

ZOLL vs. Medtronic AED Comparison

Full-Rescue Support	AED Plus	CR Plus
Total steps of Full-Rescue supported	8	4
Percentage of Full-Rescue performed by untrained rescuers in test*	63%	45%
Increase in CPR compression depth*	277% increase	17% increase
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 & 1 picture graphic
Support system for airway maintenance	Yes (PASS lid)	No
Technology/Design Comparison		
Water & dust ingress protection (IP)	IP55 **	IPX4 ***
EMS hand-off information	No. of shocks, time elapsed	None
Electrode pads life	4 years	2 years
Battery life (standby mode – no emergency)	5 years	2 years
Battery technology	10 Lithium Manganese 123A batteries available at retail.	Internal battery only, with external "trickle" charger (Lithium Ion) that requires 2 weeks to develop full charge.
Post-purchase Cost of Ownership		
Battery replacement interval (with daily self-test) / Cost of replacement	5 years / \$75	2 years / \$99 (includes pads and battery charger)
Pad replacement interval / Cost of replacement	4 years / \$149	2 years / (included w/ battery charger)
Equipment required for 5 year period	1 CPR-D padz	2 replacement kits (battery charger and 2 sets of pads)
Cost of ownership for 5 year period	\$149	\$198
Pediatric Capability		
Levels of energy sent to pads	Adult: 120J – 150J – 200J Pediatric: 50J – 70J – 85J	Adult: 200J – 300J – 360J Pediatric: 200J – 300J – 360J
Independent adult & pediatric energy protocols	Yes	No
Pediatric pad pre-connection	Yes	No – connect during rescue
Pediatric Electrocardiogram (ECG) Analysis	Yes	No – same as adult
Pad-type (adult/pediatric) recognized & announced to prevent errors	Yes	No (voice prompts describe application of adult pads during pediatric rescue with completely different pads)
Pediatric defibrillation technology	Configurable pediatric energy only sent to pads	Adult energy sent to pads with hardware in wire to shunt 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.

*** Untested protection from solid foreign objects. Protected against water splashed against the enclosure from any direction.