

# Data Sheet

# LIFEPAK® CR2 Defibrillator

with LIFELINKcentral™ AED Program Manager

- \_ Self-monitoring
- Wireless connectivity
- \_ Fastest time to first shock<sup>1</sup>
- \_ cprlNSIGHT™ Analysis Technology
- \_ Layered, easy to follow design



Sudden cardiac arrest (SCA) can happen to anyone—anywhere. Immediate treatment is vital. A victim's chance of survival dramatically decreases for every minute without treatment.<sup>2</sup> That's why public access defibrillators are so important. They put lifesaving technology where it can do the most good. So when an emergency happens, you should have nothing less than the best.

- Layered design
- Layered design with easy to follow bold graphics. Both trained and untrained AED users clearly know how to begin.
- QUIK-STEP™ electrodes

  Peel directly off the base for faster
- placement.

  cprINSIGHT analysis technology
- Analyses for shockable rhythm during chest compressions with no need to pause.
- Metronome and CPR coaching Sets an effective pace and audibly guides users.
- ClearVoice™ technology
  Detects background noise and adjusts volume accordingly for clear instruction.
- Fully automatic Available in fully or semi-automatic models.

- Highest available escalating energy
   Up to 360J for more effective shocks as needed.
- Bilingual

Toggle between two pre-set languages when using the device.

- Child mode
  - Child mode delivers lower energy levels appropriate for young children without having to change electrodes.
- LIFEPAK TOUGH™
- IP55 rating for challenging environments.
- 8-year warranty
  Backed by an 8-year warranty.

LIFELINKcentral AED

Program Manager
Monitor AED programs by tracking
AED status, sending patient data
to emergency responders and
hospitals, detecting AED locations
and other tools.



### LIFEPAK® CR2 Defibrillator

### Defibrillator

**Waveform:** Biphasic Truncated Exponential with voltage and duration compensation for patient impedance.

Patient Impedance Range: 10 - 300 ohms

#### **Energy Accuracy:**

10% of the energy setting into 50 ohms 15% of the rated energy output into 25 - 175 ohms

**Output Energy Sequence:** Multiple levels, configurable from 150 joules to 360 joules.

**Energy Default:** 200J, 300J, 360J (adult) 50J, 75J, 90J (paediatric)

Shock Advisory System<sup>TM</sup>: An ECG analysis system that advises whether a shock is appropriate; meets rhythm recognition criteria specified in IEC 60601-2-4.

**cprINSIGHTTM Analysis Technology:** Enables the defibrillator to analyse the patient's heart rhythm while CPR is being performed.

**CPR Coaching:** Instructions for adult and paediatric CPR, including feedback when no CPR is detected, rate and depth guidance, a metronome and instructions on hand placement.

Time to Shock at 360J after CPR (with cprINSIGHT enabled):

Semi-Automatic: < 7 seconds</li>
 Fully Automatic: < 13 seconds</li>

Charge Time: 0 seconds for first 150J or 200J shock (as device is pre-charged). With cprINSIGHT enabled, subsequent shocks will be charged during CPR and ready to shock at the end of the CPR period.

### Controls

Lid Release/ON-OFF: Controls device power.

**Shock button, Semi-automatic:** Delivers energy when button pressed by the user.

**Shock button, Fully Automatic:** Flashes prior to delivering shock without requiring user intervention.

**Child Mode Button:** Allows operator to switch to Child Mode for reduced energy and CPR guidance appropriate for children.

Language Button: Optional feature allows operator to switch between the Primary and Secondary languages for an optional multi-language configuration.

**Electrical Protection:** Input protected against high voltage defibrillator pulses per IEC 60601-1/EN 60601-1.

**Safety Classification:** Internally powered equipment. IEC 60601-1/EN 60601-1.

### User Interface

**User Interface:** The user interface includes voice prompts and audible tones.

**ClearVoice™ Technology:** Volume adjusts automatically based on the noise level of the surrounding environment.

**Device Status Indicators:** Visual and audible indicators indicating system readiness (device, pads and battery).

### 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:  $-30^{\circ}$  to  $+60^{\circ}$ C ( $-22^{\circ}$  to  $+140^{\circ}$ F) with battery and electrodes, maximum exposure time limited to one week.

Long Term Storage: Always store the defibrillator within the recommended temperature range of 15° to 35°C (59° to 95°F).

Altitude: -382 to 4,572 m (-1,253 to 15,000 ft).

Relative Humidity: 5 to 95% (non-condensing).

**Water Resistance:** IEC 60529/EN 60529 IPX5 with electrodes connected and battery installed.

**Dust Resistance:** IEC 60529/EN 60529 IP5X with electrodes connected and battery installed.

**Shock:** MIL-STD-810F, Method 516.4, Procedure 1, (40g, 6-9 ms pulse, 1/2 sine each axis).

**Vibration:** MIL-STD-810F, Method 514.4, Helicopter – category 6 (3.75 Grms) and Ground Mobile – category 8 (2.85 Grms).

# Physical Characteristics

With handle, including electrodes and battery:

Specifications

Height: 9.7 cm (3.8 in) Width: 22.6 cm (8.9 in) Depth: 27.4 cm (10.8 in) Weight: 2.0 kg (4.5 lb)

### Accessories

### PRIMARY BATTERY

**Type:** Lithium Manganese Dioxide (Li/MnO<sub>2</sub>), 12.0V, 4.7 amp-hours.

Capacity (at 20°C): Will provide 166 200 joule shocks (with one minute of CPR between shocks) or 103 360 joules shocks (with one minute of CPR between shocks) or 800 minutes of operating time.

Standby Life (assuming daily tests only): A new battery provides device power for 4 years if installed in device that is not used.

**Replace Battery Indication:** At least 6 shocks and 30 minutes of operating time remain when first indicated.

Weight: 0.3 kg (0.7 lb).

#### **ELECTRODE PADS**

Pads: Can be used on both adult and paediatric patients.

Pads Packaging: User intuitive, rapid access electrodes.

Pads Replacement: Replace every 4 years.

### Data Storage

Memory Type: Internal digital memory (flash RAM).

**ECG Storage:** Minimum 60 minutes of ECG stored for two patient episodes.

### Communications

Communications: USB Wireless 802.11 b/g/n, or Cellular data transfer to LIFELINKcentral™ AED Program Manager or LIFENET® System.

### References

- 1 Physio-Control Internal Semi-Automatic AED Comparison Usability Study, August 2016.
- 2 Graham R, McCoy M, Schultz A. Strategies to Improve Cardiac Arrest Survival, A Time to Act. Institute of Medicine Report, 2015.

If you purchased your LIFEPAK CR2 Defibrillator from an authorized Physio-Control distributor or reseller, this distributor or reseller will have access to your LIFELINKcentral AED Program Manager account and may receive notifications prompted by the LIFEPAK CR2 Defibrillator. Please note that this setting can be disabled at ANY time: if you wish to disable this setting, please send a request to Physio-Control Customer Support to change the Distributor value to "Customer Managed".

Although not everyone can be saved, studies show that early defibrillation can dramatically improve survival rates.

All claims valid as of August 2016.

For further information please contact your local Physio-Control representative or visit our website at www.physio-control.com.



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