

SPECIFICATIONS

LIFEPAK 9P

defibrillator/monitor/pacemaker

ECG MONITOR

ECG Lead Selections:	Std, Paddles, I, II, III
Input:	Isolated ECG via QUIK-LOOK® defibrillator paddles, FAST-PATCH® disposable defibrillation/ECG electrodes or 3-lead patient cable.
Patient Cable Length:	4.0m (13 ft) total length; 3.1m cable (10 ft) with 0.9m leads (3 ft)
Common Mode Rejection:	With notch filter engaged, 100dB minimum with respect to chassis ground and 65dB minimum with respect to isolated ground, when measured at 60Hz. Common mode range for patient cable input ≥ 10 Volts peak with respect to isolated ground.
Monitor Display Size:	102mm (4 in) wide x 76mm (3 in) tall, non-fade
Sweep Speed:	25mm/second
Frequency Response:	Non-diagnostic
ECG Leads:	1.0 to 40Hz (-3dB)
Paddles:	2.2 to 20Hz (-3dB)
ECG Size:	Adjusts amplitude of ECG trace on monitor, strip chart recorder and ECG out.
Heart Rate Meter:	3 digit readout displays rates from 20 to 300 bpm. Heart rates outside this range do not yield valid systole tones or heart rate display. Heart rate meter is disabled during pacing.
Heart Rate Alarm:	User selectable alarm limits. Three high/low settings (150/40, 120/60, 160/90). Other limit options available via SET UP menu. Heart rate alarms are disabled during pacing.
1 mV Cal:	Momentary pushbutton switch on rear panel simulates a 1 mV signal pulse to the ECG input.
ECG Output:	1 Volt/mV at x 1.0 gain

GENERAL

AC Input Options: 120 or 240 Vac nominal line voltage without adjustment. 50 or 60Hz, with adjustment in SET UP menu.

Battery Type: Sealed lead-acid, 16 Vdc nominal, 3 Amp-hour

Battery Capacity: A new, fully charged battery will provide one of the following prior to shut down:

	Typical	Min
360 J discharges	75	40
Minutes of monitoring	90	70
Minutes of pacing	75	50

Low Battery Indicator: Advises operator to connect AC power.

Battery Charge Indicator: Illuminates when battery is charging.

Battery Charge Time: 24 hours to full capacity.

Service Indicator: Indicates self-diagnostic routines have detected improper operation requiring service attention.

Power Consumption: 160 Watts maximum while monitoring with recorder ON and defibrillator charging.

Height: 35.2cm (13.9 in)

Width: 29.7cm (11.7 in)

Depth: 31.0cm (12.2 in)

Weight: 13.2kg (29 lbs)

Power Cord Length: 3m (10 ft)

Standard Paddle Electrode Area: 82 square cm

DEFIBRILLATOR

Defibrillator Waveform: 5 millisecond monophasic pulse (Edmark)

Energy Select External Paddles: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 20, 30, 50, 100, 200, 300, 360 Joules

Energy Select Internal Paddles: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 20, 30, 50 Joules

Charge Controls: Independent momentary pushbutton controls on front panel and APEX paddle.

Paddle Cord Length: 3m (10 ft)

Charge Indicators: Flashing lamps on paddle and front panel pushbutton along with increasing stored energy display indicate charge in progress. Upon full charge, energy available is displayed on monitor and charge completed tone sounds.

Charge Time: Charge to 360 Joules in less than 10 seconds with a fully charged battery.

SYNC: Synchronizes defibrillator pulse to patient-generated QRS complex.

SYNC Indicator: Inverted triangle marker on displayed ECG waveform identifies synchronizer trigger point with respect to patient's QRS complex.

THERMAL ARRAY RECORDER

Paper Size: 50mm wide x 30m (100 ft)

Paper Speed: 25mm/second

Delay: ECG prints 8 seconds after first appearing on the monitor.

Frequency Response: Non-diagnostic. Diagnostic available via SET UP menu.

ECG Leads (non-diagnostic): 1.0 to 40Hz (-3dB)

ECG Leads (diagnostic): 0.05 to 100Hz (-3dB)

Paddles: 2.2 to 20Hz (-3dB)

Annotation: Time, date, ECG lead, ECG gain, heart rate, defibrillation parameters, test load discharges, pacemaker parameters

CODE SUMMARY

Critical Event Record: Digitally stored record of ECG and device parameters.

NONINVASIVE PACEMAKER

Output Rate: 40 to 170 PPM

Output Waveform: Monophasic, truncated exponential current pulse (15 to 25% droop)

Output Current: 0 to 200mA

Refractory Period: 200 to 300msec (function of rate)

Mode: Demand or non-demand

ENVIRONMENTAL

Atmospheric Pressure: 797mmHg to 500mmHg (-570 to 11000 ft)

Relative Humidity: 0 to 95% (non-condensing) at 0 to 34°C

0 to 80% (non-condensing) at 35 to 45°C

Temperature Range: 0 to 45°C operating
-30 to 65°C storage

All specifications at 20°C unless otherwise stated.