# **Powerheart G5**

# Technical Specifications



## Real-Time CPR Feedback

The Powerheart® G5 AED uses Intellisense™ CPR (ICPR) technology to monitor CPR chest compressions, providing rescuers with distinct corrective audible and visual prompts: "Press Slower", "Press Faster", "Press Softer", and "Press Harder and Fully Release".

## Rescue Ready®

The Powerheart G5 AED performs comprehensive daily self-testing to ensure it's ready to rescue. Studies have shown that approximately 46% of AED failures are due to pad, pad connector, or battery power problems.<sup>1</sup> The Powerheart G5 AED self-tests detect and help prevent these issues.

## **User-Paced Rescue Prompts**

RescueCoach® prompts guide users step-by-step through the rescue process. The AED recognises actions taken and ensures that the rescuer completes every critical task before moving on to the next.

## **Dual-Language Capabilities**

With a touch of a button, CPR Instruction, ICPR corrections, and AED prompts can quickly switch from the primary language to a preprogrammed alternate language without delaying the rescue.





### Intellisense CPR Feedback

Real-time, guideline-driven voice and text corrective prompts are delivered for CPR quality.

SHOCKS 0

00:55

PEEL SECOND PAD FROM BLUE PLASTIC

#### RescueCoach

User-paced voice and text prompts guide rescuers through each critical step of the rescue, including CPR instruction.



#### **Dual Language**

Change from primary to secondary language with the push of a button, without delaying or interrupting the rescue.



### Rescue Ready

Daily self-tests are conducted on pads, battery, and internal circuitry to ensure your AED is always ready to rescue.



### Intellisense Electrode Pads with CPR

Non-polarised pads can be placed in either location on the chest, while CPR pad is placed in the centre of the chest to guide proper hand placement for CPR compressions.

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## **Powerheart G5 Specifications**

### **Defibrillator**

**Protocol:** Semi-automatic and fully automatic configurations

**Waveform:** STAR® biphasic truncated exponential. Built-in automatic synchronisation feature.

Defibrillator Charge Hold Time: 30 seconds; Powerheart G5 Automatic model: 3 seconds prior to automatic shock delivery

Energy Selection: Factory preprogrammed selection, escalating energy. (Adult: 95 J to 354 J)

Charge Time: Less than 10 seconds with new battery

Preshock Pause: 10 seconds or less following the CPR cycle for persistent VF; 15 seconds (typical) for all other rhythms with new battery.

Pacemaker Pulse: Detection and Rejection

Paediatric Capability:

Therapy range (VE) 22 J to 82 J, Paediatric prompts

Self-test: Automatic daily self-test: battery, pads, internal electronics, and buttons. Every 7 days: daily tests plus CPR feedback accelerometer, high voltage circuits. Monthly: daily/weekly self-tests and full-energy high voltage tests.

Compression Depth: Customisable range of 2.54 cm to 7.6 cm (1 in to 3 in)

Compression Rate: Customisable range of 70 cpm to 120 cpm

Patient Impedance Measurement Range: 25 ohms to 175 ohms

Display Format: Monochrome backlit LCD

*Display Screen Size:* 2.8 cm x 5.6 cm; 1.1 in x 2.2 in

Text Screen: Displays rescue prompts and critical rescue information. Intellisense CPR (ICPR) feedback provides corrective text prompts for both rate and depth.

Voice Prompts: RescueCoach prompts provide user-paced instruction. Intellisense CPR feedback provides corrective voice prompts for both rate and depth.

Dual Language: Primary language plus optional second language.
Contact ZOLL in your region for details of language options

Data Recording and Storage:
Records up to 90 minutes and
multiple events. Includes ECG data,
device prompts, device charge/
analysis, and CPR graph

Data Recovery: Uploaded USB memory stick or direct-connect cable

#### Device

*Size:* (H x W x D) 9 cm x 23 cm x 30 cm; 3.4 in x 9.0 in x 11.8 in

Weight: 2.6 kg; 5.7 lb (with battery)

Power: Battery

Port: USB 2.0

**Device Classification:** Class III and internally powered per EN60601-1

Design Standards: Meets applicable requirements of EN 60601-1; EN 60601-2-4; IEC 60601-1; IEC 60601-2-4; IEC 60601-1-2; EN 1789

Safety and Performance: IEC 60601-1; IEC 60601-1-2; IEC60601-2-4; RTCA DO-160G: 2010: Section 5, Category C; Section 4, Category A4, EN 1789

### **Environmental**

*Operating Temperature:* 0° to 50°C, 32° to 122°F

*Humidity:* 10% to 95% relative humidity, non-condensing

Vibration (Random): MIL-STD-810G, Method 514.5, Procedure 1, Category 24; RTCA DO-160G, Section 8, Category S, Zone 2 (curve B) and Category U, Zone 2 (curves F and F1)

*Vibration (Sine):* MIL-STD-810G, Method 514.5, Procedure 1, Category 24, Helicopter Minimum Integrity

*Shock:* MIL-STD-810G 516.5, Procedure 1

*Altitude:* -382 m to 4,594 m; -1,253 ft to 15.073 ft

Pressure CSA evaluated: 700 hPa to 1060 hPa. Minimum: 570 hPa/ Maximum: 1060 hPa

Particle and Water Ingress: IP55

Drop Test: 1.22 m; 4 ft

Warranty: 6 years (+2 with registration)

## Intellisense® Lithium Battery

Battery Capacity: 420 defibrillator discharges at maximum energy (354 joules) or 16 hours of continuous monitoring time (with 2-minute CPR periods)

*Type:* Intellisense lithium battery, non-rechargeable

Battery Standby Life (once installed): 4 years\* with daily self-test. End of life indicated by a low-battery warning (audible tone) and Rescue Ready status indicator (typical remaining shocks: 9).

Battery Shelf Life: Store for up to 5 years from date of manufacture at 23°C (77°F) prior to installing in Powerheart G5 to maintain battery life.

*Temperature* :  $0^{\circ}$ C to  $50^{\circ}$ C (32°F to 122°F)

*Humidity:* 10% to 95% (noncondensing)

Weight: 1 lb

*Size:* (H x W x D): 6.5 in x 2.87 in x 1.77 in

Lithium Content: 9.2 g (approximate)

Nominal Voltage: 12 volts

## Intellisense<sup>™</sup> Electrode Pads

Shelf Life: 24 months

*Type:* Disposable, non-polarised; can be placed in either position on chest

Cable Length: 130 cm; 51.5 in



<sup>\*</sup>Comes with battery replacement performance guarantee.

¹DeLuca Jr LA, et al. *Ann Emerg Med.* 2012 Feb;59:2:103–111.