

# 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 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 recognizes 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

Comprehensive self-tests are conducted on pads, battery, and internal circuitry to ensure



#### Intellisense Electrode Pads with CPR

Non-polarized pads can be placed in either location on the chest, while CPR pad is placed in the center 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 synchronization 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

**Pediatric Capability:** Therapy range (VE) 22 J to 82 J, pediatric prompts

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

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

**Compression Rate:** Customizable 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 is English, with two secondary language options: Latin American Spanish and Canadian French

**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

### 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°C to 50°C (32°F to 122°F)

**Humidity:** 10% to 95% (non-condensing)

**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™ Electrode Pads

**Shelf Life:** 24 months

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

**Cable Length:** 130 cm; 51.5 in

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