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: ±10% into 50 ohms, ±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.

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 of “on time” with a fully charged device.

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 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™ 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).


Shock: MIL-STD-810E, Method 516.4, Procedure 1, (40g, 8-9 ms pulse, 1 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-PAK™ 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.

All specifications are at 20° C unless otherwise stated.