



# PHILLIPS HEARTSTART FRX



## EXPERT GUIDANCE. INTUITIVE SUPPORT.

Sudden cardiac arrest can happen to anyone at any time, and there's nothing more important than saving lives. If the unthinkable happens, it's important to be able to quickly and confidently assess unknowns.

**What is the sufferer's condition?**

**What is the environment like?**

**What is the treatment protocol?**

It is crucial that AEDs be close at hand, ready to go, designed to be easy to use, lightweight and rugged.

Lightweight, rugged and reliable, the FRx can withstand rough handling, extreme temperatures, dusty or wet surfaces.

Designed for use in harsh settings, it can withstand up to 500 kg (1,100 lb) and drops from 1.2 m (4 ft).

The FRx features real-time, step-by-step voice commands paced to your actions, and an audible metronome and CPR guidance assist the responder. When treating an infant or child, simply insert the optional Infant/Child Key and the FRx adjusts instructions and therapy.

The pre installed pads can be used for adults and children. The FRx is easy to maintain. It performs a series of automatic self-tests daily, weekly and monthly to check pad readiness and verify functionality, with up to four years between battery replacements.

# THE FRX MAKES SAVING A LIFE EASY

## The Philips HeartStart FRx AED

- Is lightweight, rugged and reliable.
- Includes features to help guide the treatment of SCA with easy setup, real-time metronome and clear, step-by-step voice commands paced to your actions.
- Provides CPR instructions for infants and children under 25 kg (55 lb) or 0-8 years old, and adults and children over 25 kg (55 lb) or greater than 8 years old.
- Has an optional Infant/Child Key; simply insert it and the defibrillator adjusts instruction and therapy, eliminating the need for additional infant/child pads.
- Includes pre-connected SMART Pads II that can be used for both adults and children; SMART Analysis automatically assesses heart rhythm and only delivers a shock if the victim's rhythm is determined to be treatable by the Philips advanced algorithm, even if the Shock button is pressed.
- Has patented Quick Shock feature that allows the FRx to typically deliver a shock within eight seconds after CPR.
- Performs a series of automatic self-tests daily, weekly and monthly to check pad readiness and verify functionality and calibration of circuits and systems.



# DESIGNED FOR ADAPTABILITY



## **SMART Pads II electrode pads**

One set of pads that can be used for both adults and children.



## **Dedicated Child Key**

Insert the child key for paediatric use.



## **Real-time metronome with CPR guidance**

Real-time metronome and clear, step-by-step voice commands paced to your actions.



## **Variable energy for adults and children**

Adult shock 150J | Paediatric shock 50J



## **Protection from the environment**

IP55 rating for protection in challenging environments.



## **8-year warranty**

Backed by an 8-year warranty.

# SPECIFICATIONS

Physical	
Height:	18 cm (7.1 in)
Width:	6 cm (2.4 in)
Depth:	22 cm (8.8 in)
Weight:	1.6 kg (3.5 lb) (with battery and pads)

Defibrillator	
Protocol:	Device follows preconfigured settings; defibrillation and CPR protocol can be customised using HeartStart Event Review Pro software
Waveform:	Biphasic truncated exponential; waveform parameters are automatically adjusted as a function of patient defibrillation impedance
Therapy:	Adult defibrillation: nominal peak current 32 A (150 J nominal into a 50 ohm load) Pediatric defibrillation with optional FRx Infant/Child Key installed: nominal peak current 19 A (50 J nominal into 50 ohm load)

User interface	
Instructions:	Detailed voice prompts and visual icons guide responder through use of the defibrillator
CPR guidance:	Verbal instructions for adult and infant/child CPR provide instructions and audio cues for the appropriate number, rate and depth of chest compressions, as well as for each breath
Controls:	Green On/Off button, blue-lit i-button, orange Shock button, optional Infant/Child Key
Indicators:	Ready light, blue-lit i-button, caution light, illuminated pads, icons; Shock button lights up when shock is advised

Data recording and transmission	
Infrared:	Wireless transmission of event data to a PC using the IrDA protocol
HeartStart Event Review Pro software:	Data management software (optional) for download and review of data retrieved through defibrillator's infrared data port
Data stored:	First 15 minutes of ECG and the entire incident's events and analysis decisions

Environmental	
Sealing:	Waterjet-proof IPX5 per IEC60529 Dust-protected IP5X per IEC60529
Temperature:	Operating/Standby: 0° – 50° C (32° – 122° F) Transient operating (for 20 minutes or less, after rapid transition from 20° C [68° F]): -20 to 50° C (-4° to 122° F); under non-condensing humidity conditions
Altitude:	0 to 4,572 m (0 to 15,000 ft)
Aircraft:	Meets RTCA/DO-160 Section 21 (Category M – Radiated Emissions) and Section 20 (Category M – Conducted Immunity, and Category D – Radiated Immunity)
Crush:	500 kg (1100 lb)
Drop:	Withstands 1.22 m (4 ft) drop on any edge, corner or face of the device onto masonry surface
Vibration:	Operating: meets MILSTD 810G Fig. 5146E-1, random Standby: meets MILSTD 810G Fig. 5146E-2, swept sine (helicopter)
EMI (radiated/ immunity):	Meets CISPR 11 Group 1 Class B and IEC 61000-4-3

Patient analysis system	
Patient analysis:	Evaluates patient ECG to determine if a rhythm is shockable. Rhythms considered shockable are ventricular fibrillation (VF) and certain ventricular tachycardias (VT) associated with lack of circulation. For safety reasons, some VT rhythms associated with circulation will not be interpreted as shockable, and some very low-amplitude or low-frequency rhythms will not be interpreted as shockable VF
Sensitivity/specificity:	Meets AAMI DF80 guidelines and AHA recommendations for adult defibrillation
Shock advised:	Able to deliver a shock as soon as the device indicates a shock is advised
Quick shock:	Able to deliver a shock after the last chest compression of a CPR interval, typically in 8 seconds
Shock-to-shock cycle time:	Typically less than 20 seconds between shocks in a series
Artifact detection:	Allows ECG analysis even in the presence of most pacemaker artifact and electrical noise sources; other artifacts are detected and corrective voice prompts issued

# SPECIFICATIONS CONTINUED

Battery	
Battery Capacity:	When new, a minimum of 200 shocks or 4 hours of operating time at 25° C (77° F)
Type:	9 Volt DC, 4.2 Ah, lithium manganese dioxide, disposable long-life primary cell
Install-by date:	Battery is labeled with an install-by date of at least five years from date of manufacture
Standby life:	Typically, four years when stored and maintained according to directions provided in the Instructions for Use

SMART Pads II	
Active surface area:	80 cm <sup>2</sup> (12.4 in <sup>2</sup> ) each
Cable length:	121.9 cm (48 in)
Use-by date:	Pads case is labeled with a use-by date of at least two years from date of manufacture

Automated and user-activated self-tests	
Daily automatic self-tests:	Tests internal circuitry, waveform delivery system, pads and battery capacity
Pads integrity test:	Specifically tests readiness-for-use of pads (gel moisture)
Battery insertion test:	Upon battery insertion, extensive automatic self-tests and user-interactive test check device readiness
Status indicators:	Blinking green "Ready" light indicates ready for use; audible "chirp" indicates need for maintenance

# ACCESSORIES



**Heartstart battery**



**FRx Smart Pads II**



**Phillips Heartstart carry case**



**Child Key**



03 8710 8666

[sales@aedauthority.com.au](mailto:sales@aedauthority.com.au)

41 Marconi Drive, Dandenong South VIC 3175



[aedauthority.com.au](http://aedauthority.com.au)