

Biphasic technology, pacing and monitoring all in one portable device

The VidaStat DM operates in both semi-automatic AED mode, with easy to follow step-by-step visual and audio instructions, and biphasic manual defibrillation mode with maximum energy level of 360 Joules. The VidaStat has a full range of monitoring options, including 3 Lead ECG, Nellcor SpO2, Omron NIBP, IBP, temperature and Respironics EtCO2.



Features:

- Manual and AED operation
- Non-invasive Pacing Mode
- Advanced Biphasic Technology
- Pediatric and Adult Paddles
- Data storage for up to 100 patients
- Rechargeable dual battery system
- Integrated thermal printer
- SD Card & USB allows you to review data stored and software upgrade

- LCD
Waveform &
Text display
- Colin
NIBP
(optional)
- Temperature
1 & 2
(optional)
- IBP
1 & 2
(optional)
- Respironics
Capnography
(optional)



Specifications:

Display	
Screen Size	170.0x128 (mm) (8.4 in diagonally across the TFT-LCD screen)
Screen Type/Color	Liquid Crystal Display (LCD) Color
Resolution	800x600 pixels

Controls	
Standard Knob; Mode key (Off, AED, Manual, Pacing and Monitor); 11 buttons (Shock, Select Energy Level, Charge, Analyze, NIBP, LEAD, Alarm, Size, Print, RATE, mA); 5 soft key	

Alarms	
Categories: Patient Status and System Status	
Priorities: Low, Medium and High Priorities	
Notification: Audible and Visual	
Setting: Default and Individual	
Alarm Volume Level: 45 to 85 dB	

Physical Characteristics and Printer	
Instrument	
Dimensions	340x305x210 (mm) (W*H*D) including a battery excluding paddles, options and accessories
Weight	6.16 kg including battery excluding paddles, options and accessories

ECG: Type CF with defibrillation protection
 SpO2: Type CF with defibrillation protection
 Temperature: Type CF with defibrillation protection
 EtCO2: Type CF with defibrillation protection
 NIBP: Type CF with defibrillation protection
 IBP: Type CF with defibrillation protection
 Paddle: Type CF with defibrillation protection
 Mode of Operation: Continuous

Printer	
Type	Thermal
Weight	190g
Number of Channels	1 to 3 channels
Paper Width	80 mm
Printer Speed	25 mm/s

Electrical	
Instrument	
Power Requirement	AC Mains 100 to 240 V, 50/60 Hz, 60 to 160 VA
	DC Mains 18Vdc, 7.0A with DC/DC adapter

Battery (Option)	
Type	Li-ion battery
Voltage	14.4V / 6600mAh
Discharge	A minimum of 200 shocks at 200 Joules (per battery)
Operating Time 5 hours (per battery)	At the following condition: no printing, no external communication, no audible alarm sound and room temperature: 25°C Recharge 5 hours with VitaStat turned on/off
Dual Battery	Automatic Switching

Environmental Conditions	
Operation	
Temperature	0 to 50°C (32 to 122°F)
Humidity	15 to 95% RH, non-condensing
Altitude	-170 to 4,877 m (-557 to 16,000 ft)
Water Resistance	IP34



Defibrillator

Biphasic Waveform: Biphasic Truncated Exponential
Resuscitation Guidelines: Selectable AHA/ERC

Manual Mode

Shock Energy Level: External Paddles:
1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 15, 20, 30, 40, 50, 75, 100, 125, 150, 175, 200, 300, 360J

Automatic Discharge Time: 60 seconds

Charging Time to 200J: Within 6 seconds with rated main voltage/DC main Voltage (battery within 7 seconds)

Charging Time to 360J: Within 8 seconds with rated main voltage/DC main Voltage (battery within 9 seconds)

Synchronous Cardioversion: Energy transfer begins within 60msec of the QRS peak

AED Mode

1 ch ECG measurement

Lead	Lead II
Patient Impedance	25 to 175 Ohm
Heart Rate	20 to 300 bpm
Charging Time to 200J	Within 6 seconds with rated main voltage/DC main Voltage(battery Within 7 seconds)

Delivered Energy

The VitaStat delivers shocks to load impedances from 25 to 175 Ohms. The duration of each pulse of the waveform is dynamically adjusted based on delivered charge, in order to compensate for patient impedance variation, as shown below;

Load resistance (Ohm) Delivered energy (Joule)

25	203
50	198
75	200
100	199
125	198
150	197
175	197

Pacer

Pacing Mode	Demand or non-demand
Pacing rate	30 ppm to 180 ppm
Resolution	2 ppm
Accuracy	± 1.5 ppm
Output current	0 mA to 140 mA
Resolution	2 mA
Accuracy	± 5% or 5 mA

QRS Marker: In the demand mode

ECG	
Heart Rate	
Measurement Rate	0, 20 to 300 bpm
Resolution	1 bpm
Accuracy	±5 bpm

ECG (Electrocardiograph)

Optional Leads	3 / 5 / 12 Leads
Lead I, II, III, aVR, aVL, aVF, V1, V2, V3, V4, V5, V6, Paddles, Pads	
Lead Off Detection	Detected and displayed
Pacer Detection	Detected pacer pulses of ±2mV to ±700mV with pulse widths of 0.1 to 2msec and rise times 10% of width not to exceed 100msec

Input;

Input Impedance	5 M Ohm or more
Input Dynamic Range	±5mV AC, ±300mV DC
Voltage Range	±0.5mV ~ ±5mV
Signal Width	40 to 120 ms (Q to S)

Output (Frequency Response);

ECG Filter	3/5 Lead; 0.5 to 21 Hz
	0.05 to 40 Hz
	1 to 21 Hz
	12 Lead; 0.05 to 40Hz
	0.05 to 150Hz

ECG size	5.0, 10.0, 15.0, 20.0, 30.0 mm/mV
Display Sweep Speeds	25.0 mm/sec
Display Sensitivity	10 mm/mV
Pacing Pulse Detection	On, Off
Electrode Disconnect Alarm	Display and/or sound
Common Mode Rejection (CMRR)	90 dB or more
Defibrillator Discharge Recovery	less than 5 sec per IEC 60601-2-27

Respiration

IM Respiration

Technique	Impedance Pneumography
Range	0, 3 to 120 breaths/min
Resolution	1 breaths/min
Leads	RA to LA
Base impedance	500 to 2000 ohm
Delta impedance	0.5 to 3 ohm
Lead Off Condition	Detected and displayed
Defibrillator Protection	Protected

AW Respiration

Technique	Non-dispersive Infrared Spectroscopy
Range	0 to 150 breaths/min
Accuracy	±1 breaths/min
Display Sweep Speeds	25 mm/sec
Resolution	±0.1°C