Responder 2000

Small, lightweight and powerful Hospital defibrillator

GE introduces the Responder® 2000, a technologically advanced, biphasic defibrillator-monitor engineered specifically to meet the needs of medical professionals in hospitals and clinics worldwide. Its light weight and powerful rechargeable battery make it one of the most portable units on the market.

Responder 2000 features manual and semi-automatic defibrillation modes, and can be used to perform cardioversion with ECG input from GE's Dash® or Solar® patient monitors.

Every Responder 2000 incorporates the patented RHYTHMx® analysis algorithm and STAR® biphasic waveform technology – enabling quick, accurate arrhythmia identification and treatment – and delivers energy via pediatric-adaptable external paddles, adhesive electrodes, and internal paddles.

- 3- and 5-lead ECG
- SpO_2 (via Datex-Ohmeda sensors) optional
- Transcutaneous pacing (demand and fixed) optional
- Simple-to-navigate user interface
- Customizable settings
- Internal memory stores 40 20-second ECG strips
- Pediatric-adaptable external paddles
- Bright, full-color, backlit display
- Available in 9 languages

Responder 2000 specifications

General

Dimensions	30.0 cm (11.8 in.) x 27.2 cm (10.7 in.) x 18.8 cm (7.4 in.)
Weight	4.8 kg (10.6 lbs.) with adhesive defib pads and battery
Power supply	Mains and rechargeable Li-Ion battery (11.1V, 6600 mAh) 90-264 VAC, 47-63 Hz With new and fully charged battery, delivers a minimum of 50 maximum-energy shocks or 4 hours monitoring

Ambient conditions for storage and operation

Temperature, storage	-20° C (-4o F) to 60° C (140° F)
Temperature, operation	0° C (32° F) to 50° C (122° F)
Relative air humidity, storage	10% to 95% RH, non-condensing
Relative air humidity, operation	same as above
Air pressure, storage	570 hPa to 1030 hPa
Air pressure, operation	same as above

ECG monitoring

Patient connection	3-lead ECG cable, 5-lead ECG cable, external paddles, adhesive defibrillation electrodes
Input protection	Fully defibrillator protected
Pacemaker Spike Display	Detects pace pulses of 0.1 ms to 2.0 ms, with a pace-pulse amplitude of ±20 mV to ±700 mV
Bandwidth	0.5 Hz to 100 Hz via ECG cables; 3 to 33 Hz via external paddles & defibrillation electrodes
Lead Select	Displayed on monitor
ECG Size	0.25, 0.5, 1.0, 2.0, and 4.0 cm per mV
Heart Rate	25 to 300 BPM
HR Alarm	User selectable in increments of 5 BPM: tachycardia 40 to 300 BPM and bradycardia 25 to 140 BPM; may be turned off

Memory

	Up to 40 ECG strips of 20 seconds duration including 4 seconds of history, with heart rate, lead, filter, date, time, cause of recording (defib, alarm, manual), selected energy, delivered energy, synchronization mark, alarm limits. Archiving of the last 5,000 events with date and time

Defibrillator

Modes of operation	Semi-automatic and Manual (includes cardioversion and auto-sequence functionality)
External and internal defibrillation	Synchronous and asynchronous
Form of shock	STAR biphasic, escalating variable energy
Energy levels	2, 3, 5, 7, 10, 15, 20, 30, 50, 70, 100, 150, 200, and 270 Joules, delivered into 50 ohms resistance
Energy selection	Rotating knob on unit; auto sequence, user programmable
Capacitor-charging time	With mains power or fully-charged battery, to 200J in 5 seconds; to 270J in 7 seconds with no charge on capacitors
Defibrillation	Via external paddles, internal paddles (spoons), or adhesive therapy electrodes (pads)
ECG derivation	Via 3-lead (I, II, III) and 5-lead (I, II, III, aVL, aVR, aVF, V) ECG cable or via combined defib/pacing electrodes
Printer	60 mm paper, 2 registration channels, and 25 mm/sec feed rate

Each Responder 2000 package includes one (1) defibrillator-monitor,
one (1) power cord, one (1) rechargeable battery, one (1) set of pediatric-adaptable
external paddles, one (1) roll of paper and one (1) user manual.

Responder 2000 specifications (continued)	
External pacemaker	
Operating modes	Demand and fixed
Pulse frequency	30 to 180 pulses per minute, +/-5%
Pulsed current	0 to 140 mA, in 5 mA steps, into a 25-ohm to 200-ohm load.
Accuracy	+/-10% or 3 mA, whichever is greater
Pulse width	40 ms +/-4 ms
Pulse form	Monophasic rectilinear current pulse
SpO$_2$	
Saturation display	1 % to 100%, in 1% intervals
Format	Plethysmogram, digital value of percent saturation, and upper and lower alarm limits
Sensor compatibility	Datex-Ohmeda
User interface	
Hard keys	Power, charge, shock, and manual buttons; trim knob
Display	Color, backlit LCD, 2-channel (i.e., one ECG, one SpO$_2$)
Resolution	115 mm x 86 mm, 320 x 240 pixels
Languages	Dutch, English, French, German, Italian, Portuguese, Russian, Spanish, and Swedish

Lightweight and portable; easier to hold, carry and position

Brilliant, high-contrast, color display with wide-angle viewing

Defibrillation via pediatric-adaptable external paddles, adhesive defibrillation electrodes, or internal paddles.

Quick Look ECG via external paddles

Event and data recorder

Defibrillation in manual mode (including synchronized cardioversion) and semi-automatic mode

Easy-to-use trim knob

Hard keys for "Charge", "Shock", and "Manual Mode" make performing a rescue even easier

Powered by 6,6 Ah Li-Ion rechargeable battery, or by mains 90-264 V

Power on

ECG via 3- or 5-lead cables

Healthcare Re-imagined

GE is dedicated to helping you transform healthcare delivery by driving critical breakthroughs in biology and technology. Our expertise in medical imaging and information technologies, medical diagnostics, patient monitoring systems, drug discovery, and biopharmaceutical manufacturing technologies is enabling healthcare professionals around the world discover new ways to predict, diagnose and treat disease earlier. We call this model of care „Early Health." The goal: to help clinicians detect disease earlier, access more information and intervene earlier with more targeted treatments, so they can help their patients live their lives to the fullest.
Re-think, Re-discover, Re-invent, Re-imagine.

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GE imagination at work

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