

# ZOLL PD™ 1200 PACEMAKER/DEFIBRILLATOR

## Large Monitor

The ZOLL PD 1200 features a large, and bright CRT display. Messages are large and easy to read.

## Multi-Function Electrodes

ZOLL's Multi-Function Electrodes allow hands-off defibrillation, pacing, and monitoring. Just one pair of electrodes and one simple connection is all that is required to perform four functions: defibrillation, pacing, cardioversion and ECG monitoring. ZOLL Multi-Function Electrodes are faster and preferred by many clinicians instead of standard paddles.

## Ease of Use

The controls are simple and color-coded for easy operation. All functions and controls are standardized with other ZOLL models. Training time is reduced, skill retention is improved, and potential therapy delays are minimized.

## Pacing Technology

The ZOLL PD 1200 features ZOLL's patented pacing technology, recognized as the industry standard and proven superior in independent clinical studies.\*

## Monitoring Interface

A central station monitor interface allows remote monitoring of high risk patients.

\*Clinical studies are available upon request.



The ZOLL PD 1200, combining defibrillation, pacing, and monitoring, offers complete ACLS-response capabilities in a single, easy-to-use unit that is ideal for critical and specialty-care areas. It can be configured with the ZOLL "hands-off" Multi-Function Electrodes, with standard defibrillation paddles and pacing electrodes, and with internal defibrillation paddles and pacing electrodes.

The ZOLL PD 1200 operates on both AC line and battery power and is completely compatible with all models in the ZOLL cardiac resuscitation system.

## Versatile Power

Operates on both line and battery power. Superior, sealed lead-acid battery technology delivers higher capacity, longer life, and lower costs. Up to 2 hours of operation is provided. An integral charger maintains optimal battery charge and operates the unit regardless of battery condition.

## Annotating Recorder

Accurate and written documentation of therapies – including actual defibrillation – is provided automatically.

## Summary Capability

Automatically saves all important ECG events and device information to provide a complete printed record after the event.

## Warranty and Support

Comprehensive five-year warranty with use of a loaner in North America, around-the-clock technical assistance, on-site instruction, and a refresher training videotape are provided.

## Standardization

The ZOLL PD 1200 brings fast, reliable defibrillation, pacing, and monitoring to any hospital area. It offers complete standardization with the ZOLL system of cardiac resuscitation equipment. Accessories provide maximum flexibility and long-term value.

# ZOLL PD™ 1200

# SPECIFICATIONS

## Pacemaker

|                    |  |
|--------------------|--|
| Type:              | VVI demand; asynchronous (fixed rate) when used without ECG leads. |
| Pulse Type:        | Rectilinear, constant current.                                     |
| Pulse Duration:    | 40 milliseconds.   |
| Pulse Amplitude:   | VARIABLE TO 140 mA.  |
| Pacing Rate:       | VARIABLE FROM 30 TO 180 PPM.                                       |
| Output Protection: | Fully defibrillator-protected and isolated.                        |
| Pacer On:          | Message display on monitor.  |

## Pacing/Defibrillation Electrodes

Specially designed pre-gelled ZOLL Multi-Function Electrodes, and Multi-Function stat padz electrodes packaged in pairs. Can be used in the anterior/anterior position. Pediatric sizes available.

## Defibrillator

|                                |   |
|--------------------------------|---|
| Waveform:                      | Damped sinusoid.  |
| Output Energy Delivered:       | Selectable at 2, 3, 5, 7, 10, 20, 30, 50, 100, 150, 200, 300, 360 joules.   |
| Charge Time:                   | Less than 10 seconds.   |
| Delivered Energy Display:      | CRT monitor displays delivered energy.  |
| Synchronized Mode:             | Synchronizes defibrillator pulse to patient's R-wave. "SYNC" message displayed on monitor. Marker on monitor and on recorder paper identifies R-wave.   |
| Internal Paddles:              | Output limited to 50 joules when internal paddles are connected. Discharge from paddles.  |
| Charge Controls:               | Control on apex paddle and front panel.   |
| Paddles:                       | Standard paddles are anterior/anterior adult and pediatric. Adult paddles slide off to expose pediatric paddles.  |
| Defibrillation Electrodes:     | Specifically designed ZOLL Multi-Function Electrodes used in anterior/anterior or anterior/posterior positions; packaged in pairs.  |
| Integral Defibrillator Tester: | Integral circuitry allows complete test of defibrillator charge and discharge without removing paddles from storage wells. Identical circuitry allows complete test of unit configured with multi-function cable. |
| Defib On:                      | Message display on monitor.   |

## Monitor and Display

|                     |   |
|---------------------|---|
| Patient Connection: | Via 3-lead ECG cable, paddles, and electrodes. Selectable by front panel switch.          |
| Input Protection:   | Fully defibrillator-protected. Special circuit prevents distortion of ECG by pacer pulse. |
| Bandwidth:          | .5 – 40 Hz (–3dB) standard.   |
| Display Format:     | Nonfade, moving trace with freeze capability.   |
| Monitor On:         | Message display on monitor.   |
| Screen Type:        | High-resolution CRT display.  |
| Screen Size:        | 5 inches diagonally (108 mm x 85 mm viewing area).  |

|                                |   |
|--------------------------------|---|
| Sweep Speed:                   | 25 mm/sec.  |
| Viewing Time:                  | 4 seconds.  |
| Heart Rate:                    | Digital display on monitor 0 – 300 BPM.                                     |
| Pacer Output Current:          | Digital display on monitor 0 – 140 mA.                                      |
| ECG Lead Selection:            | Display on monitor.   |
| ECG Size:                      | .5, 1, 2 cm/mV display on monitor.  |
| Alarm On/Off Status:           | Display on monitor. User selectable High (60 – 280 BPM) Low (20 – 100 BPM). |
| ECG Lead Off:                  | Message display on monitor.   |
| Pacer Electrode Off:           | Message display on monitor.   |
| Defibrillator Paddle Fault:    | Message display on monitor.   |
| Defibrillator Electrode Fault: | Message display on monitor.   |
| Recorder Paper Out:            | Message display on monitor.   |
| Low Battery Voltage:           | Message display on monitor.   |

|                               |  |
|-------------------------------|--|
| Battery Charger Optional:     | Extended diagnostics – self-test mode. |
| Defibrillator Charge Time:    | Extended diagnostics – self-test mode. |
| Peak Delivered Defib Current: | Extended diagnostics – self-test mode. |
| Pace Rate and Output:         | Extended diagnostics – self-test mode. |

## Diagnostic Self-Test

## Recorder

|                     |   |
|---------------------|---|
| Paper:              | Standard 40 mm thermal (grid width), 50 mm (paper width).   |
| Speed:              | 25 mm/sec.  |
| Delay:              | 4 seconds.  |
| Annotations:        | Time, date, defib energy heart rate, pacer output, sync, event marker, ECG size, lead, alarm, defib test OK/Fail. |
| Writing Method:     | High-resolution, thermal array print head.  |
| Printout Modes:     | Manual, automatic.  |
| Automatic Function: | 15 second recording initiated by alarm conditions and defibrillator discharge.                                    |

## Batteries

|                        |  |
|------------------------|--|
| Type:                  | Rechargeable, sealed lead-acid.  |
| Recharge Time:         | 24 hours to full capacity.   |
| Charger:               | Integral to instrument; no separate charger unit required.   |
| Service:               | Battery is easily removed as a unit.   |
| Low Battery Indicator: | Message display on monitor. Approximately 20 minutes of monitoring remain when message is displayed. Instrument will operate on AC power when batteries are depleted. Defibrillator charge time may be extended when batteries are depleted. |
| Operating Time:        | 50 defibrillator charges to maximum energy (360J), or 2 hours of continuous monitoring, or 1.5 hours of continuous monitoring/pacing at 60 mA, 80 beats/min.   |

## General

|                     |   |
|---------------------|---|
| Size:               | 18 cm high x 32 cm wide x 42 cm deep (7 x 12.6 x 16.5 in).  |
| Weight:             | 12 kg (27 lbs)  |
| Power Requirements: | 115 VAC, 60 Hz input or 220 VAC, 50 Hz input.   |
| Power Consumption:  | 50 watts maximum.   |
| Warranty:           | In North America: 5 years, including use of a loaner. Outside North America: consult ZOLL authorized representative.                |
| Design Standards:   | Meets or exceeds all AAMI specifications for defibrillators. Meets or exceeds UL 544, IEC 601, CSA standards for medical equipment. |
| Patient Safety:     | All patient connections are fully isolated.   |
| Temperature:        | Operating: 0°C to 55°C.<br>Storage: –40°C to 75°C.<br>Humidity: 5% to 95% relative.   |

## Product Information

|                        |  |
|------------------------|--|
| ZOLL PD 1200 8002-0011 | Pacemaker/Defibrillator standard configuration includes the following:<br>1 set standard anterior/anterior defibrillator paddles (adult, pediatric), 1 ECG cable, 1 pacer output cable, 1 set adult electrodes, 1 set pediatric electrodes, 1 roll recorder paper, 2 operator's guides, 1 tube defib gel, 1 inservice videotape. |
| ZOLL PD 1210 8002-0101 | Electrophysiology PD 1200 version for use with external programmable stimulator in electrophysiology studies.  |

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