MINDRAY BENEHEART R3 ELECTROCARDIOGRAPH

• 33301 MINDRAY BENEHEART R3 ELECTROCARDIOGRAPH 3 channels

BENEHEART R3 is a lightweight portable cardiograph for resting ECG diagnosis.

Reliable analysis - Glasgow algorithm
BeneHeart R3 utilizes the University of Glasgow ECG analysis algorithm, one of the world-leading resting ECG interpretations with 50 years of history.

Great Portability - only 1.2 kg
The BeneHeart R3 weighs only 1.2 kg with battery, easy to carry.

5" clear colour display
5" colour screen 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. You can easily switch between these two styles of paper without dismantling the pressure lever.

*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.*

• 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

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,
Glasgow algorithm* in GB, IT, DE	PL, ES, TR

*Available in 13 languages as internal software by mid 2014

TECHNICAL SPECIFICATIONS

Power
Power supply: AC input without external power adaptor or battery operation
AC power: 100 to 240 VAC ± 10% 60 VA
Battery-type: rechargeable Lithium ion battery 11.1 V typical, 2,500 mAh
 - capacity: 6 hours of continuous operation without recording or 500 ECGs in 2.5 x 4 format at 25 mm/s and 10 mm/mV
 - charge time: 3.5 hours with power off
Processing
ECG analysis samplig rate: 500 samples/second (sps)
Digital sampling rate: 1,000 samples/second/channel
Pacer detection sampling rate: 16,000 samples/second/channel
ECG amplifier: DC-coupled
Acquisition mode: Pre-acquisition or post-acquisition provide 10 seconds of instantaneous ECG acquisition

Baseline drift filter: 0.05 Hz, Baseline Drift Removal (BDR)
AC filter: 50/60 Hz ± 0.3 Hz
ADC: 24 bit
Imput impedance: 50 MD at 10 Hz, defibrillator protected
Patient leakage: < 10 µA
Heart rate meter: 30 to 300 BPM ± 10% or ± 5 BPM, whichever is greater
Sensitivity/gain: 5, 10, 20 mm/mV, Auto
DIsplay 24 bit Colour display TFT LCD with LED graphics backlit
Resolution: 800x400
Display data: Patient ID, gender, age, heart rate, clock, battery power indicator, waveforms, lead labels, speed, gain, filter settings, warning messages, information messages, network status and USB
Thermal printer: Dot array/Width 80 mm/speed 5, 12.5, 25, 50 mm/s

Software
Measurement and interpretation: according to University of Glasgow ECG analysis algorithm
Resting ECG mode: Records and prints 12-lead resting ECG with 10-second duration as a standard
Patient information: Patient ID, secondary ID, age, date of birth, gender, race, medication class and V3 electrode placement
Internal storage: 800 ECGs in internal memory
ECG Storage format: PDF format and Mindray storage format
Multi-language internal software: GB, FR, IT, ES, DE, PL, PT, TR, RU, HU, RO, CZ, CN
Report formats Thermal printer/PDF/A4/letter
Size/Weight: 250x194xh 56 mm/1.2 kg including battery

PC-ECG WITH INTERPRETATION SOFTWARE AND USB PORT

• 33320 PC-ECG + ECG LAB SOFTWARE
Innovative PC-ECG device that can be connected to your PC via USB port. No power cable is required as it is powered through the USB PC cable. The unit is supplied with a 10 banana plug ECG cable (length 295 cm) and a powerful interpretation software (GB, FR, IT, DE, ES, PT, CN).
Main software features:
- **12 lead resting ECG with interpretation**
- **vector ECG**
- sampling screen colour customization   - multi ECG report formats
- standard or thermal paper print, B&W or colour
- auto interpretation On or Off   - measurement table
- tests comparison   - 90s resting ECG full disclosure
- multi hour ECG monitoring with holter analysis
- simple exercise stress test with report
- e-mail, PDF, ASCII, HL7, Dicom, GDT Interfaces
• 33328 ECG CABLE - SPARE
• 33321 PC-ECG+CARDIOLOGY SOFTWARE
Same as code 33320 but with the following specialist functions:
- timed vector ECG
- SAECG (Signal Averaged ECG) ventricular late potentials analysis
- QTd analysis   - hour ECG
- High Frequency ECG (HFECG)
- Frequency Cardiogram (FCECG)   - simple exercise ECG
• 33322 CARDIOLOGY SOFTWARE to upgrade 33320 into 33321

FCG CAD gram to locate coronary artery disease and ischemia

3-VCG analysis

QT Dispersion QTD analysis with chroma map
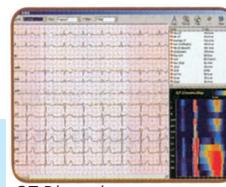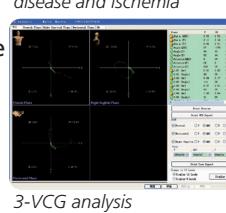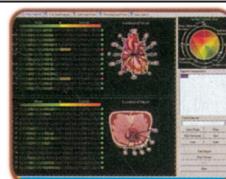
Above 3 pictures refers to code 33321

PC not included

Only 550 g
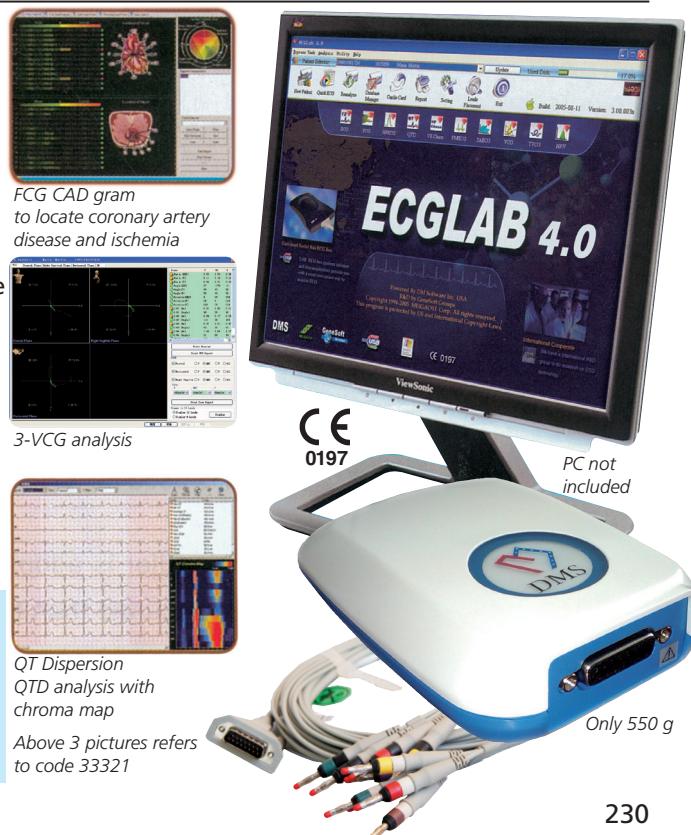
TECHNICAL SPECIFICATIONS

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

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