

Defibrillator

Waveform: Biphasic truncated exponential, with voltage and current duration compensation for patient impedance.*

Output Energy Sequence: Multiple levels, configurable from 150 joules to 360 joules (200 joules min for Japan). Factory default settings of 200J, 300J, 360J.

Output Energy Accuracy: $\pm 10\%$ into 50 ohms, $\pm 15\%$ into 25 to 100 ohms.

Shock Advisory System: An ECG analysis system that advises whether a shock is appropriate; meets rhythm recognition criteria specified in DF39.

The device charges for shock only when the Shock Advisory System advises defibrillation.

Device Capacity:

Typical: Thirty (30) full discharges or 210 minutes of "on time" with a fully charged device.

Minimum: Twenty (20) full discharges or 140 minutes of "on time" with a fully charged device.

Shock Charge Time: Charge times with a fully charged device: 200 joules in less than 9 seconds, 360 joules in less than 15 seconds.

System Recharge Times: Recharge times with a fully discharged device: Able to deliver 6 shocks or provide 42 minutes of operating time after 24 hours of recharge time and 20 shocks or 140 minutes of operating time after 72 hours of recharge time with a new CHARGE-PAK at temperatures above 15° C (59° F).

Controls:

Lid Release/ON-OFF—Controls device power.

SHOCK button (semi-automatic version)—delivers defibrillation energy. After electrodes are attached to a patient, the fully automatic version of the device delivers a shock, if appropriate, not requiring operator intervention.

Electrical Protection: Input protected against high voltage defibrillator pulses per HEC60601-1/EN60601-1.

Safety Classification: Internally powered equipment. IEC60601-1/EN60601-1.

User Interface

User Interface: The user interface includes voice prompts, audible tones and graphic prompts.

Readiness Display: The readiness display shows the device status.

OK Indicator: Shows "OK" when the last self-test was completed successfully. When the "OK" indicator is visible, all other indicators are not visible. The "OK" indicator is not displayed during device operation.

CHARGE-PAK Indicator: When displayed, replace the CHARGE-PAK $^{\text{TM}}$ battery charger.

Attention Indicator: When first displayed, at least six (6) discharges or 42 minutes of operating time remain.

Service Indicator: Service required when displayed.

Environmental

Note: All performance specifications defined assume the unit has been stored (two hours minimum) at operating temperature prior to operation.

Operating Temperature: 0° to +50° C (+32° to +122° F).

Storage Temperature: -40° to +70° C (-40° to +158° F) with CHARGE-PAK and electrodes, maximum exposure time limited to one week.

Atmospheric Pressure: 760 mmHg to 429 mmHg, 0 to 15,000 feet above sea level.

Relative Humidity: 5 to 95% (non-condensing).

Water Resistance: IEC60529/EN60529 IPX4 "Splash proof" with electrodes connected, CHARGE-PAK installed.

Shock: MIL-STD-810E, Method 516.4, Procedure 1, $(40g, 6-9 \text{ ms pulse}, \frac{y}{s}, \text{ sine each axis}).$

Vibration: MIL-STD-810E, Method 514.4, Helicopter - category 6 (3.75 Grms) and Ground Mobile - category 8 (2.85 Grms).

Physical Characteristics

Height: 10.7 cm (4.2 in). Width: 20.3 cm (8.0 in).

Depth: 24.1 cm (9.5 in), excluding handle.

Weight: 2.0 kg (4.5 lb) with CHARGE-PAK and electrodes.

Default Settings

Energy Sequence: Energy sequence is set to 200J, 300J, 360J.

Motion Detection: The motion detection system is set to on during analysis.

Energy Protocol: The energy protocol is set to increase energy only after a lower energy shock was unsuccessful.

Stack Shocks: Stack shocks option is set to off.

Turn-On Prompt: The turn-on prompt is set to provide voice prompts upon power on.

CPR Time: The CPR Time is set to 120 seconds.

Voice Prompt Volume: The voice prompt volume is set to high

Accessories

CHARGE-PAK Battery Charger

Type: Li/SO2Cl2 Lithium Sulfuryl Chloride, 11.7V, 1.4 amp-hours.

Replacement: Replace the CHARGE-PAK battery charger and QUIK-PAKTM electrodes packet after using the defibrillator, if the CHARGE-PAK symbol appears in the readiness display or when the Use By date is reached (typically 2 years).

Weight: 80.5 grams (0.18 lb).

QUIK-PAK Electrode Pads

Pads: ECG is received from disposable defibrillation electrodes, standard placement (anterior-lateral).

Pads Packaging: User intuitive, rapid release QUIK-PAK electrodes allow the electrode pads to be preconnected to the device and protected under a top cover.

Pads Replacement: Replace every two (2) years.

Infant/Child Reduced Energy Defibrillation Electrodes:

For use on infants and children less than 8 years of age or less than 55 lbs (25kg).

Data Storage

Memory Type: Internal digital memory.

ECG Storage: Dual patient data storage. Minimum 20 minutes of ECG stored for the current patient, summarized data stored for the previous patient.

Report Types:

- Continuous ECG A continuous patient ECG report.
- Continuous Summary report A summary of critical resuscitation events and ECG waveform segments associated with these events.
- Event Log report A report of time stamped markers, which reflect operator and device activity.
- Test Log report A device self-test activity report.

Capacity: Minimum 200 time-stamped event log markers.

Communications: Wireless transfer to a personal computer.

Data Review: Physio-Control provides an array of tools to meet customer needs for data viewing and analysis.

* The specifications apply from 25 to 200 ohms. Voltage compensation is limited to the voltage that would result in delivery of 360 joules into 50 ohms.

All specifications are at 20° C unless otherwise stated.