

ZOLL vs. Cardiac Science AED Comparison

Full-Rescue Support	AED Plus	Powerheart AED G3
Total steps of full-rescue supported	8	3
Percentage of full-rescue performed by untrained rescuers in test*	63%	44%
Increase/Decrease of depth of CPR compressions in one minute *	277% increase	20% decrease
CPR support	Adaptive metronome for 100 bpm. Instantaneous feedback for compression depth. Voice & text prompts for "Push Harder" and "Good Compressions."	Timed minute of silence (default) or "Continue CPR" prompt each 15 seconds (optional).
Communication with rescuer	Voice prompts, text & circle of picture graphics	Voice Prompts & 38 character text
Support system for airway maintenance	Yes (PASS lid)	No
Technology/Design Comparison		
Water & dust ingress protection (IP)	IP-55 **	IP-24 ***
Electrode polarization	Non-polarized	Non-polarized
Time to first shock All voice prompts (pads attached when told) Jump to analysis (pads attached immediately)	53 seconds 24 seconds	55 seconds 23 seconds
Variable escalating energy	Yes (96 – 240 Joules)	Yes (140 – 360 Joules)
Daily self-diagnostic	Yes	Yes
Post-purchase Cost of Ownership		
Battery replacement interval (with daily self-test) / Cost of replacement	5 years / \$75	3 years / \$395
Pad replacement interval / Cost of replacement	4 years / \$149	2 years / \$43
Equipment required for 5 year period	1 CPR-D padz	1 battery pack 2 sets of pads
Cost of ownership for 5 year period	\$149	\$481
Pediatric Capability		
Levels of energy sent to pads	Adult: 120J – 150J – 200J Pediatric: 50J – 70J – 85J	Adult: 200J – 300J – 300J Pediatric: 200J – 300J – 300J
Independent adult & pediatric energy protocols	Yes	No
Pediatric electrocardiogram (ECG) analysis	Yes	No – same as adult
Pad-type (adult/pediatric) detected & announced to prevent errors	Yes	No
Pediatric defibrillation technology	Low-dose pediatric energy only sent to pads.	Adult energy sent to pads. Hardware in wire shunts energy.

* S Miller, et. al. "Lay Rescuer Adherence to the Chain of Survival: A Comparison of Four Automated External Defibrillators." *Pre-hospital Emergency Care*. 2004; 8:91. NOTE: Difference shown is statistically significant (P<0.05).

** Protected from dust interfering with satisfactory operation. Protected against water jets against the enclosure from any direction.

*** Protected from solid foreign objects larger than 12.5mm in diameter. Protected against water splashed against the enclosure from any direction.