

# Making lifesaving faster, easier, better

Philips HeartStart FR3 Defibrillator for professional responders



# Making lifesaving faster,

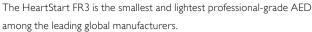
A sudden cardiac arrest (SCA) response is a stress-test for a professional medical response team because time matters. You need your equipment to be rugged, ready to use, and to support you every step of the way.

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. It eliminates steps to help you start the right therapy CPR or defibrillation
- Easier helping make your job easier with the smallest and lightest professional-grade AED among leading global manufacturers.\* It is designed to be rugged, reliable, and ready to use
- Better helping you improve your response by supporting a culture of continuous improvement, including optimizing training and fine-tuning SCA response







# 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. The HeartStart FR3 solution significantly 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\*\* by opening the FR3 carry 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
- 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 European Resuscitation Council Guidelines for Resuscitation 2010 recommend that delays and interruptions to chest compressions be minimized throughout the entire resuscitation.<sup>1,2</sup> **Philips Quick Shock** technology reduces the time between hands-off and shock delivery to minimize CPR interruptions.

# Easier: Helping make your job easier



#### Easier to carry with your other equipment

- Smallest and lightest (3.5lbs, 1.6kg) professional-grade AED among leading global manufacturers
- · 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

#### Confidence that your AED will be ready when needed

- Battery typically delivers 300 shocks or, if configured, 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 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

- Philips SMART biphasic waveform is evidence-based therapy that achieves consistently high efficacy for terminating ventricular fibrillation<sup>3-16</sup>
- CPR Metronome keeps the beat for consistent chest compressions
- Quick Shock reduces the time between hands-off and shock delivery to minimize CPR interruptions
- SMART CPR provides patient-specific treatment advice for the right initial therapy – CPR or defibrillation – even for shockable rhythms

### Easier for responders in bilingual work environments to use the AED

 Bilingual configurable so that voice and text prompts can be clearly understood

#### Easier to use in a noisy environment

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

#### Easier to simulate real-world conditions when training

- Deliver more realistic training with the actual FR3 device, using a rechargeable training battery and training pads
- The AED Trainer 3 provides a cost-effective training option without taking FR3 AEDs 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, for easy hand-off

#### Easier to configure and upgrade your AED to meet your needs

- Protocols can be configured with Bluetooth® or FR3 data card based on medical direction and defibrillation program requirements
- Extensively upgradeable to take advantage of Philips advancements now and in the future







# **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.

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. They can even forward a PDF of the presenting ECG to the patient's cardiologist to

help support post-event care.\*\*\* Responders can keep devices in service by downloading events via Bluetooth® or an 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 use the data to refine their cardiac arrest response protocols.

### 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.

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



# HeartStart FR3 Defibrillator specifications

Defibrillator		Patient analys	sis system
Models	041200 toxt display	_	Evaluates impedance of defibrillator pads for proper
riodeis	861388 text display	ECG analysis	
	861389 ECG and text display		contact with patient skin, evaluates the ECG
	Supplied with AED, primary battery (1), SMART		rhythm and signal quality to determine if a shock is
	Pads III (1 set), printed instructions (Setup		appropriate; also detects artifact and pacemaker
	Guide) and CD-Rom (Administrative Reference)	SMART CPR	Evaluates key characteristics of the presenting VF
Waveform	SMART Biphasic Truncated Exponential waveform		and determines the initial therapy: shock first, or
	parameters adjust as a function of patient		CPR first quickly followed by a shock
	impedance. Adult nominal peak current 32A (150)	Sensitivity/	Meets AAMI DF80 requirements and AHA
	into a 50 ohm load): pediatric nominal peak current	specificity	recommendations for adult defibrillation
	19A (50J into a 50 ohm load) using optional Infant/	Quick Shock	Typically arms in <8 seconds from the end of the
	Child Key		"Stop CPR" prompt
Shock delivery	Via defibrillator pads placed in the anterior-anterior	FR3 primary	battery
	(Lead II) position for adults; anterior-posterior	Туре	12 VDC, 4.7 Ah, lithium manganese dioxide
	position for infants and children under 55 lbs (25 kg)		Long-life primary cells
	or 8 years old	Capacity	Typically 300 shocks or 12 hours of operating time at
Controls	On/Off button, shock button, option buttons.		$77^{\circ}$ F ( $25^{\circ}$ C) when configured for monitoring after
	Auto-On feature, when used with the optional		No Shock Advised (NSA)
	FR3 carry case, enables FR3 to power up when		7.5 hours of operating time at 77° F (25° C) when
	case lid is opened		configured for CPR after NSA
Indicators	High-resolution color LCD, beeper, voice	Standby life	3 years minimum when stored under standby
	prompts, tones and chirps, audio speaker,		environmental conditions (battery installed)
	connector socket, ready light, shock button	Shelf life	5 years
Advanced mode	Configurable using optional HeartStart	<b>SMART Pads</b>	III
	Configure software	Application	Disposable, multifunction defibrillation pads for adult
ECG display			or infant/child patients. Time-saving peel and place
Screen	LCD color display, 320 x 240 pixels.		pads can be removed from packaging and stored in
	2.8" x 2.1" (7.2 cm x 5.4 cm)		the FR3 carry case. Pads can be preconnected to FR3,
Bandwidth	1 Hz to 30 Hz (-3dB), nominal (non-diagnostic)		which enables testing during FR3's routine self-test.
Monitored lead	Lead II using anterior-anterior adult pads	Infant/Child K	Key (optional)
	placement	Function	Selects therapy for infants or children under 55
Physical			lbs (25 kg) or 8 years old
Size	2.7" high x 5.3" wide x 8.7" deep	FR3 data card	
	(6.9 cm x 13.5 cm x 22.1 cm)	Function	Stores a minimum of 8 hours of ECG, event, and,
Weight	3 lbs 8 oz (1.6 kg) with FR3 primary battery		if configured, voice recording. Can also be used
	installed		for configuring FR3
Environmental/physical requirements		Automated and user-activated self-tests	
Sealing	Meets IEC529 class IP55 with battery installed	Automatic self-	Tests internal circuitry, waveform delivery
Temperature	Operating/standby: 32°-122°F (0°-50°C)	tests	system, ECG acquisition, temperature, status (or
Altitude	Meets IEC 60601-1:5.3 (1013 to 572 mbar (hPa),		readiness) of attached accessories (SMART Pads
	equivalent to air pressure from 0 to 15,000 feet;		III and FR3 data card) and battery
	0 to 4,572 meters)	Automated self-	
Shock/drop	Meets MIL-STD-810F 516.5, Procedure IV	test frequency	during all modes of operation
Abuse tolerance	(after a one-meter drop to any edge, corner, or	User initiated	Automatic self-tests plus tone, display, and button
	surface in standby mode)	tests	performance
Vibration	Meets MIL-STD-810F 514.5 C-17		pattery and training pads (optional)
	Class II Wireless Transceiver Module	Function	Places FR3 into a scenario-based training mode
Function	Transmit retrospective event data or		and simulates shock therapy
	configuration setting wirelessly	Туре	10.8 Volt, 4.5 Ah Li-ion battery
	0	./ [ *	

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- \* Data on file with Philips Healthcare.
- If you do not use the Philips HeartStart FR3 carry 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 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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