The Smallest, Lightest, Most Advanced Defibrillator Monitor Ever Made
All the Capabilities You’ll Ever Need

Only 11 lb (5 kg). Half the weight and a third of the size of any unit in its class. The M Series has everything you need for cardiac resuscitation: fast, easy-to-use defibrillation, external pacing, ECG with advanced monitoring, built-in AC or DC power, and an integrated information management system.

M Series Specifications

ECG Monitoring
Patient Connections: 3-lead ECG cable, 5 lead ECG cable, 12-lead ECG cable, paddles or MFE Pads. Selectable by front panel switch. Input Protection: Fully defibrillator protected. Special circuit prevents distortion of ECG by paper pulsue. (Pacer version only.)

Implanted Pacemaker Spike Display: Dedicated circuitry detects most implanted pacemaker spikes and provides standard display marker of spike on ECG trace.

Bandwidth: 0.5-40 Hz (3 dB) or 0.5-30 Hz; 0.05-150 Hz diagnostic.

Lead Selection: Displayed on monitor
- ECG Size: 0.5, 1, 1.5, 2, and 3 cm/mV - display on monitor
- Heart Rate: Digital display 0-300 bpm ±5%
- Heart Rate Alarm: On/off display on monitor. User-selectable, tachycardia 60-280 bpm, bradycardia 20-100 bpm

1 Volt ECG: Output 1.0 volt/cm of deflection on strip chart paper. - 25 ms delay from patient ECG input.

Display Format: Non-fade moving bar display

SmartAlarms™: Repeated ventricular fibrillation with amplitude > 100 µV and wide complex ventricular tachycardia with rates greater than 150 bpm.

Multi-Frequency Electrode Impedance Measurement Range: 0-250 ohms.

Display

Screen Type: High-resolution display.

Screen Size: 5 inches (14.2 cm) diagonally.

Sweep Speed: 25 mm/sec.

Viewing Time: 4 seconds.

Channel: 2.


Defibrillator

Waveform: Damped sinusoid or ZOLL Rectilinear Biphasic.

Energy Selection: Selectable at 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 15, 20, 30, 50, 75, 100, 150, 200, 300, 360 joules. (Delivered into 50 ohm.) Selected using controls on serrum paddle or defective front panel.

Rectilinear Biphasic Energy selection up to 200 joules maximum.

Charge Time: Less than 7 seconds with a new fully charged battery (first 15 charges to max energy).

Depolarized barunary will result in a later defibrillator charge time.

Energy Display: Monitor displays both selected and delivered energy.

Synchronized Mode: Synchronizes defibrillator pulse to patient’s bradycardia. “SYNC” message displayed on monitor. Markor on display and recorder paper identifies ‘/wave energy discharge point.

Advisory Function: Single analysis or programmable auto re-analysis x3 with programmable auto energy level selection, screen prompts, and voice prompts. AED Function: Auto analysis and charge x3 with programmable auto energy level selection, screen prompts, and voice prompts.

Charge Controls: Control on apex paddle and on device front panel.

Paddles: External anterior/anterior adult and pediatric. Adult paddles slide off to expose pediatric paddles.

Multi-Frequency Electrode (MFE) Pads: Specifically designed adult anterior/posterior pre-gelled ZOLL MFE Pads, and Multi-Frequency stat•padz™ packaged in pairs.

Built-In Defibrillator Tester: Tests defibrillator energy output and continuity of universal cable and paddles; documented on PCMCIA card and strip chart.

Defibrillator Advisory: Evaluates electrode connection and patient ECG to determine if defibrillation is required.

Shockable Rhythm: Ventricular fibrillation with amplitude > 100 µV and wide complex ventricular tachycardia with rates greater than 150 bpm.

Multi-Frequency Electrode Impedance Measurement Range: 0-250 ohms.

Pacemaker (Pacer Version Only)

Type: VVI demand, asynchronous (fixed rate) when used without ECG leads or in AEN mode.

Pulse: Rectilinear constant current, 40-2 milliseconds, amplitude variable 0 to 140 mV ±5% or 5 mV, whichever is greater. Digitally displayed on the monitor (increments or decrements by a value of 2 mA); rate variable from 30 to 180 ppm ±1.5% (increments or decrements by a value of 2 ppm).

Output Protection: Fully defibrillator protected and isolated.

Multi-Frequency Electrode (MFE) Pads: Specifically designed pre-gelled ZOLL stat•padz™, pre-pads™ and pre-padz™ MFE packaged in pairs.

Recorder

Paper: 80 mm thermal (grid width): 90 mm (paper width).

Speed: 25 mm/sec, 6-second delay.

Annotations: Time, date, defibr energy, heart rate, pacer output (pacer version only). QRS sync marker, ECG size, lead, alarm, defibr test On/Off, analyze ECG, analysis halted, noisy ECG, shock advised, no shock advised, ECG too large, ECG too small, and diagnostic bandwidth.

Printing Method: High-resolution, thermal array print head.

A universal connector for paddles and pads eliminates confusing adapters and misconnections that can delay life-saving efforts.

Specifications subject to change without notice.

ZOLL Data Control, SmartAlarms, stat•padz and stat•padz™ are trademarks of ZOLL Medical Corporation.

© ZOLL Medical Corporation 2002. All rights reserved. 9656-0143 Printed in USA 2004 4/02