HeartStart FR3 Defibrillator specifications

Defibrillator	
Models	861388 text display 861389 ECG and text display Supplied with AED, primary battery (1), SMART Pads III (1 set), printed instructions (Setup Guide) and CD-Rom (Administrative Reference)
Waveform	SMART Biphasic Truncated Exponential waveform parameters adjust as a function of patient impedance. Adult nominal peak current 32A (150J into a 50 ohm load): pediatric nominal peak current 19A (50J into a 50 ohm load) using optional Infant/ Child Key
Shock delivery	Via defibrillator pads placed in the anterior-anterior (Lead II) position for adults; anterior-posterior position for infants and children under 55 lbs (25 kg) or 8 years old
Controls	On/Off button, shock button, option buttons. Auto-On feature, when used with the optional FR3 carry case, enables FR3 to power up when case lid is opened
Indicators	High-resolution color LCD, beeper, voice prompts, tones and chirps, audio speaker, connector socket, ready light, shock button
Advanced mode	Configurable using optional HeartStart Configure software
ECG display	
Screen	LCD color display, 320 x 240 pixels. 2.8″ x 2.1″ (7.2 cm x 5.4 cm)
Bandwidth	1 Hz to 30 Hz (-3dB), nominal (non-diagnostic)
Monitored lead	Lead II using anterior-anterior adult pads placement
Physical	
Size	2.7″ high x 5.3″ wide x 8.7″ deep (6.9 cm x 13.5 cm x 22.1 cm)
Weight	3 lbs 8 oz (1.6 kg) with FR3 primary battery installed
Environmental/physical requirements	
Sealing	Meets IEC529 class IP55 with battery installed
Temperature	Operating/standby: 32°–122°F (0°–50°C)
Altitude	Meets IEC 60601-1:5.3 (1013 to 572 mbar (hPa), equivalent to air pressure from 0 to 15,000 feet; 0 to 4,572 meters)
Shock/drop Abuse tolerance	Meets MIL-STD-810F 516.5, Procedure IV (after a one-meter drop to any edge, corner, or surface in standby mode)
Vibration	Meets MIL-STD-810F 514.5 C-17
Bluetooth 2.0 Class II Wireless Transceiver Module	
Function	Transmit retrospective event data or configuration setting wirelessly

Patient analysis system	
ECG analysis	Evaluates impedance of defibrillator pads for proper contact with patient skin, evaluates the ECG rhythm and signal quality to determine if a shock is appropriate; also detects artifact and pacemaker
SMART CPR	Evaluates key characteristics of the presenting VF and determines the initial therapy: shock first, or CPR first quickly followed by a shock
Sensitivity/ specificity	Meets AAMI DF80 requirements and AHA recommendations for adult defibrillation
Quick Shock	Typically arms in <8 seconds from the end of the "Stop CPR" prompt
FR3 primary battery	
Type	12 VDC, 4.7 Ah, lithium manganese dioxide Long-life primary cells
Capacity	Typically 300 shocks or 12 hours of operating time at 77° F (25° C) when configured for monitoring after No Shock Advised (NSA) 7.5 hours of operating time at 77° F (25° C) when configured for CPR after NSA
Standby life	3 years minimum when stored under standby environmental conditions (battery installed)
Shelf life	5 years
SMART Pads III	
Application	Disposable, multifunction defibrillation pads for adult or infant/child patients. Time-saving peel and place pads can be removed from packaging and stored in the FR3 carry case. Pads can be preconnected to FR3, which enables testing during FR3's routine self-test.
Infant/Child Key (optional)	
Function	Selects therapy for infants or children under 55 lbs (25 kg) or 8 years old
FR3 data card	
Function	Stores a minimum of 8 hours of ECG, event, and, if configured, voice recording. Can also be used for configuring FR3
Automated and user-activated self-tests	
Automatic self-tests	Tests internal circuitry, waveform delivery system, ECG acquisition, temperature, status (or readiness) of attached accessories (SMART Pads III and FR3 data card) and battery
Automated self-test frequency	Daily, weekly, monthly, power on, and runtime during all modes of operation
User initiated tests	Automatic self-tests plus tone, display, and button performance
FR3 training battery and training pads (optional)	
Function	Places FR3 into a scenario-based training mode and simulates shock therapy
Type	10.8 Volt, 4.5 Ah Li-ion battery