



Making lifesaving faster, easier, better

Philips HeartStart FR3 Defibrillator for professional responders

PHILIPS

Making lifesaving faster,

A sudden cardiac arrest (SCA) response is a stress test for a professional medical response team because time matters. You need your equipment to be rugged, ready to use, and to support you every step of the way.

As a global leader in defibrillation technology, Philips helped chart the course for widespread use of automated external defibrillators (AEDs) among professional responders starting with the innovative ForeRunner and HeartStart FR2 AEDs. Today, Philips continues to provide AED solutions specifically designed for the full spectrum of responders from lay people to clinicians.

Our best professional-grade AED yet, the HeartStart FR3 is designed to make lifesaving faster, easier, and better.

- **Faster** – helping you do your job faster as it significantly reduces deployment time. It eliminates steps to help you start the right therapy – CPR or defibrillation – on your patient faster. Responders can also quickly disconnect the pads and CPR meter from the HeartStart FR3 and connect them to the HeartStart MRx monitor/defibrillator, for fast patient hand-off.
- **Easier** – helping make your job easier because it is small, light, and easy to carry. The optional Q-CPR measurement and feedback technology is set up to help you perform guidelines-compliant CPR. Additionally, HeartStart FR3 is designed to be rugged, reliable, and ready to use.
- **Better** – helping you improve your response by supporting a culture of continuous improvement, including training opportunities to fine-tune SCA response.



The HeartStart FR3 is small and light, which makes it easy to carry and maneuver in tight places.

easier, better

Faster: Helping you provide therapy faster

When responding to a sudden cardiac arrest, you make every effort to reach the victim quickly. But the clock keeps ticking until your patient actually receives therapy. Philips HeartStart FR3 reduces deployment time by eliminating steps to help you start delivery of the right therapy – CPR or defibrillation – on your patient faster.



- **Automatically powers on**** with the Heart Start FR3 rigid system case so you can focus on pad placement from the start*
- **Peel & place SMART Pads III.** There's no foil pouch to open when the pads are pre-connected
- **Q-CPR** (optional) can help first response teams deliver high performance, high quality CPR right from the start, independently of pads placement
- **Receive patient-specific guidance** with Philips SMART CPR for the most appropriate initial therapy – CPR or defibrillation – even for shockable rhythms
- **Minimize CPR interruptions** and speed shock delivery with Philips Quick Shock

The HeartStart FR3 solution helps you respond to a pediatric cardiac arrest faster

- No need to change pads, just use the same SMART Pads III for adults and children
- Insert the Infant/Child Key to automatically decrease the defibrillation therapy and implement the configured infant/child CPR protocols



Philips Quick Shock technology reduces the time between hands-off and shock delivery to minimize CPR interruptions.

Minimize CPR interruptions with Quick Shock

The 2010 American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Science and the 2010 European Resuscitation Council Guidelines for Resuscitation recommend that delays and interruptions to chest compressions be minimized throughout the entire resuscitation.^{1,2} **Philips Quick Shock** technology reduces the time between hands-off and shock delivery to minimize CPR interruptions.

Easier: Helping make your job easier



Shown actual size

Easier to carry with your other equipment

- Small and light (3.5lbs / 1.6kg)
- Easy to use and maneuver in tight places
- A variety of carry case options to fit your needs

Confidence that your AED will stand up to your demanding work environment

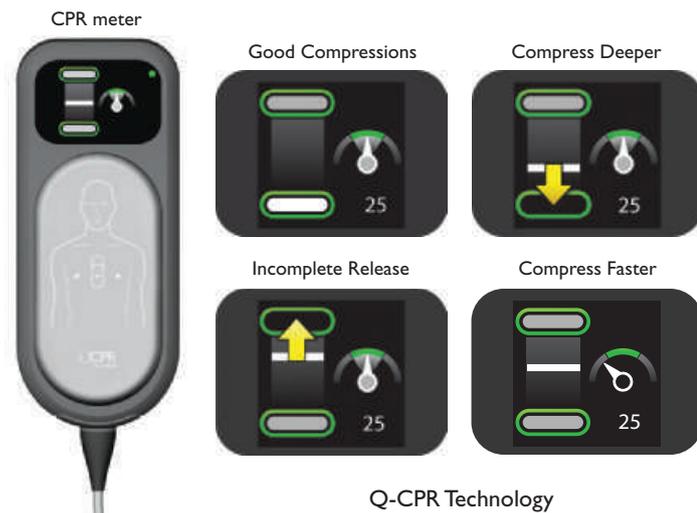
- Holds IP55 rating for protection against dust and jetting water
- Tested to US Military standards
- Crush tested to 1,100lbs (499kg)

Confidence that your AED will be ready when needed

- Standard battery typically delivers 300 shocks or, if configured, up to 12 hours of monitoring
- Performs daily, weekly, and monthly automated self-tests, including pads integrity, with visual and attention-getting audible alerts
- Green ready light flashes to confirm the HeartStart FR3 is ready for use
- Philips AEDs have accumulated over 30 billion service hours*

Confidence that you are delivering high-quality therapy to your patient

- Q-CPR helps responders perform high-quality CPR. It provides real-time measurement and feedback on compression depth, release, and rate right where you want it — on the patient's chest. It also provides notification of the lack of CPR activity and the presence of hyperventilation
- CPR Metronome keeps the beat for consistent chest compressions
- SMART CPR evaluates key characteristics of the presenting VF and determines the initial therapy — defibrillation first or CPR first quickly followed by a shock
- Quick Shock reduces the time between hands-off and shock delivery to minimize CPR interruptions



- Philips SMART biphasic waveform is evidence-based therapy that achieves consistently high efficacy for terminating ventricular fibrillation³⁻¹⁶

Easier to use in a noisy environment

- Bright, high-resolution color LCD that can show text or text with ECG

Easier to adapt to your specific organizational needs

- 3-Lead ECG cable for rhythm assessment and attended monitoring allows trained users to select Lead I, II or III for optimized viewing, and the Event Mark feature allows notable events to be captured for later review
- Rechargeable battery option provides up to 100 shocks and up to 3.5 hours hours of monitoring time as a cost-effective solution for frequent users
- Bilingual configurable so that voice and text prompts can be clearly understood
- Extensively upgradeable to take advantage of Philips advancements now and in the future

Easier to simulate real-world conditions when training

- Deliver more realistic training with the actual HeartStart FR3 device, using the rechargeable training battery and training pads
- The AED Trainer 3 provides a cost-effective training solution without taking the HeartStart FR3 AED out of service

Easier to standardize on one pad set for your program

- SMART Pads III are compatible for use with the HeartStart FR2-Series
- SMART Pads III work with Philips monitor/defibrillators, including the HeartStart MRx monitor/defibrillator, for easy hand-off





Philips Data Management Solutions

HeartStart Event Review (basic)

Review, annotate, print, and store AED cases in a database for responder debriefing.

HeartStart Event Review Pro (full featured)

Provide more in-depth assessment of responder intervention and patient response to evaluate individual and system-wide response performance.

HeartStart Data Messenger

Automatically route events from your responders' computers based on your desired workflow. Responders don't have to manipulate software to move data. So event data may arrive at its destination more promptly and consistently.

Philips Data Software Development Kit

Append a defibrillator patient event to any electronic patient care reporting (ePCR) enabled with the Philips Data Software Development Kit.

Better: Helping you improve emergency response

The HeartStart FR3 and Philips Data Management Solutions are designed to help support **a culture of continuous improvement and excellence** among emergency response organizations.

The HeartStart FR3 can capture an entire code for retrospective review. And with the optional Q-CPR feature, administrators can review comprehensive CPR data all within the context of the event.

Philips tools help make it simple for emergency responders in the field to

download and forward data to where it needs to be so they can focus on providing care. Responders can keep devices in service by downloading events via Bluetooth or a HeartStart FR3 data card.

Having data readily available can help facilitate retrospective review by medical directors and program managers so timely and consistent feedback can be provided to responders while the event is still fresh. Medical directors can also refine their protocols.

Patient data flows according to your desired workflow using your existing infrastructure



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), and user documentation
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
Advanced mode	Configurable using optional HeartStart Configure software
ECG display	
Screen	LCD color display, 320 x 240 pixels. 2.8" x 2.1" (7.2cm x 5.4cm)
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 (6.9cm x 13.5cm x 22.1cm)
Weight	3lbs 8oz (1.6kg) 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 572mbar (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
Crush test	1,100lb (499kg)
Bluetooth 2.0 Class II Wireless Transceiver Module (optional)	
Function	Transmit retrospective event data 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
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 HeartStart "Stop CPR" prompt
FR3 primary battery	
Type	12VDC, 4.7Ah, lithium manganese dioxide Long-life primary cells
Capacity	Typically 300 shocks or up to 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 the HeartStart's FR3's routine self-test.
Infant/Child Key (optional)	
Function	Selects therapy for infants or children under 55lbs (25kg) or 8 years old
HeartStart FR3 data card (optional)	
Function	Stores a minimum of 8 hours of event data including voice recording, (if configured)
Automated and user-activated self-tests	
Automated self-test	Daily, weekly, monthly. Power on and runtime tests during all modes of operation.
HeartStart FR3 training battery and training pads (optional)	
Function	Places FR3 into a scenario-based training mode and simulates shock therapy
Type	Lithium ion rechargeable battery
Q-CPR (optional)	
Application	For use with the HeartStart FR3 Text 861388 and ECG 861389 models with PR2.0 or higher software
Function	CPR meter provides real-time measurement and feedback on CPR performance in accordance to the 2010 AHA/ERC Guidelines. Displays CPR feedback indicators for depth, release, and rate of chest compressions. Provides notification for lack of expected CPR activity. The HeartStart FR3 prompts the responder when it detects hyperventilation of the patient
Compression rate	100 to 120/min
CPR Inactivity Indicator	Visual icon
Hyperventilation	Prompts responders when detected
Compression counter	Registers up to 999 compressions or, automatically resets with timed CPR intervals
Sealing	Meets ISO/IEC 60529 class IP55
3-Lead ECG Cable (optional)	
Application	For use with the HeartStart FR3 with ECG, model 861389 with PR2.0 or higher software
Function	Lead vectors I, II, or III are selectable Event Marker feature using option button
Rechargeable Clinical Use Battery (optional)	
Application	For use with the HeartStart FR3 Text 861388 and ECG 861389 models with PR2.0 or higher software
Function	Lithium ion rechargeable for use with the Philips 861394 charger <ul style="list-style-type: none"> • 10.8 VDC, 4.5 Ah, typical • When new and fully charged, provides 3.5 hours of operating time or 3 hours with the CPR meter connected

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* Data on file with Philips Healthcare.

** If you do not use the HeartStart FR3 rigid system case with the auto-on feature, press the green On/Off button to turn on the FR3.

*** ECG is intended only for basic rhythm identifications. It is not intended for diagnostic and ST segment interpretation.

Not all items are available worldwide. Check with Philips for availability of optional software and accessories.

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The HeartStart FR3 requires a prescription for use in the United States, and must be used under medical direction.

Please visit www.philips.com/fr3



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