

# THE ART AND SCIENCE OF DEFIBRILLATION™

## Lifeline **AUTO**

The Lifeline AUTO is a fully automatic defibrillator designed to analyze heart rhythms and automatically deliver a shock—without intervention—if needed.

The Lifeline AUTO includes all mission critical features necessary to provide the most advanced treatment for Sudden Cardiac Arrest. Yet it is so simple and unthreatening to use that even non-medical personnel can effectively save lives.

The Lifeline AUTO was developed by experienced multidisciplinary engineering teams and incorporates state-of-the-art digital signal processing techniques and advanced ECG analysis algorithms.

The Lifeline AUTO defibrillator uses advanced biphasic technology - including the most studied biphasic shock waveform - and automatically adjusts the shock delivery to the person's individual needs.

For first response professions like police, fire and EMS, the Lifeline AUTO is standard equipment. For schools, offices, malls, factories and public places, it's becoming as vital as a fire extinguisher.



# Lifeline AUTO Fully Automatic Defibrillator

THE LATEST EVOLUTION IN THE AWARD-WINNING LIFELINE  
DEFIBRILLATOR SERIES

## What is the Lifeline AUTO?

The Lifeline AUTO is a fully automatic defibrillator designed to analyze heart rhythms and automatically deliver a shock—without intervention—if needed.

The Lifeline AUTO includes all mission critical features necessary to provide the most advanced treatment for Sudden Cardiac Arrest. Yet it is so simple and unintimidating to use that even non-medical personnel can effectively save lives.

The Lifeline AUTO was developed by experienced multidisciplinary engineering teams and incorporates state-of-the-art digital signal processing techniques and advanced ECG analysis algorithms.

## Why the Lifeline AUTO?

The device exceeds the American Heart Association performance recommendations - giving the user confidence the correct therapy is being delivered.

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## Technical Specifications\*

### DEFIBRILLATOR

|                                                                                          |                                                                                                                 |
|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| <b>Type</b><br>Fully Automatic external defibrillator                                    | <b>Voice Prompts</b><br>Extensive voice prompts guide user through operation of the unit                        |
| <b>Model</b><br>DDU-120 Series                                                           | <b>Controls</b><br>Lighted On/Off button                                                                        |
| <b>Waveform</b><br>Biphasic Truncated Exponential (Impedance compensated)                | <b>Indicators</b><br>"check pads"<br>"do not touch patient"<br>"analyzing"<br>armed-for-shock<br>AED status LED |
| <b>Energy</b><br>Adult: 150 Joules<br>Pediatric: 50 Joules<br>(Nominal into 50 Ohm load) |                                                                                                                 |
| <b>Charge Time*</b><br>DBP-2800: Less than 6 seconds<br>DBP-1400 Less than 9 Seconds     |                                                                                                                 |

### SELF TESTS

|                                                                                              |
|----------------------------------------------------------------------------------------------|
| <b>Automatic</b><br>Automatic daily, weekly and monthly circuitry tests                      |
| <b>Battery Insertion</b><br>System integrity test on battery insertion                       |
| <b>Pad Presence</b><br>Pads preconnected tested daily                                        |
| <b>User-Initiated</b><br>Unit and battery pack system test may also be initiated by the user |
| <b>Status Indication</b><br>Visual and audible indication of unit status                     |

### EVENT DOCUMENTATION

|                                                                                                                                                                                                                                                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Internal Event Record</b><br>Critical ECG segments and rescue event parameters are recorded and can be downloaded to a removable data card                                                                                                              |
| <b>PC-Based Event Review</b><br>ECG with event tag display, and audio playback when available                                                                                                                                                              |
| <b>Removable Storage</b><br>(Optional)<br>Up to 12 hours of ECG and event data storage (no audio option) or up to 2 hours of audio, ECG and event storage (audio option) on a removable data card. Actual length of storage is dependant on card capacity. |

### PATIENT ANALYSIS SYSTEM

|                                                                                                                                                                                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Patient Analysis</b><br>Automatically evaluates patient impedance for proper pad contact. Monitors signal quality and analyzes patient ECG for shockable/non-shockable rhythms |
| <b>Sensitivity/Specificity</b><br>Meets AAMI-DF-39 specifications and AHA recommendations                                                                                         |

### PHYSICAL

|                                                            |                                                                                                  |
|------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| <b>Size</b><br>8.5 x 11.8 x 2.7 inches<br>(22 x 30 x 7 cm) | <b>Weight (Approximate)</b><br>With DBP-1400: 4.2 lbs (1.9kg)<br>With DBP-2800: 4.4 lbs (2.0 kg) |
|------------------------------------------------------------|--------------------------------------------------------------------------------------------------|

### DEFIBRILLATION/MONITORING PADS

|                                                                                                                        |                                                                                                          |
|------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| <b>Model</b><br>Adult - DDP-100<br>Child/Infant - DDP-200P                                                             | <b>Surface Area</b><br>103 cm <sup>2</sup> (nominal, each pad)<br>50 cm <sup>2</sup> (nominal, each pad) |
| <b>Type</b><br>Pre-connected, single-use, non-polarized, disposable, self-adhesive electrodes with cable and connector | <b>Pad Placement</b><br>Adult - Anterior/Anterior<br>Child/Infant - Anterior/Posterior                   |
|                                                                                                                        | <b>Cable Length</b> (typical)<br>48 In (122 cm)                                                          |

### BATTERY PACK

| MODEL DBP-2800**                                            | MODEL DBP-1400**                                           |
|-------------------------------------------------------------|------------------------------------------------------------|
| <b>POWER</b> 15V, 2800 mAh                                  | <b>POWER</b> 15V, 1400 mAh                                 |
| <b>CAPACITY</b> 300 shocks or 16 hours continuous operation | <b>CAPACITY</b> 125 shocks or 8 hours continuous operation |
| <b>STANDBY LIFE</b> 7 years                                 | <b>STANDBY LIFE</b> 5 years                                |

|                                                                                      |                                                   |
|--------------------------------------------------------------------------------------|---------------------------------------------------|
| <b>Type</b><br>Lithium/Manganese Dioxide<br>Disposable, recyclable, non-rechargeable | <b>Low Battery Indicators</b><br>Visible, Audible |
|--------------------------------------------------------------------------------------|---------------------------------------------------|

### ENVIRONMENTAL

|                                                                                                                              |                                                                                                                                  |                                                                                                                         |                                                                                              |
|------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| <b>Relative/Humidity</b><br>Operating/Standby: 5%- 95% (non-considering)                                                     | <b>Altitude</b><br>-500 to 15,000 ft (-150 to 4500m) per MIL-STD-810F 500.4 Procedure II                                         | <b>Sealing/Water Resistance</b><br>IEC60529 class IP54; Splash proof, Dust Protected (Battery Pack installed)           | <b>EMC (Immunity)</b><br>EN 60601-2-4:2004, limits EN 61000-4-3:2002 Level 3 (10V/m), method |
| <b>Temperature</b><br>Operating: 0 to 50°C (32 to 122°F)                                                                     | <b>ESD</b><br>EN 61000-4-2:2001, (open air up to 8kV or direct contact up to 6kV)                                                | <b>EMC (Emission)</b><br>EN 60601-1 -3:1998 +A1: 2002, limits EN 55011: 1998 +A1: 1999 +A2:2002 Group 1 Level B, method |                                                                                              |
| <b>Shock/Drop Abuse Tolerance</b><br>MIL-STD-810F 516.5 Procedure IV (1 meter, any edge, corner or surface, in standby mode) | <b>Vibration</b><br>Ground (MIL-STD-810F 514.4 Category 20)<br>Helicopter (RTCA/DO-160D, Section 8.8.2, Cat R, Zone, 2, Curve G) |                                                                                                                         |                                                                                              |