular.

SonoEye P3 Phased Array indicated for Abdominal, Cardiac, Lung, EM.

SonoEye P5 Convex indicated for Abdominal, OB/GYN, Urology, Lung, EM.

SonoEye P6 Micro Convex indicated for Pediatrics and Neonatal Abdominal, Cardiac and Veterinary imaging applications.



Cable length 3m

Programmable buttons for customized functions: gain, depth, focus, freeze, save,

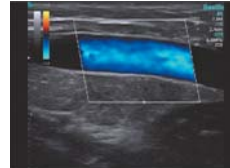
33916

SONOEYE IS SUITABLE FOR HUMAN OR VET

93/42/EEC
EN 60601-1
Type BF
continuous operation



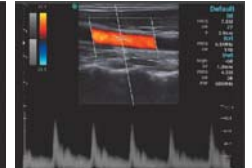
IMAGING MODES



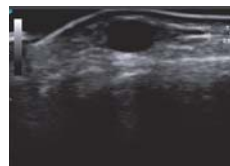
Basilic vein, C Mode



Cardiac, B Mode



Carotid, PW Mode



IV, B Mode



IVC, B Mode



Ulnar Nerve, B Mode

SONOEYE PALM ULTRASOUND SYSTEM

GIMA code	Scanning Method	Frequency (MHz)		VASCULAR	MSK	NERVE	LUNG	ABDOMINAL OB/GYN	UROLOGY	SMALL PARTS	EM**	CARDIAC	VETERINARY
		Main freq.	Frequency range										
33914	P2 Linear	7.5	7.0-12.0	●	●	●	●				●	●	
33915	P3 Phased Array	3.0	2.5-4.0					●	●			●	●
33916	P5 Convex	3.5	3.0-5.0				●	●	●		●		
33917	P6 Micro-Convex	6.5	6.0-10.0				●					●	●

TABLET FOR SONOEYE

33918 Tablet for SonoEye

**EM: Emergency medicine



Sonoeye carrying case



Light
Half weight of a phone,
highly integrated
design, less volume.

App

SonoEye works with SonoEye App for Human or Vet, free to download on www.chisonsonoeye.com

Human and Vet use

All SonoEye probes can be used on human or animals based on selected App.

Supplied with carrying case and manual (GB, IT).

CHISON
Value Beyond Imaging

COMPATIBILITY

Model
Smart Phone: HUAWEI P30 Pro, HUAWEI iV30, Xiaomi RedmiNote 8Pro (continuously updated)
Smart Pad: HUAWEI MatePad (BAH3-W59), HUAWEI MatePad Pro (MRX-W09), TECLAST T30, TECLAST T30 Pro, TECLAST M40 Air, Samsung Galaxy Tab S6 (SM-T860), Honor ViewPad V6, Honor ViewPad V7, Xiaomi Pad 5, Xiaomi Pad 5 Pro 12.4" (continuously updated)

TECHNICAL SPECIFICATIONS

Model	33914	33915	33916	33917
Probe Type:	Linear	Phased Array	Convex	Micro-Convex
Central frequency:	7.5 MHz	3.0 MHz	3.5 MHz	6.5MHz
Frequency Range:	7.0-12.0 MHz	2.5-4.0 MHz	3.0-5.0 MHz	4.0-10.0 MHz
Scanning Depth:	1.0-14.8 cm	4.9-22.7 cm	3.8-37.3 cm	4.4-20.2 cm
Footprint*:	40 mm (43.5x9 mm)	18x12.5 mm	R50 (56.98x12.5 mm)	51.17x11 mm
FOV:	NA	90 degree	59 degree	93 degree
Doppler:	Support Mode: B, M Mode, Colour Doppler, Power Doppler, DPD, PW Mode			
Image Optimal:	A/O, dynamic range, 2D map, chroma, persistence, line density, compound			
Dimensions mm:	64x170x24	64x173x24	64x172x24	64x174x24
Weight without cable:	130 g	124 g	143 g	138 g

*Contact area of the probe to patient



VIATOM WIRELESS HANDHELD ULTRASOUND SCANNERS

viatom®

FDA

CE 0123



33931

LINEAR



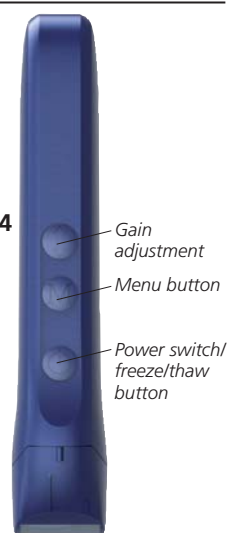
33932

LINEAR + CONVEX



33934

LINEAR + CONVEX + CARDIAC



Gain adjustment
Menu button
Power switch/ freeze/thaw button

WIRELESS HANDHELD ULTRASOUND SCANNERS

Easy to use wireless handheld ultrasound scanners. Medical staff can manage and share ultrasound scan results with patients through ultrasound software anytime, anywhere. Doctors can save cases and print reports with one click. High speed frames per second to get any small detail in maximum clarity for a quick diagnostic imaging.

- wireless connectivity, compatible with tablets and smartphones (iOS, Android)
- built-in and replaceable battery
- wireless charging support
- advanced digital imaging technology for clear images
- cost-effective and easy to carry
- suitable for hospital, emergency, clinic, outdoor
- intelligent terminal platform, powerful expansion functions on application, storage

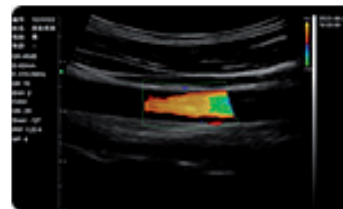
Dual head ultrasound scanner (33932)

Interchangeable linear and convex heads by simply flipping around the device.

3 in 1 ultrasound scanner (33934)

Linear + Convex + Phased Array (Cardiac) Probe, it can realize transition from shallow to deep scan without switching. Ultra-wide frequency coverage and scanning depth are suitable for whole body examination. Ultra-clear image and ultra-long standby ≥ 12 h with 4200 mAh. 3.7V super-large lithium battery. Built-in independent Wi-Fi module, which can realize delay-free image transmission without the external network, reduce data transmission delay and improve image clarity. Scanning parameters can be adjusted via a simple and intuitive

multi-touch interface: adjust depth, gain, power and color. All models have manual GB, IT.



Carotid artery



Kidney

VIATOM ULTRASOUND SYSTEM

GIMA code	Scanning Method	Frequency range (MHz)	VASCULAR	MSK	PEDIATRICS	BREAST	THYROID	CAROTID	SMALL ORGANS	LUNG	ABDOMEN	CARDIAC	GYNECOLOGY	OBSTETRICS	UROLOGY	KIDNEY	ARTERIES
33931	Linear	7.5-10	●	●	●	●	●	●	●								
33932	Linear Convex	7.5-10 3.5-5	●	●	●	●	●	●	●		●	●	●	●	●	●	
33934	Linear Convex Cardiac	7.5-10 3.5-5 2.5-5	●	●	●	●	●	●	●		●	●	●	●	●	●	●

STANDARD ACCESSORIES

	33931	33932	33934
Probe stand	●	●	
Wireless charging support	●	●	●
USB cable	●	●	●
Charger adaptor			●
Carrying case			●

MAIN USE OF ULTRASOUND PROBES

- Linear probe:** Suitable for the examination of superficial organs such as breast, thyroid, lymph nodes, etc. and blood vessels such as a carotid artery, upper extremity artery, lower extremity artery and other small organs, musculoskeletal examination.
- Convex probe:** Suitable for abdominal and pelvic organ scanning, FAST scanning, pleural effusion scanning and lung ultrasound scanning.
- Cardiac probe:** Suitable for cardiac ultrasonography of the heart, thoracic arteries and of intracranial blood vessels.



33931



33934

TECHNICAL SPECIFICATIONS

Model	33931	33932	33934
Probe type:	Linear	Linear Convex	Linear Convex Cardiac
Frequency range:	7.5-10 MHz	7.5-10 MHz 3.5-5 MHz	7.5-10 MHz 3.5-5 MHz 2.5-5 MHz
Scanning depth:	20/40/60/100 mm	20/40/60/100 mm 90/160/220/305 mm	20~80 mm 90~305 mm 90~160 mm
Head width:	40 mm	40 mm 45 mm	60 mm
Doppler:	B, BM	B, B/M, B+colour, B+PDI, B+PW	B/BM/Colour/PDI/PW
Battery life:	3~5 hours	≥ 2.5 hours	3 hours
Charging time:		2 hours	3 hours
Size:		15.6x6x2 cm	15.7x7x3 cm
Weight:	230 g	260 g	220-250 g
Image Measure:	Length, Area, Angle, Heart Rate, Obstetrics		Distance, Area, Circumference, Angle, Heart Rate, Time, Velocity, S/D, Depth
Format:	JPG, AVI, DICOM		JPG, PNG, AVI, MP4, DICOM
Frame rate:	18 frames/second		31 frames/second
Image adjust.:	BGain, TGC, DYN, Focus, Depth, Harmonic, Denoise		

GIMA 900 PRO AND PLUS VITAL SIGNS MONITORS

- 35124 GIMA 900 PRO VITAL SIGNS MONITOR
 - 35132 GIMA 900 PLUS VITAL SIGNS MONITOR
- "Vital Signs" is a line of small multi-parameter patient monitors, which can monitor the vital physiological parameters: non-invasive blood pressure (NIBP), pulse oxygen saturation (SpO₂), electrocardiogram (ECG) and temperature (TEMP).
- 3.5" LCD display for remote review (GIMA-900 Pro), and 7" high resolution touch screen (GIMA-900 Plus)
 - history data records reviewed in waveform, list and trend graph
 - USB connection for data download through integrated software (GB)

Optional printer

GIMA code	ACCESSORIES AND SPARES	
35133	Printer* - optional	*Installation done by Gima if ordered with monitor. Need service if ordered later.
35141	Paper 5.1 cm x 12 m - box of 5	
35129	Lithium re-chargeable battery - spare for 35124, 35132	
35135	Reusable adult SpO ₂ probe - spare	
35136	Reusable pediatric SpO ₂ probe	
35137	5 leads ECG cable - spare	
35127	Trolley - adjustable 73 to 113 cm	
35128	Rail clamp	
For 900 Pro	For 900 Plus	NIBP CUFF
35140	35050	NIBP cuff - 10-19 cm - pediatric
35142	35051	NIBP cuff - 18-26 cm - pediatric XL
35139	35052	NIBP cuff - 21-35 cm - adult
35143	35053	NIBP cuff - 27-42 cm - adult XL

STANDARD ACCESSORIES

- Adult SpO₂ probe
- NIBP adult cuff
- Temperature probe - skin type
- ECG cable + 10 ECG electrode
- Lithium rechargeable battery
- Power supply cable
- Dust protective mantle
- Manual (GB, FR, IT, ES)



TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS				Measuring accuracy: ± 2 bpm or $\pm 2\%$, whichever is greater
NIBP				ECG
Measuring method: Oscillometric				
Measurement mode: Manual, Auto, STAT				
Measurement range:				
Press(unit)	Adult	Pediatric	Neonate	HR display range: 15~350 bpm
SYS mmHg	40-275	40-200	40-135	HR display accuracy: $\pm 1\%$ or ± 2 bpm, whichever is greater
MAP mmHg	20-230	20-165	20-110	HR alarm delay time: ≤ 10 s
DIA mmHg	10-210	10-150	10-95	Sensitivity selection: x1/4, x1/2, x1, x2
SpO ₂				Sweeping speed: 25 mm/s
Measuring range:		35%~100%		Temperature
Measuring accuracy:		3% for range from 70 to 100%		Measuring range: 21-50°C
Low perfusion performance:		as low as 0.4%		Measuring accuracy: $\pm 0.2^{\circ}\text{C}$ for range 25-45°C
Pulse Rate				Other Technical Specifications
Measuring range:		30~240 bpm		Power supply: 100~240 VAC, 50/60 Hz
				Battery: 11.1 V / 4,400 mAh (Li-ion Battery)
				Size: 168x172x242 mm

PC-3000 MULTI-PARAMETER PATIENT MONITOR



Weight: 2.5 kg
Size: 198x93x156 mm

- 35134 PC 3000 MULTI-PARAMETER PATIENT MONITOR
- 7" high resolution colour TFT display, 5-channel waveform display
- standard parameters: ECG, RESP, SpO₂, NIBP, 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;
- carrying handle with bed-hooks
- Internal software: GB, IT, FR, ES, PT, PL, CZ, TR, CN.

STANDARD ACCESSORIES

- 1 ECG cable
- 1 Adult SpO₂ probe
- 1 AC power Adapter
- 1 NIBP cuff
- 1 Li-ion battery*
- 1 Power cable
- 10 Disposable electrodes
- 1 Body surface temperature transducer
- User manual: IT, GB, FR

*About 3 hours continuous working when battery is fully charged

GIMA code	ACCESSORIES - SPARES
35135	Adult SpO ₂ probe - spare
35136	Pediatric SpO ₂ probe
35137	5 leads ECG cable 3.75 m - spare
35138	Li-ion battery - spare
35140	NIBP cuff 10-19 cm - pediatric
35142	NIBP cuff 18-26 cm - pediatric XL
35139	NIBP cuff 21-35 cm - adult - spare
35143	NIBP cuff 27-42 cm - adult XL
35144	Carrying bag
35160	AC power adapter + cable - spare
35163	Carrying handle - spare

TECHNICAL SPECIFICATIONS

NIBP Monitoring	Measuring method: Automatic measurement by oscillating method	Adult mode: < 180 mmHg	Infant mode: < 120 mmHg
Initial cuff inflation pressure:	Adult mode: 300 mmHg		
Overpressure protection limit:			
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 $\pm 10\%$	Diastolic $\pm 10\%$	MAP $\pm 10\%$
Measurement mode:	Manual, Auto, STAT		
Automatic measuring:	1-240 min		
TEMP Monitoring	Measuring range, accuracy: 21.0 - 50.0 °C, $\pm 0.2^\circ\text{C}$		
SpO₂ & Pulse Rate Monitoring			
Transducer:	dual-wave length LED		
SpO ₂ measuring range:	0 - 100 %		
Accuracy:	70%-100% $\pm 3\%$		
Low perfusion capability:	0.4 - 5 %		
PR measuring range:	0 - 250 bpm ± 2 bpm		
ECG Monitoring			
Heart rate measurement:	± 0.4 mVp - ± 5 mVp		
Heart rate display range:	15 - 350 bpm $\pm 1\%$ or ± 2 bpm whichever is greater		
Heart rate alarm delay time:	≤ 10 s		
Sensitivity selection:	Auto, x1/4, x1/2, x1, x2, x4	tolerance: $\leq 5\%$	
Sweeping speed:	12.5 mm/s, 25 mm/s, 50 mm/s	tolerance: $\leq 10\%$	
Common-mode rejection ratio:	≥ 89 dB		
Frequency response mode:	Monitoring: 0.5 - 40 Hz	Diagnostic: 0.05 - 75 Hz	
RESP Monitoring			
Monitoring range, accuracy:	0 - 120 rpm, $\pm 5\%$ or 2 rpm, whichever is greater		
RESP alarm range:	0 - 100 bpm $\pm 10\%$		
Other Technical Specifications			
Power supply: 100 - 240 Vac, 50/60 Hz - 60 VA			
Networking port: serial/Net port			
Norms			
IEC 60601-1 Class I, type BF, IPX2			

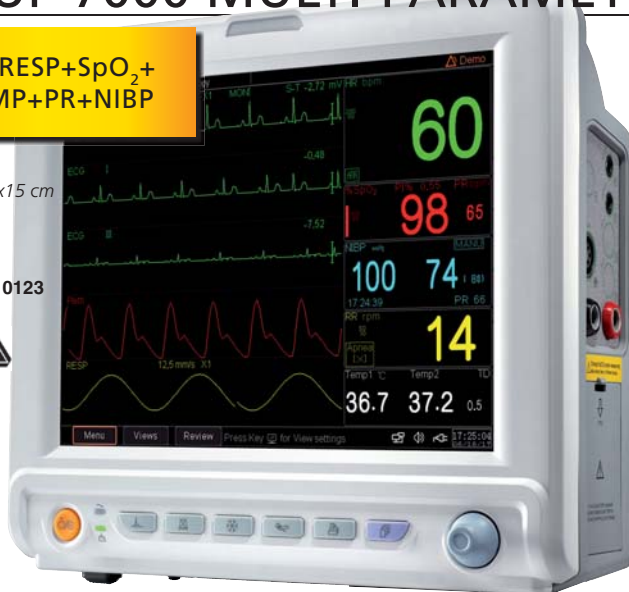


Wide option of screen views available

UP 7000 MULTI-PARAMETER PATIENT MONITOR

ECG+RESP+SpO₂+
2 TEMP+PR+NIBP

Size:
29x31.5x15 cm
Weight:
3.9 kg

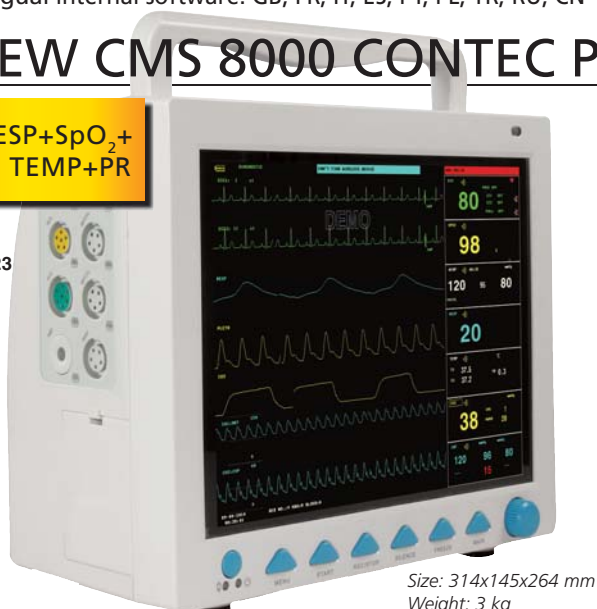


- **35145 MULTI-PARAMETER PATIENT MONITOR**
ECG, RESP, SpO₂, 2 TEMP, PR, NIBP with printer
- 12.1" high resolution colour TFT display with LED backlight
- 3 channel ECG amplification
- arrhythmia analysis and ST segment analysis
- up to 2,000 groups parameter data & 24-hour ECG waveform storage and recall
- 2,000-hour graphic and tabular trends for all parameters
- 9 trace ECG waveforms simultaneous display
- protection against interference from defibrillator
- adult/pediatric/neonate measurement modes
- visual and audible alarms
- built-in rechargeable lithium battery
- built-in thermal printer
- multilingual internal software: GB, FR, IT, ES, PT, PL, TR, RU, CN

GIMA code		ACCESSORIES AND SPARES	
35137	ECG cable - spare		35148
35141	Paper 5.1 cm x 12 m - box of 5		
35148	Trolley - adjustable 92.4 to 107.4 cm		
35129	Lithium rechargeable battery - since S.N. J3300PG00766		
Till S.N.	From S.N.	NIBP CUFFS	
J3300OB00127	J3300PG00695		
35140	35050	Pediatric - arm circumf. 10-19 cm	
35142	35051	Pediatric XL - arm circumf. 18-26 cm	
35139	35052	Adult - arm circumf. 21-35 cm	
35143	35053	Adult XL - arm circumf. 27-42 cm	
Till S.N.	From S.N.	SPO ₂ PROBES	
J3300RF01475	J3300SE01687		
35135	35329	Adult SpO ₂ probe - spare - 35329 needs 35324	
35136	35328	Pediatric SpO ₂ probe - optional - 35328 needs 35324	
-	35324	Extension cable for 35328, 35329	
STANDARD ACCESSORIES			
<div>- Adult SpO₂ probe</div> <div>- NIBP adult cuff</div> <div>- Temperature probe - skin</div> <div>- ECG cable 5 leads (RA - LA - LL - PL - C)</div> <div>- Re-chargeable battery</div> <div>- Printer</div> <div>- Power supply cable</div> <div>- Disposable electrode</div> <div>- Dust-protective mantle</div> <div>- Manual (GB, IT)</div>			
TECHNICAL SPECIFICATIONS			
NIBP Monitoring - Oscillometric			
Measuring range:	Systolic pressure:	Diastolic pressure:	Mean arterial pressure:
adult:	40~275mmHg	10~210mmHg	20~230mmHg
pediatric:	40~200mmHg	10~150mmHg	20~165mmHg
neonatal:	40~135mmHg	10~95mmHg	20~110mmHg
TEMP Monitoring			
Measuring range:	21.0°C~50.0°C ±0.2°C		
Response time:	≤ 150 sec		
SpO ₂ & Pulse Rate Monitoring			
Input dynamic range:	0%~100%		
PR measuring range:	0bpm~250bpm		
ECG Monitoring			
Input dynamic range:	±0.5mVp~±5mVp		
HR measuring range:	15bpm~350bpm		
RESP Monitoring			
Measuring method:	Thoracic impedance		
Monitoring range:	0rpm~120rpm, ±5% or ±2rpm whichever is greater		
Other Technical Specifications			
Power supply:	100~240Vac, 50/60Hz, consumption: <80 VA		
Networking port:	Ethernet port		

NEW CMS 8000 CONTEC PATIENT MONITOR

ECG+RESP+SpO₂+
NIBP+2 TEMP+PR



Size: 314x145x264 mm
Weight: 3 kg

- **35152 NEW CMS 8000 PATIENT MONITOR**
ECG, RESP, SpO₂, PR, NIBP, DUAL CHANNEL TEMP
- 12.1" TFT colour LCD display
- multilingual interface (GB, IT, FR, DE, ES, PT, NL, PL, CZ, TR, RO, RU)
- adult/pediatric/neonate measurement modes
- 8 channel waveform synchronous display
- 7 lead ECG waveform on one screen
- anti-motion, anti-ambient light interference digital SpO₂ technology
- AC/DC rechargeable lithium battery
- manual/AUTO/continuous NIBP measurement mode
- standard/OXY- graph/Trend-graph/big characters and view bed interfaces

For new 35152	For old 35151	ACCESSORIES AND SPARES
35153	35149	Adult SpO ₂ probe - 3 m cable - spare
35107	35107	Neonate SpO ₂ probe <3 kg - reusable
35104	35108	SpO ₂ extension cable
35113	35113	Pediatric NIBP cuff 18-26 cm
35146	35114	Adult NIBP cuff 25-35 cm - spare
35147	35115	Adult large NIBP cuff 33-47 cm
35116	35116	Thigh NIBP cuff 46-66 cm
35181	35154	Rectal temp probe - optional
35182	35155	Skin temp probe - spare
35183	35156	ECG cable - spare
35157	35157	Printer - optional*
35158	35158	Trolley
35161	35159	Rechargeable lithium battery - spare
32968	32968	Printer paper roll 50 mm x 20 m

*Installation done by Gima if ordered with monitor. Need service if ordered later.

STANDARD ACCESSORIES	
- Adult SpO ₂ probe	- Rechargeable lithium battery
- NIBP adult cuff and extension tube	- ECG cable
- Temperature probe - skin	- power supply cable
- manual: GB, IT	
- ECG electrodes	
TECHNICAL SPECIFICATIONS	
ECG	Measurement period in CONT mode: 5 min
5-lead, dual channel, 3-lead, single channel	Measurement alarm: 10-270 mmHg
Scan speed: 12.5 mm/s, 50 mm/s	SpO ₂
ST segment monitoring	Measurement and alarm range: 0-100%
Measurem. and alarm range: -2.0 mV +2.0 mV	Measurement accuracy: 70-100% ±2%
RESP	PR
Method: R-F (RA-LL) impedance	Measurement and alarm range: 25-250 bpm
Measurement and alarm range: 0-150 rpm	TEMP
Apnea alarm: 10-40 sec	Channel: dual channel
NIBP - Oscillometric method	Measurement and alarm range: 0-50 °C
Mode: manual/AUTO/continuous	Power supply: 100-240 V - 50/60 Hz
Measurement interval in AUTO mode: 1/2/3/4/5/10/15/30/60/90/120/240/480/960 min	Safety classification: Classe I type CF
	Defibrillation-proof applied part

K12 AND K15 PATIENT MONITORS FOR INTENSIVE CARE

- 35306 K12 MULTIPARAMETER MONITOR 12" - 5 lead ECG
- 35307 K12 TOUCHSCREEN MULTIPARAMETER MONITOR 12" - 5 lead ECG
- 35308 K12 TOUCHSCREEN MULTIPARAMETER MONITOR 12" - 10 lead ECG
- 35309 K15 TOUCHSCREEN MULTIPARAMETER MONITOR 15" - 5 lead ECG
- 35332 K15 TOUCHSCREEN MULTIPARAMETER MONITOR 15" - 10 lead ECG
- 35310 K15 TOUCHSCREEN 2 IBP+ EtCO₂ MULTIPAR. MONITOR 15" - 5 lead ECG

15" TFT display
with LED backlight
9 waveforms on screen

ECG + SpO₂ + NIBP +
RESP + 2-TEMP
2 IBP* + EtCO₂* configuration

*Only for 35310

Multi-functional patient monitors for monitoring the vital physiological signs of adult, pediatric and neonate patients. Real-time recording and displaying of parameters, such as ECG, heart rate (HR), non-invasive blood pressure (NIBP), oxygen saturation (SpO₂), respiration (RESP) and temperature (TEMP) allow comprehensive analysis of patient's physiological conditions.

- ergonomic design with intuitive user interface
- USB socket for data transfer and software upgrade
- 9 or 13 (35308 only) traces on-screen waveforms
- Windows style display view, easy to operate
- visual and audible alarm for physiological and technical alarms
- large capacity storage
- suitable for use with original Nellcor sensors
- protection against defibrillator discharge, resistance against the interference from electro-surgical unit; Cardiac pacemaker pulse detection and inhibition.

Internal software: GB, DE, FR, PT, ES, IT, PL, TR, RU.

PC software GB, IT, ES. Compatible with Windows XP, 7, 8, 10, 11.

35309



360° degree
visible indicator
with 3 level alarm

Lithium battery
up to 2.5 hours
continuous
monitoring

Optional
printer,
code
35133

GIMA code	ACCESSORIES FOR K12, K15
35133	Printer** - optional
35141	Paper 5.1 cm x 12 m - box of 5
35311	NIBP cuff - 6x11 cm neonate - optional
35312	NIBP cuff - 10x19 cm pediatric - optional
35313	NIBP cuff - 21x35 cm adult - spare
35314	SpO ₂ rubber probe*** D type - adult - opt. - need ext. cable
35315	Reusable SpO ₂ probe*** D type - neonate - opt. - need ext. cable
35316	Reusable SpO ₂ probe*** D type - pediatric - opt. - need ext. cable
35317	Reusable SpO ₂ probe*** D type - adult - spare - need ext. cable
35318	Extension cable for SpO ₂ probes - spare
35319	Rechargeable lithium battery - spare
35320	ECG cable 5 leads - spare
35322	ECG cable 10 leads - spare for 35308, 35332
35148	Trolley - optional
35321	IBP**** single use monitoring kit for 35310 - spare

***Invasive Blood Pressure (IBP) is a direct measurement of the patient's arterial or venous blood pressure. Catheter is inserted directly into a vein, artery or other pressure access areas and connected to a pressure transducer for measuring systolic, diastolic and mean blood pressures. The monitor can display data and a waveform for each pressure channel.

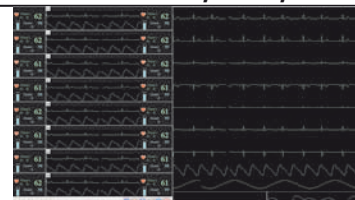
TECHNICAL SPECIFICATIONS

		TECHNICAL SPECIFICATIONS	
ECG		NIBP measurement mode:	Manual, Auto, STAT, Multi-cycle mode
Input dynamic range:	±(0.5~5 mVp)	NIBP measuring accuracy:	Mean difference: ±5 mmHg
Differential input impedance:	≥10 MΩ		Standard deviation: 8 mmHg
Bandwidth:	0.05~150 Hz (Diagnostic), 0.5~40 Hz (Monitoring)	Auto measuring intervals:	1~480 min
	1~20 Hz (Operation)	SpO ₂	
CMRR:	≥90 dB (Diagnostic)	Technique:	Dual-wavelength optical method
	≥105 dB (Monitoring & Operation)	Measuring range:	0%~100% ±2% for SpO ₂ , range 70~100%
Sensitivity selection:	×1/4, ×1/2, ×1, ×2, ×4 and Auto	PR measuring range:	30~250bpm ±2bpm or ±2%, whichever is greater
Sweeping speed:	6.25 mm/s, 12.5 mm/s, 25 mm/s, 50 mm/s	Low perfusion performance:	As low as 0.3%.
HR measuring range:	15~350 bpm ±1% or ±2 bpm, whichever is greater	EtCO ₂ (only for 35310, needs 33796 or 33797)	
Pacemaker pulse detection and rejection function		Technique:	Infrared optical method
RESP		Sampling mode:	Sidestream or Mainstream
Measuring range:	0~120 rpm ±5% or ±2 rpm, whichever is greater	Measuring range:	0~150 mmHg
TEMP		Measuring accuracy:	0~40 mmHg ±2 mmHg; 41~70 mmHg ±5%; 71~100 mmHg ±8%; 101~150 mmHg ±10%; 50 ml/min ±10 ml/min (Sidestream)
Measuring range:	21.0~50.0 °C ±0.2 °C from 25~45 °C	Flow rate:	
NIBP		IBP - 35310 only	
Technique:	Oscillometric method	Technique:	Strain gauge transducer
Typical measurement time:	<30 seconds (adult cuff)	Input sensitivity:	5 μV/V/mmHg
NIBP measuring range:	SYS: 40~275 mmHg (Adult)	Measuring range:	-50~300 mmHg ±2% or ±4 mmHg, whichever is greater
	40~200 mmHg (Pediatric)	Measuring positions:	ART, RAP, PA, LAP, CVP, ICP, AUXP1, AUXP2
	40~135 mmHg (Neonate)	Calibration:	zero calibrating
NIBP measuring range:	DIA: 10~210 mmHg (Adult)	Other Specifications	
	10~150 mmHg (Pediatric)	Power supply:	AC 100~240 V, 50/60 Hz, 60 VA
	10~95 mmHg (Neonate)	Built-in lithium battery:	11.1V/4400 mAh
NIBP measuring range:	MAP: 20~230 mmHg (Adult)	Alarming method:	3 levels audible-visible alarm
	20~165 mmHg (Pediatric)	Networking - Safety standard:	Ethernet - IEC 60601-1
	20~110 mmHg (Neonate)		

PATIENT CENTRAL STATION UP TO 64 MONITORS FOR UP7000*, K12, K15

- 35323 CENTRAL STATION SOFTWARE
Software collects all data of each bedside monitor and displays them in a collective way. It stores, monitors and analyses the trend data of ECG and other parameters. It can manage up to 64 bed monitors. It includes U-Disk (software+manual) and dongle.
- 33745 CENTRAL STATION SYSTEM PC+MONITOR

- 33746 LAN CABLE - 3 m
- 33767 LAN CABLE - 30 m
One cable for any monitor to be connected.
Customized cable length on request. Manual in: GB, IT.
*Since S.N. J3300PG00766



RIESTER RVS-100 VITAL SIGNS MONITOR



MULTIPARAMETER MONITORS

• 33800 RVS-100 NIBP + SpO₂ + PRINTER

• 33801 RVS-100 NIBP + SpO₂ + PRED. TEMP + PRINTER

The Riester RVS-100 is an easy to use vital signs monitor with touchscreen display, offering pulse oximetry, blood pressure. Temperature measurements (only 33801).

Meeting your healthcare system's needs, offering spot check, triage, and continuous monitoring modes for all neonatal to adult patients.

Key Features

- 3 measurement modes (Monitor, Spot-check, Triage)
- high-sensitivity 8" TFT colour touch screen with self-explanatory user interface and integrated help-function
- displays SYS, DIA, MAP, Pulse, Temp, Plethysmogram
- EWS, NEWS and MEWS for early detection to improve patient outcomes
- clinical grade NIBP including averaging mode (2-5 readings) and neonate mode
- Bluetooth connectivity to Riester 'tymPRO' and 'sensoPRO' thermometers
- Riester Oximax SpO₂ including neonate mode
- predictive oral Thermometer (Filac 3000), only 33801
- connectivity with the EMR - using the HL7 standard
- LAN Connectivity as standard

- programmable alarms (audible, visible) with 3 priority levels
- supports nurse call RJ11 port
- internal memory for 5,000 measurements
- internal software language: GB, FR, IT, ES, PT, DE, DK, PL, CH
- lithium-ion battery with 11 hours run time (Automatic mode, 15 min intervals)

33801 + 33810

Basket
(270x200x225 mm)
for cuffs, sensors,
cables storage



GIMA code	RIESTER code	ACCESSORIES FOR RVS-100
33805	13301	Riester SpO ₂ sensor - children - optional
33806	13302	Riester SpO ₂ sensor - adult - spare
33813	129.006	Riester pediatric velcro cuff 35.5 x 10 cm - optional
33810	13317	Trolley with basket
33811	13321	Printer paper roll 4.9 cm x 30 m - box of 20

STANDARD ACCESSORIES

SpO ₂ adult sensor	2 cuffs (adult and adult large with connectors)
SpO ₂ extension cable	Lithium battery and charger
Oral temperature probe (only 33801)	Manual (GB, IT, On request FR, DE, ES, PT, PL)
Probe covers (only 33801)	
NIBP extension tube	

TECHNICAL SPECIFICATIONS

Clinical-grade NIBP (non-invasive blood pressure)

Measuring method:	automatic oscillometric		
Measurement range:	SYS	DIA	MAP
	Adult	30-270 mmHg	10-220 mmHg
	Pediatric	30-235 mmHg	10-220 mmHg
	Neonate	30-135 mmHg	10-110 mmHg

Cuff pressure range:	0-280 mmHg, resolution 1 mmHg
Pressure accuracy:	Static ± 3 mmHg
	Clinic ± 5 mmHg, standard deviation ≤ 8 mmHg

Pulse rate range:	Circ 15 mmHg, standard deviation ≤ 8 mmHg 40-240 bpm, accuracy 1 bpm		
Initial inflation pressure:	Adult	Pediatric	Neonate
	160 mmHg	130 mmHg	75 mmHg
	Double overpressure protection (hardware and software)		
	297 ± 3 mmHg	252 ± 3 mmHg	147 ± 3 mmHg

Alarm range: SYS, DIA, MAP 0 - 300 mmHg

Riester SpO ₂	
Measurement range:	0-100 %, resolution 1 %
Accuracy:	$\pm 2\%$ (70 to 100%) - $\pm 3\%$ (40 to 69%)
	Unspecified (0 % to 39 %)

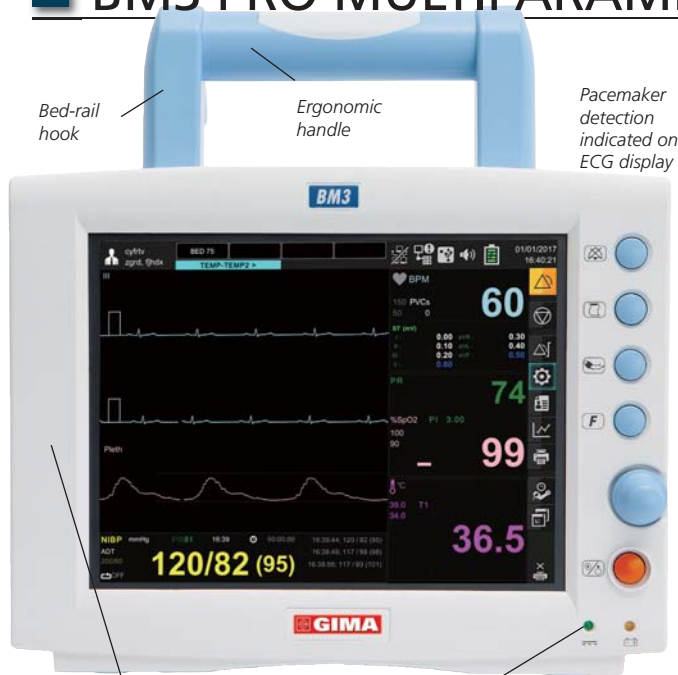
Alarm range:	0-100 %
Average time:	4 sec, 8 sec, 16 sec

Pulse rate	
Measurement range:	20-250 bpm, resolution 1 bpm
Accuracy:	± 1 % or ± 1 bpm whichever is greater

Predictive thermometer (only 33801)	
Oral (Quick Mode)	non-fever temps: 3 - 5 seconds

fever temps:	8 - 10 seconds
Oral (Standard Mode):	6-10 seconds
Measurement accuracy:	35.5 - 42°C ± 0.1 °C (± 0.2 °F)
Monitor Alarm:	Visible LEDs (Red, Yellow, Cyan)
	Audible Speaker
	Audible alarm, QRS tone
	Supports Pitch Tone and multi-level volume
	Alarm tones meet the requirement of IEC 60601-1-8
	Pressure: 45 to 85 dB test distance 1 meter from the tone
Ports:	1 AC power inlet
	1 standard RJ45 interfaces.100 BASE-TX, IEEE 802.3
	4 USB ports
	1 Equipotential grounding point
	1 RJ11 connector for nurse call
	DC out port 15V/1.2 A
Power Supply:	100 - 240 V AC, 50/60 Hz
Battery:	Lithium-Ion, rechargeable battery, 10.8 V DC, 6,600 mAh,
	Charging time to a 100%: 6 hours
	Operating time approx. 11 hours
	(new and fully charged battery with connected SpO ₂ , Temp and NIBP on AUTO mode (15 minutes interval))
	Low battery indicator and charging battery indicator
Monitor dimensions:	303x110x h 230 mm (11.93x9.05x4.33 inches)
Weight:	3600 g, (7.94 lb) including temp module, printer

BM3 PRO MULTIPARAMETER MONITOR WITH TOUCH SCREEN



Bed-rail hook

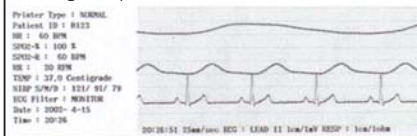
Ergonomic handle

Pacemaker detection indicated on ECG display

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

Battery status indicator - continuous operating time approx 2 h

Printing sample



Easy mounting with bed-rail hook

ECG+SpO₂+NIBP+RESP+ optional TEMP and EtCO₂



ST analysis display mode



Large parameter display mode



Trend display mode

33720 GIMA BM3 PRO TOUCH MONITOR (8" - 800x600 - TFT display)

GIMA monitor is configured with:

- 8" wide colour touch screen TFT LCD for a clear view
- Individual sweep speed setting for each parameter
- 168 full hours trend data stored
- SpO₂ measurement with very low perfusion detection and pulse beep
- 2 traces ECG
- screen freeze on/off
- external HDMI output for large screen
- connection to Central monitoring system using LAN or W-LAN
- Li-ion Battery (for 2 hours continuous operation)
- High-performance ECG detection and analysis
 - input impedance for dry skin or electrode patch
 - ST level, PVC count real-time display
 - 13 kinds of Arrhythmia analysis
 - pacemaker detection function
- Enhanced & extendible multi-parameter
 - Sidestream/Mainstream EtCO₂
- Enhanced data management
 - graphical and tabular trends
 - 20 cases per 10 sec alarm waveform stored, reviewed and printed
- USB memory storage
- B2B interconnection
 - up to 4 monitors (BM3/5/7) can be connected
- 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).

CE 0123

Moving cart increases flexibility around the ward



Angle of plate adjustable

Adjustable height

33725

33725 CART

Adjustable height, basket included.

Temperature sensors, cuffs, batteries and accessories see page 351. CO₂ sensors page 350.

STANDARD ACCESSORIES

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

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:	8" wide colour touch TFT LCD 800x600 pixels
Dimensions - Weight:	238x250xh 163 mm - 3.1 kg
Trace	4 waveforms: 2*ECG, SpO ₂ , Respiration
Indicators	Sweep speed: 6.25, 12.5, 25, 50 mm/sec Categorized alarms (3 priority levels) Visual alarm, QRS beep & SpO ₂ Pulse beep Percent (%) SpO ₂ pitch tone, Battery status, External power LED
Thermal printer:	25, 50 mm/sec (paper width 58 mm)
Battery:	Rechargeable Li-ion battery Operating time: 2 hours of continuous operation (when fully charged)
Interfaces:	LAN digital output for transferring data DC input connector: 18 VDC, 2.8 A max External HDMI output for large screen USB barcode reader USB memory data storage / SW upgrade
Operating voltage:	100-240 V, 50-60 Hz
Data storage:	168 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 Moderate: 0.5 to 25 Hz Monitoring: 0.5 to 40 Hz Maximum: 5 to 25 Hz
Pacemaker detection mode:	Indicator on waveform display (user selectable)
Protection:	Against electro-surgical 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 160 mmHg Neonatal pressure: 20 to 130 mmHg
Respirations	
Method:	Thoracic impedance
Range:	5 to 120 breath/min
Accuracy:	± 1 breath/min
Apnea alarm:	yes
Temperature Unit - optional	
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 PRO MULTIPARAMETER MONITOR WITH TOUCH SCREEN

• 33776 GIMA BM5 PRO MONITOR - 10.4" TOUCH SCREEN COLOUR TFT LCD - 7 ch ECG

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

- Enhanced & expandable multi-parameter patient monitor
- 10.4" touch screen colour TFT LCD with 6 waveforms
- individual sweep speed setting for each parameter
- 168 full hours trend data are stored
- SpO₂ measurement with very low perfusion detection
- screen freeze on/off
- oxyCRG, drug calculation
- external HDMI output for large screens
- connection to central station using LAN or W-LAN - optional
- Li-ion battery with longer time life (3 hours of continuous operation)
- real time bed to bed connectivity, max 8 monitors without server or central station
- EMR direct HL7 with editable menu

Selectable software language
(GB, DE, FR, IT, PT, PL, RO, HU, ES, CZ, BG, RU, TR, CN)

CE 0123



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

33776



STANDARD ACCESSORIES

3 lead patient cable (ECG)
Disposable electrodes: 10 pcs
NIBP tubing - 3m
Reusable child and adult cuff
Battery

SpO₂ sensor - reusable
SpO₂ sensor extension cable 2 m
Thermal printer 58 mm
DC adaptor (18 VDC, 2.5A)
User manual: GB, IT

- enhanced & expandable multi-parameters:
 - Mainstream/Sidestream EtCO₂ - optional
 - high-performance suntech NIBP (BM5ICU)
- high-performance ECG detection and analysis:
 - enhanced input impedance for dry skin or electrode patch
 - ST level, PVC count, real-time display
 - 13 kinds of arrhythmia analysis
 - pacemaker detection function
- enhanced data management:
 - graphical and tabular trends
 - USB memory storage
- 20 cases - 1 sec. alarm waveform are stored, reviewed and printed
- 33771 TEMPERATURE SENSOR 3 m - skin type - optional
- 33772 TEMPERATURE SENSOR 3 m - rectal - optional
- 33741 EXACON TEMPERATURE SENSOR 2.75 m - rectal - optional

Other accessories page 351.

GENERAL		TECHNICAL SPECIFICATIONS		Respirations	
Dimensions/Weight:	238x163xh 250 mm/4 kg	Sweep speed:	6.25, 12.5, 25, 50 mm/sec.	Range:	5 to 120 breaths/min ± 1 b/min
Trace:	6 waveform (ECGx2, SpO ₂ , RR or EtCO ₂ IBPx2)	Filter:	Diagnoses: 0.05 to 150 Hz Monitoring: 0.5 to 40 Hz Moderate: 0.5 to 25 Hz Maximum: 5 to 25 Hz	Apnea alarm:	yes
Indicators:	categorized alarms (3 priority levels), visual alarm lamp handle, QRS beep, SpO ₂ pulse beep, heart rate, SpO ₂ pulse pitch tone battery status, external power LED	S-T Segment detection range:	- 2.0 to 2.0 mV	Temperature Unit	
Thermal printer:	25, 50 mm/sec (paper width 58 mm)	Arrhythmia analysis:	Asystole, Vtach, Vfib, Bigeminy, Accent Couplet, Irregular, Pause, Pvc, Ront, Trigeminy, Vbrady, Shortrun	Range:	0° to 50°C (32°F to 122°F)
Battery:	Rechargeable Li-ion (3 hours operating time)	Pacemaker detection mode:	Indicator on waveform display (user selectable)	Accuracy:	± 0.1°C (25 to 50°C), ± 0.2°C (0 to 24°C)
Interfaces:	LAN digital output for transferring data Nurse call system connection defibrillator sync. output	Protection:	against electrosurgical interference and defibrillation	Compatible with: YSI Series 400 Temperature Probes	
DC input connector:	18 VDC, 2.8A max	NIBP		IBP - option	
Operating voltage:	100-240 V, 50-60 Hz	Technique:	Oscillometric with linear deflation	Channels:	2
SpO ₂		Pressure range:	0 to 300 mmHg ± 3 mmHg	Measuring range:	-50 to 300 mmHg
% Saturation Range:	0% to 100% ± 2 digits (70 to 100%)	Measurement Modes:	Manual-Automatic-Continuous	Measuring accuracy:	± 1 mmHg (<100 mmHg) ± 1 % of reading(>100 mmHg)
Pulse Rate Range:	30 to 254 bpm ± 2 bpm	Safety pressure:	Adult: 300 mmHg Neonate: 150 mmHg	Pulse rate counting range:	0 to 300 beats/min
ECG		Measurement range:	Adult pressure: 20 to 260 mmHg Pediatric pressure: 20 to 160 mmHg Neonate pressure: 20 to 130 mmHg	Zero balancing:	range ± 200 mmHg accuracy ± 1 mmHg drift ± 1 mmHg over 24 hours
Lead type:	3-lead, 5-lead	Accuracy:	Pulse rate: 30-220 bpm meets accuracy requirements of ANSI/AAMI ISO 81060-2-2013	Transducer sensitivity:	5µV/mmHg
Lead selection:	3-lead: I, II, III			EtCO₂ - Respironics option	
ECG Waveforms:	3-lead 1 channel 5-lead: 1/2/7 channels			Measurement mode:	Sidestream or Mainstream
Heart rate range:	Adult: 30-300 bpm Neonate/pediatric: 30-350 bpm			Measurement range:	0-150 mmHg, 0 to 19%
Heart rate accuracy:	± 1 bpm or ± 1%, whichever is greater			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

RESPIRONICS CO₂ SENSORS: CAPNOSTAT MAINSTREAM AND LOFLO SIDESTREAM

• 33796 LOFLO SIDESTREAM CO₂ SENSOR for intubated and non intubated patients

Flexible and compact CO₂ sensor that provides consistent and reliable CO₂ monitoring of adult, pediatric and neonatal patients. No calibration required. 50 ml/minute sampling rate.



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)

GIMA code EtCO₂ ACCESSORIES for 33796 - box of 10

33790	Intubated Filter Line H - adult
33791	Intubated Filter Line H - infant
33792	Non intubated CO ₂ nasal cannula - adult
33793	Non intubated CO ₂ nasal cannula - pediatric
33794	Non intubated CO ₂ +O ₂ nasal cannula - adult
33795	Non intubated CO ₂ +O ₂ nasal cannula - pediatric



• 33797 CAPNOSTAT MAINSTREAM CO₂ SENSOR for intubated patients

Small, durable and lightweight mainstream CO₂ sensor provides accurate and reliable monitoring for all intubated patients from neonates to adults. No calibration required. Fast airway measurement.

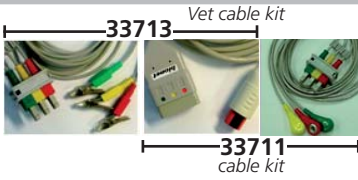
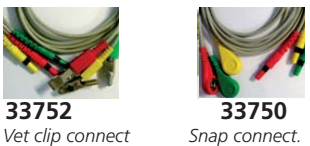

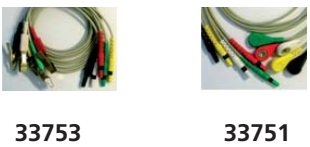
Capnostat®
Mainstream
CO₂ sensor




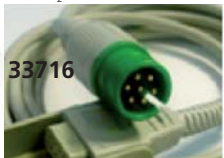
COMPATIBILITY OF LOFLO AND CAPNOSTAT CO₂ SENSORS

Brand	Model
Bionet	BM5, BM5 Pro
Creative	K15
Mindray	Various
Philips	Various


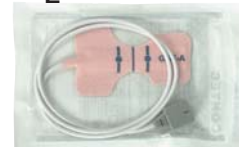
ECG CABLES FOR BM GIMA AND BIONET MONITORS

GIMA code	ECG CABLES FOR BM3 (33718, 33719, 33720, 33780, 33781)	ACCESSORIES FOR MONITOR BM3, BM5, BM7	
		NEW (after 6/2006)	OLD (before 6/2006)
33711	3-lead patient cable kit (cable+snap connectors 33748)	 33713 Vet cable kit 33760 Vet clip connect 33762 Cable 33748 Snap connect	 33752 Vet clip connect 33750 Snap connect.
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	 33761 Vet clip connect 33763 Cable 33749 Snap connect	 33753 Vet clip connect 33751 Snap connector
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 (33776, 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)		











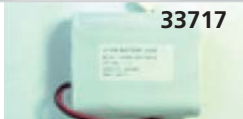
BM1, BM3, BM5, BM7 SpO₂ SENSORS

GIMA code	SpO ₂ SENSORS AND EXTENSION CABLE FOR ALL BM MONITORS	SpO ₂ REUSABLE PROBES		SpO ₂ EXTENSION CABLE
		7 pin	33730 33731	33716
33730	Adult reusable finger sensor* (> 45 kg) - 7 pin			
33731	Pediatric reusable finger sensor* (15-45 kg) -			
33732	Vet reusable sensor* - clip <small>*Needs extension cable 33716</small>			
33716	Extension cable**, 2 m (7 pin big SpO ₂ connector) since 2007 <small>**Necessary for all probes</small>			

NELLCOR COMPATIBLE DISPOSABLE SpO₂ SENSORS

 33757 33754 33755 33756		 All sensors are supplied in sterile pack with 70 cm cable.	
GIMA code	NELLCOR COMPATIBLE DISPOSABLE SpO ₂ SENSORS (not compatible with Nellcor Oximax)	TECHNICAL SPECIFICATION SpO ₂ SENSORS	
33755	Disposable neonate/adult sensor - under 3 kg (neonate foot) - over 40 kg (adult finger)	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)	
33756	Disposable infant sensor - 3-20 kg		
33757	Disposable pediatric sensor - 10-50 kg		
33754	Disposable adult sensor - over 30 kg		

BM1, BM3, BM5, BM7 MONITOR ACCESSORIES

GIMA code		ACCESSORIES FOR BM1, BM3, BM5, BM7				
33738	NIBP	Extension cable, 3 m (necessary for all cuffs)	 Kit of 3 neonatal cuffs*	 33735	 33736	
33735		Adult cuff 27.5-36.5 cm need ext. cable 33738				
33736		Child cuff - need ext. cable 33738				
32848		Obese cuff - need ext. cable 33738				
33737		Kit of 3 neonatal cuffs* - needs cable 33738				
32810	Temp	Mini cuff size 16x5 cm - needs 33738+33739	 33738	 32810	 32811	
32811		Mini cuff size 23x5 cm - needs 33738+33739				
33739		Metal connector (necessary for mini cuff)				
33771		Temperature sensor 3.0 m, skin type***				
33772		Temperature sensor 3.0 m, rectal type				
33743	Paper	Thermal paper 57.5 mm, 38 Ø	 33738	 33771	 33772	
33715		Battery				Ni-MH 12V battery - Since January 2006** - BM3, BM3 Plus
33707						Li-ion battery 10.8 V for BM3 Pro, BM5 Pro
33717						Li-ion battery - Since Sept. 2007** - new BM3, Plus, BM5
33710						Li-ion battery 11.1 V for BM1
33709	Li-ion battery 11.1 V for BM7					
33747	Adapter	AC adapter for BM3, BM5, BM7	 33715		 33717	
*Cuff range 3.3-5.6 cm, 4.2-7.1 cm, 5-10.5 cm						
**Date is approximative. Please select battery according to picture and specifications						
***Compatible with Drager MM151114, MM15822, GE 21733601, Philips HP21059B, Nihon Kohden P242A, Datascop 0206-02-0003.						

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

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

***Compatible with Drager MM15114, MM15822, GE 21733601, Philips HP21059B, Nihon Kohden P242A, Datascope 0206-02-0003

REUSABLE COMPATIBLE SPO₂ SENSORS FOR ALL BRANDS

GIMA code	OEM - Brand	N	Sensor type	Cable length	Connector type	Compatibility	Extension cable - 2.4 m
35220*	BCI	5	Pediatric finger	0.9 m		BCI: 3401, 3304, 3303, 3302, 3301, 3300; Spacelabs Burdick: PRO ₂ ; Draeger: Oxipac 2000/2500	35300
35221		1	Adult finger	0.9 m			-
35222		1	Adult finger	3.0 m			-
35225	CSI (Criticare)	6	Neonatal Y-type	3.0 m		Alaris (IVAC): VitalCheck 4400; Criticare: 503DX, 503 Spot, 504DX/P, 504DX, 506 series (except 506LN3), 507ELC2, 8100 Poet Plus, Poet (602-3A), Scholar, Scholar III	-
35226		1	Adult finger	0.9 m			-
35227		1	Adult finger	3.0 m			-
35230*	Datascope	1	Adult finger	0.9 m		Accusat, Accutorr 3/4 SAT, Accutorr Plus, Passport (Database SpO ₂)	35301
35231		1	Adult finger	3.0 m			-
35232*	Datex-Ohmeda	1	Adult finger	0.9 m		Datex-Ohmeda: AS/3, CS/3, CH/5, CH/2S, CH-RS, SAF-F, CG/2S, Cardiacap I, Cardiacap II, Cardiacap 5, Capnomac Ultima, Light Monitor, M-Estpr, Oscar II, OSP-200, Satlite Trans, Satlite, Trans Plus, System 5, ULT500	35302
35233		5	Pediatric finger	3.0 m			-
35234		1	Adult finger	3.0 m			-
35235		3	Adult Y-type ear sensor	3.0 m			-
35238	GE Datex-Ohmeda	1	Adult finger	3.0 m		GE (Datex-Ohmeda): S/5, i4 Modular Monitors with Eseries modules, Corometrics® 259 with TruSignal Ohmeda Technology	-
35239		1	Adult finger	4.0 m			-
35240		2	Adult soft-finger	3.0 m			-
35241		3	Adult Y-type ear	3.0 m			-
35243	GE	1	Adult finger	3.0 m		Ohmeda TruSat Ohmeda TruSat TD	-
35245		1	Adult finger	3.0 m		GE: Dash 2000/3000/4000 with Nellcor option, Dash 3000/4000/5000 with Ohmeda option, Solar 8000/8000M, i9500 with Tram Module 451/451N/ 851/851N, Cardiolab®/Mac-Lab® with Tram Module 451/451N, Corometrics® 120/2120 series, Eagle 1000/3000/4000 Responder 3000 with Nellcor option	-
35247*	GE TruSignal	1	Adult finger	0.9 m		TruSignal sensors and interconnect cables are backwards compatible with Datex, ohmeda and GE SpO ₂ technologies.	35303
35250	Goldway	1	Adult finger	3.0 m		Goldway: UT4000 A / 4000 A pro / 4000B, UT6000 C	-
35252	Mindray	1	Adult finger	3.0 m		PM-600, PM-5000, PM-6000, PM-7000, PM-8000, PM-9000, MEC-1000 (Nellcor based) PM-50	-
35255**	Nellcor	6	Neonatal Y-type	0.9 m		Artema: Diascope, Datascope: (Mindray): Accutorr Plus, Expert, Passport, PM-50; Dräger: Cicero, Narkomed, Vitalert 1000, GE Medical: Corometrics 118, 120, 129, 188, 510, 556, Critikon 9710, 9720, Plus, Compact, Dinamap Select, MPS, Oxyshuttle, Pro 300/400, Eagle Series, Dash Series, Hellige Eagle, 1000, 3000, Eagle SMK, SMU, SMV, SOLAR Series, TRAM Modular x50SL Series; Invivo Research: M12 (Nellcor SpO ₂), Millennia 4500 Plus 2, Invivo/MDE Escort 100 OPT11A Escort 300A, Escort II OPT30, Prism (Nellcor SpO ₂); Ivy Biomedical: 405A, 4050, 405P, 405T, Vital-Guard 450 CN, Mennen: Horizon XL (Nellcor SpO ₂), MR 1300 Mercury 1200; Nellcor: N100 (req. preamp cable), N180, N200 (req. preamp cable), N-20, NPB-75, NPB-290, NPB-295, N-390, N-395, N-3000, N6000; Nihon Kohden: BSM-1102 Life Scope EC, BSM2304 iPro (Life Scope i), BSM-4102, 4112 Procyon LT (Life Scope P), BSM-4104, 4114 Procyon (Life Scope P), BSM-9510 Life Scope M (Nellcor SpO ₂), OGS2000 PocketCare (Nellcor SpO ₂); Pace Tech Vitalmax 800 Series (cara negra Nellcor SpO ₂); Philips 78352C, 78354C, 78834C, M1020A, M1025B, M1205A, M1350B, M1 722A/B, M1732A/B, M2475B, M2601A, M3000A	35304
35256**		5	Pediatric finger	0.9 m			35304
35257**		4	Adult/neonatal wrap	0.9 m			35304
35258**		1	Adult finger	0.9 m			35304
35259**		1	Adult finger	3.0 m			35304
35260**		2	Adult soft-finger	0.9 m			35304
35261**		3	Adult Y-type ear	3.0 m			35304
35262**	Nellcor Oxitech	1	Adult finger	0.9 m		Nellcor Oximax: N-550, N-560, N-595, N-600 and Patient monitors with Oximax module	35305
35263**		2	Adult soft finger	0.9 m			-
35265**	Nihon-Kohden	4	Adult/neonatal wrap	0.9 m		Nihon Kohden: BSM-4101, 4103 4111, 4113 Life scope P BSM-5105, 5135 Life scope A BSM-2351, 2353 Life scope L BSM-2301, 2303 Life scope I, Life scope S	-
35264		1	Adult finger	3.0 m			-
35266**	Nonin	1	Adult finger	0.9 m		NONIN: 8500, 8600, 8700, 8800/9840 NONIN: 2500, 9600, 9700	-
35268	Novamatrix	6	Neonatal Y-type	3.0 m		Novamatrix: 505, 510, 511, 515B/C, 520, 7000, 7100; Oxypleth	-
35269		1	Adult finger	3.0 m			-
35272	Ohmeda	1	Adult finger	3.0 m		Datex-Ohmeda: 3740, 3710, 4700 OxiCap, 520RGM, Biox 3760, Ohmeda 3700, 3770, 3775, Rascal II, GE Medical System: 7000 series, Corometrics 511, TRAM A.R., Tram Modular x00SL Series, Mennen: Horizon XL800 (Ohmeda SpO ₂)	-
35275	Philips	6	Neonatal Y-type	1.6 m		Philips: M3, M4, MP20, MP30, MP40, MP50, MP70, MP80, VM4, VM6, VM8	-
35276		4	Adult/neonatal wrap	1.6 m			-
35277		1	Adult finger	1.6 m			-
35278		1	Adult finger	3.0 m			-
35279		2	Adult soft-finger	1.6 m			-
35280		2	Adult soft-finger	3.0 m			-
35281		3	Adult Y-type ear	3.0 m			-
35283	Siemens/Dräger	2	Adult soft-finger	3.0 m		Philips: 1205, M1205A, 78352C, 78834C, 78354C, M1020A, M1025A, M1025B, M1350B, M1772A/B, M1732A/B, M2475B	-
35285		1	Adult finger	1.6 m			-
35286		2	Adult soft-finger	1.6 m			-
35287		3	Adult Y-type ear	1.6 m			-

*These SpO₂ sensors need extension cable for connection to device.

**Optional extension cable. See last column

All products are supplied with manual in GB, FR, IT, ES.