

AED Plus®

Technical Specifications



Measuring Chest Compression with Real CPR Help

The force required to depress the chest during CPR varies with the patient's size and build. The standard measure of chest compression quality, however, is not force but depth. The Real CPR Help® technology in ZOLL's CPR-D-padz® includes a hand-placement locator, an accelerometer, electronics, and a processing algorithm that work together to measure vertical displacement in space as each compression occurs.

One Size Fits All

ZOLL's one-piece electrode design accounts for anatomical variation. Based on extensive human data, CPR-D-padz meet the anthropometric chest characteristics of 99% of the population. If needed, the lower (apex) electrode can be separated and adjusted to accommodate the remaining 1% of the population.

Simplified Placement

Affixing two separate electrode pads to the patient's bare chest can be confusing to a lay rescuer. ZOLL's CPR-D-padz simplify this step by guiding placement of the red crosshairs at the center of the imaginary line connecting the patient's nipples. Once in place, the hand-locator and the two electrode pads fall naturally into optimal position for both defibrillation and CPR.

Five-Year Shelf Life

All AED electrodes transmit defibrillating electricity into the patient via metal in close contact with a salt-infused gel that is positioned between the metal and the skin. Over time, however, the salt in the gel will corrode the metal and eventually compromise electrode functionality. ZOLL's novel electrode design includes a sacrificial element that prevents significant corrosion for five years, which is unmatched in the market today.

AED Plus Specifications

Defibrillator

Waveform:

Rectilinear
Biphasic
Defibrillator
Charge Hold
Time: 30
seconds

Energy

Selection:
Automatic
preprogram
med
selection
(120J, 150J,
200J)

Patient

Safety: All
patient
connections
are
electrically
isolated
Charge

Time: Less
than 10
seconds
with new
batteries

Electrodes:
ZOLL CPR-D-
padz, pedi-
padz® II or
stat-padz® II
Self-test:
Configurable
automatic
self-test
from 1 to 7
days.

Default =
every 7
days.
Monthly
full-energy
test (200J).

Automatic
Self-Test
Checks:
Battery
capacity,
electrode
connection,
electrocardio
gram and
charge/disch
arge circuits,
microprocess

or hardware and software, CPR
circuitry and CPR-D sensor, and audio
circuitry *CPR: Metronome Rate:*
Variable 60 to 100 CPM

Depth: 3/4" to 3.5"; 1.9 to 8.9 cm
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 AED Plus
Administrator's Guide.

Patient Impedance Measurement
Range: 0 to 300 ohms

Specifications subject to change without notice.

Defibrillator: Protected ECG
circuitry *Display Format:* Optional
LCD with moving bar

Size: 12.6" x 1.3"; 6.6 cm x 3.3 cm

Optional ECG Viewing Window:

2.6 seconds *Optional ECG Display*
Sweep Speed: 25 mm/sec; 1"/sec
Battery Capacity: Typical new (20°C) =
5 years (225 shocks) or 13 hours
continuous monitoring. End of life
designated by Red X (typical
remaining shocks = 9).

Data Recording and Storage:
50 minutes of ECG and CPR data. If
audio recording option is installed and
enabled, 20 minutes of audio
recording, ECG, and CPR data. If audio
recording is disabled, 7 hours of ECG
and CPR data.

PC Minimum Requirements
For Configuration and Patient Data
Recovery: Windows® 98,
Windows® 2000, Windows® NT,
Windows® XP, Windows® 7,
IBMcompatible PII with 16550 UART
(or higher) computer. 64MB RAM.
VGA monitor or better. CD-ROM
drive. IrDA port. 2MB disk space.

Device

Size: (H x W x D) 5.25" x 9.50" x
11.50"; 13.3 cm x 24.1 cm x 29.2 cm

Weight | 6.7 lbs; 3.1 kg *Power:* User-
Replaceable Batteries. 10 Type 123A
Photo Flash lithium manganese
dioxide batteries *Device Classification:*
Class II and internally powered per
EN60601-1 *Design Standards:* Meets
applicable requirements of UL 2601,
AAMI DF-39, IEC 601-2-4,
EN60601-1, IEC60601-1-2

Environmental

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

-22° to 140°F; -30° to 60°C

Humidity: 10 to 95% relative humidity,
non-condensing *Vibration:* MIL Std.
810F, Min. Helicopter Test

Shock: IEC 68-2-27; 100G

Altitude: -300 to 15,000 ft.; -91m
to 4573 m *Particle and Water*
Ingress: IP-55

CPR-D-padz

Shelf Life: 5 years

Conductive Gel: Polymer Hydrogel

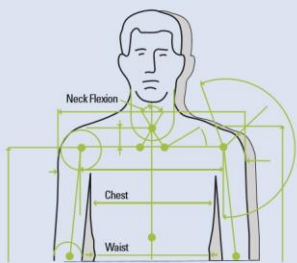
Conductive Element: Tin

Packaging: Multilayer foil

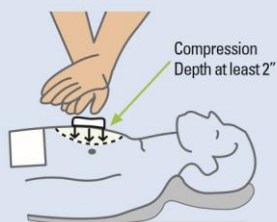
laminated pouch *Impedance Class:*
Low

Cable Length: 48 in (1.2 m) *Sternum:*
Length: 6.1 in (15.5 cm); Width: 5.0 in
(12.7 cm); Length, conductive gel: 3.5
in (8.9 cm); Width, conductive gel: 3.5
in (8.9 cm); Area, conductive gel:
12.3 sq in (79.0 sq cm) *Apex:*
Length: 6.1 in (15.5 cm); Width: 5.6
in (14.1 cm); Length, conductive
gel: 3.5 in (8.9 cm); Width,
conductive gel: 3.5 in (8.9 cm);
Area, conductive gel:
12.3 sq in (79.0 sq cm) *Complete*
Assembly: Folded

Length: 7.6 in (19.4 cm); Folded
width: 7.0 in (17.8 cm); Folded
height: 1.5 in (3.8 cm) *Design*
Standards: Meets applicable
requirements of ANSI/AAMI/ISO
DF-39-1993



Real CPR Help® provides unique assistance
to rescuers with real-time feedback on
CPR compression depth and rate.



ZOLL's one-piece CPR-D-padz is designed to
fit 99% of the population's chest anatomy.



CPR-D-padz offers clear anatomical
placement illustrations and a CPR hand
positioning landmark.



CPR-D-padz comes complete with rescue
essentials, including a barrier mask, a razor,
scissors, disposable gloves, and a towelette.

ADVANCING RESUSCITATION. TODAY.®

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