

ZOLL vs. Philips AED Comparison

Full-Rescue Support	AED Plus	OnSite / Home
Total steps of Full-Rescue supported	8	3
Percentage of Full-Rescue performed by untrained rescuers in test*	63%	48%
Increase in CPR compression depth*	277% increase	39% 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 fixed metronome for 100 bpm with voice prompts for breathing at 15-2 (press "i" button)
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)	IP-55 **	IP-21 ***
Energy protocol	Adult: 120J – 150J – 200J Pediatric: 50J – 70J – 85J	Adult: 150J – 150J – 150J Pediatric: 50J – 50J – 50J
Electrode pads life	4 years	2 years
Electrode pads operating temperature	32°F (0°C) to 120°F (50°C)	50°F (10°C) to 110°F (43°C)
Battery life (standby mode – no emergency)	5 years	4 years
EMS hand-off information	No. of shocks, time elapsed	None
EMS hand-off pad compatibility	All ZOLL ALS Defibrillators	None
Pad Expiration Inspection	Immediately visible	Open/Power up required
Post-purchase Cost of Ownership		
Battery replacement interval (with daily self-test) / Replacement cost	5 years / \$75	4 years / \$125
Pad replacement interval / Replacement cost	4 years / \$149	2 years / \$49
Equipment required for 5 year period	1 CPR-D padz	1 battery pack 2 sets of electrode pads
Cost of ownership for 5 year period	\$149	\$223
Pediatric Capability		
Levels of energy sent to pads	Adult: 120J – 150J – 200J Pediatric: 50J – 70J – 85J	Adult: 150J – 150J – 150J Pediatric: 150J – 150J – 150J
Independent adult & pediatric energy protocols	Yes	No
Pediatric electrocardiogram (ECG) analysis	Yes	Yes (?)
Pad-type (adult/pediatric) recognized & announced to prevent errors	Yes (power up and mid-rescue change)	Yes (mid-rescue change only)
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 from water jets against the enclosure from any direction.

*** Protected from solid foreign objects larger than 12.5mm in diameter. Protected from non-splashing water falling with 15° of vertical.