# ZOLL AED 3<sup>®</sup> BLS

## **Technical Specifications**



## High-quality CPR When and Where You Need It Most

The ZOLL AED 3<sup>®</sup> BLS provides enhanced Real CPR Help<sup>®</sup>, which measures the actual depth and rate of each compression and displays it on the CPR Dashboard<sup>™</sup>. In addition to the CPR Dashboard, the ZOLL AED 3 BLS displays the patient's ECG, the remaining time for the current CPR cycle, the elapsed time since the patient had collapsed, and the number of shocks delivered. And to ensure optimal visibility, the ZOLL AED 3 BLS can be can be positioned flat or upright like an ALS device.

### Shorten the Learning Curve

If you have an R Series in your hospital, using the ZOLL AED 3 CPR Dashboard will be seamless. The same numerical values are displayed, and the same audible feedback and metronome help you comply with the 2015 American Heart Association Guidelines of 100 to 120 compressions per minute. Whether you rescue a patient in the cafeteria, the parking garage, or near a clinical area, Real CPR Help will guide high-quality CPR, which has been linked to improved patient outcomes.

## By the Numbers

The 2015 CPR Guidelines state that "Data-driven performance-focused debriefing has been shown to improve performance of resuscitation teams. We highly recommend their use for teams managing patients in cardiac arrest."<sup>1</sup> Using ZOLL's RescueNet<sup>®</sup> CaseReview, detailed rescue performance data can be exported quickly and easily via USB or transferred directly using the WiFi capability. Data on CPR rate, depth, release velocity, and chest compression fraction can easily be evaluated and used to improve future responder performance.

## Always Code-Ready

The WiFi capabilities of the ZOLL AED 3 BLS allow the AED to report its state of readiness, including batteries and electrodes, to Defibrillator Dashboard<sup>™</sup>, ZOLL's asset management database. Biomedical engineering can determine quickly if an AED in the hospital's fleet needs attention before it is needed. The WiFi also provides automatic clock synchronization, which is critically important at the beginning and end of daylight saving time.

<sup>1</sup>Resuscitation. 2015;95:288-301





The metrics of Real CPR  $\mathsf{Help}^{\circledast}$  can be seen on the dashboard.



Data containing CPR quality can be downloaded after the event via WiFi and reviewed quickly with the code team to evaluate and identify areas of improvement.



Child button will illuminate when pediatric pad is attached.

ZOLL Medical Corporation Worldwide Headquarters 269 Mill Road Chelmsford, MA 01824, USA 978-421-9655 800-804-4356

For subsidiary addresses and fax numbers, as well as other global locations, please go to www.zoll.com/contacts.

## **ZOLL AED 3 BLS Specifications**

#### Defibrillator

Protocol: Semi-automatic

Waveform: ZOLL Rectilinear Biphasic™

*Defibrillator Charge Hold Time:* 30 seconds

*Energy Selection:* Factory preprogrammed selection (Adult: 120 J, 150 J, 200 J; Child: 50 J, 70 J, 85 J). User configurable.

Patient Safety: All patient connections are electrically isolated

*Charge Time:* Less than 10 seconds with new battery

Pre-shock Pause: 8 seconds with new battery

*Self-test:* User-configurable automatic self-test every day or every 7 days. Default: Every 7 days. Monthly full-energy test (200 J).

Automatic Self-test Checks: Battery capacity, status and expiration; electrode connection and expiration; ECG and charge/discharge circuits; microprocessor hardware and software; CPR circuitry and pads sensor; audio circuitry

CPR Metronome Rate: Constant 105 (+/- 2) CPM

*Depth Measurement:* 1.9 cm to 10.2 cm; 0.75 in to 4 in

*Defibrillation Advisory:* Evaluates electrode connection and patient ECG to determine if defibrillation is required

Shockable Rhythms: Ventricular fibrillation with average amplitude >100 microvolts and wide complex ventricular tachycardia with rates greater than 150 BPM for adults, 200 BPM for pediatrics. For ECG analysis algorithm sensitivity and specificity, refer to the ZOLL AED 3 Administrator's Guide.

Patient Impedance Measurement Range: 10 to 300 ohms

Defibrillator: Protected ECG circuitry

*Display Format:* High-resolution LCD with capacitive touch panel

*Display Screen Size:* 5.39 cm x 9.5 cm; 2.12 in x 3.74 in

Display Sweep Speed: 25 mm/sec

*Display Viewing Speed:* 3.84 seconds

Data Recording and Storage: Userconfigurable for 1 or 2 clinical events for total of 120 minutes. Includes ECG, impedance measurements, device prompts, and CPR data. With voice recording enabled, same data with synchronous audio added for total of 60 minutes.

Data Recovery: Controlled by touchscreen, uploaded to USB memory stick, or RescueNet CaseReview or CodeReview, over a WiFi network

Internal Clock Synchronization: Coordinated Universal Time (UTC) synchronization occurs when communicating with hospital Wi-Fi.

#### Device

*Size:* (H x W x D) 12.7 cm x 23.6 cm x 24.7 cm; 5.0 in x 9.3 in x 9.7 in

Weight: 2.5 kg; 5.5 lbs

*Power:* Lithium manganese dioxide battery pack

Wireless: 802.11 a/b/g/n

*Security Protocols:* WPA1, WPA 2, WPA Personal, WPA Enterprise

*Port:* USB 2.0

Audio Recording: User-configurable on/off (default=off)

*Device Classification:* Class III and internally powered per EN 60601-1

*Design Standards:* Meets applicable requirements of EN 60601-1, EN 60601-1-11, IEC 60601-2-4

#### **Environmental**

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

*Storage Temperature:* -30° to 70°C; -22° to 158°F

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

*Vibration:* IEC 60068-2-64, Random, Spectrum A.4, Table A.8, Cat. 3b; RTCA/D0-160G, Fixed Wing Aircraft, Section 8.6, Test Cat. H, Aircraft Zone 1 and 2; EN1789, Sweep per EN 60068-2-6 Test Fc

Shock: IEC 60068-2-27; 100G

*Altitude:* -381 m to 4573 m; 1,250 to 15,000 ft

Particle and Water Ingress: IP55

Drop Test: 1 meter; 3.28 ft

#### **Battery**

*Type:* Disposable, sealed lithium manganese dioxide

Battery Standby Life (once installed)\*: 5 years with weekly selftest. Battery end of life indicated by blank status window (typical remaining shocks: 9).

*Battery Shelf Life:* Store for up to 2 years at 23°C (77°F) prior to installing in ZOLL AED 3 BLS to maintain battery life detailed above.

*Temperature:* 0°C to 50°C (32°F to 122°F)

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

Weight: 317.5 grams; 0.7 lbs

*Size:* (H x W x D) 27.75 mm x 133 mm x 88 mm; 1.0 in x 5.16 in x 3.5 in

Nominal Voltage: 12 volts

#### **ZOLL AED 3 BLS Carry Bag**

*Size:* (H x W x D) 29.2 cm x 27.4 cm x 17.8 cm; 11.5 in x 10.8 in x 7.0 in

Weight: 3.4 kg; 7.5 lbs (ZOLL AED 3 BLS with battery installed and an electrode pre-connected in carry bag)

*Holds:* ZOLL AED 3 BLS with battery inserted and back-up set of electrodes

\*Battery standby life will be shorter in areas with low WiFi signal strength and/or more complex WiFi authentication protocols. Specifications subject to change without notice.

©2018 ZOLL Medical Corporation. All rights reserved. CaseReview, CPR Dashboard, Defibrillator Dashboard, Program Management Onboard, Real CPR Help, RescueNet, ZOLL AED 3, and ZOLL are trademarks or registered trademarks of ZOLL Medical Corporation in the United States and/or other countries. All other trademarks are the property of their respective owners. The ZOLL AED 3 is not available for sale in the United States. The product has not received regulatory clearance/approval by the Food and Drug Administration. Printed in U.S.A. MCN HP 1801 0294

