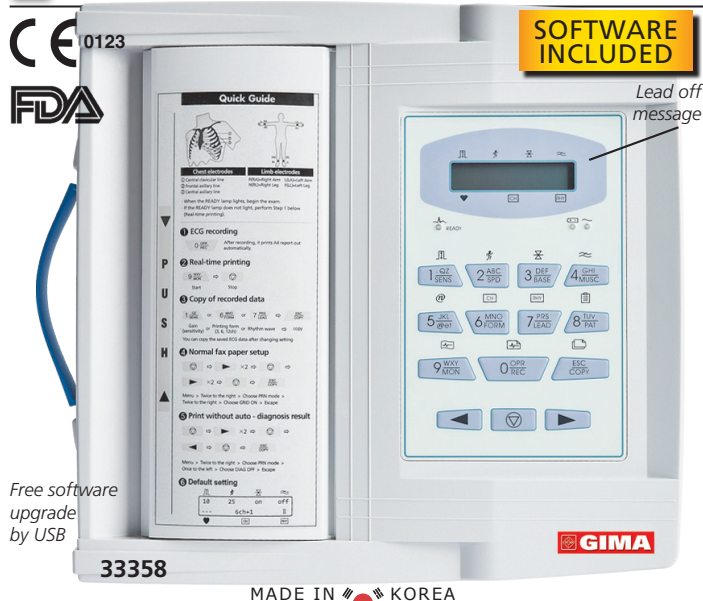


# MULTI CHANNEL ECG WITH INTERPRETATION ON PAPER



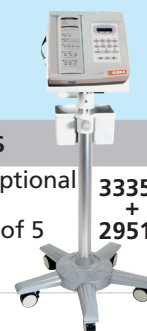
Free software  
upgrade  
by USB

- **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 $\mu$ V (p-p) max input impedance: >50M $\Omega$ Input voltage range: $\pm$ 5 mV CMRR: greater than 105 dB DC offset voltage: $\geq \pm$ 400mV Patient leakage current: < 10 $\mu$ 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	



GIMA code	CARDIOGIMA 12 ACCESSORIES	
29536	Rechargeable lithium battery for 33358 - optional	33358 + 29519
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	

# 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 $\mu$ A
Input impedance	$\geq$ 50 M $\Omega$
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	

