



- DEFIBRILLATOR •
- MULTIFUNCTIONAL •  
PADS
- BIPHASIC SHOCK •
- MONITOR  
CONNECTION •
- OPTION OF PADS  
FOR INTERNAL  
DEFIBRILLATION

# apolus

Biphasic  
Defibrillator



## HIGHLIGHTS



The most cost-effective equipment for basic function of defibrillation without compromising the safety of a reputable manufacturer.



- Integrated adult and child multifunctional pads.
- Charge ready and patient contact indicator on pads.
- Optional pads for internal defibrillation (adult and child).
- Connection for synchronization with external cardiac monitor (cardioversion).



# apolus

## PRACTICAL

- Instant initialization.
- Ready for shock in less than 6 seconds.
- Biphasic energy delivered of up to 360 J, electronically limited to 50 J when used with child pads.
- Light and robust, it has a low and wide base, which facilitates use and allows horizontal operation or vertical attachment.
- Large handles on both sides and no sharp edges design for emergency transport.

## EASY TO USE

- Main functions concentrated in just one selector button.
- Infocenter - Through the LCD display the user receives information (in Portuguese) about the operation of the equipment and alerts of the functional test.
- Operation on 1, 2, 3 pattern - uses the same command layout of the CardioMax/DualMax line of defibrillators, facilitating use by professionals already familiar with equipment from Instramed, resulting in less training time.

## RELIABLE

- Reliability - Instramed is a brand present in hundreds of medical organizations on more than 60 countries.
- Dependable products developed for the reality of emergency care.
- A wide network of dealers providing sales and parts, along with the factory-certified technical assistance, provides excellent post-sales service.
- With more than 30 years in the business, Instramed is a manufacturer that maintains stock parts and components even for discontinued products.

KNOW MORE ABOUT THIS PRODUCT AT [WWW.INSTRAMED.COM.BR](http://WWW.INSTRAMED.COM.BR)

**GENERAL SPECIFICATIONS****•Dimension with pads:**

- 44.5 cm (W).
- 24.5 cm (D).
- 20.0 cm (H).

**•Weight:**

- Device: 3.0 Kg.
- External set: 0.85 Kg.
- Complete set: 4.75 Kg.

**•Removable rechargeable battery:**

- Type: NiMH, 14.4V DC 4.5 A/h.

**•Duration (fully charged battery):**

- Minimum of 140 shocks at 360 J or a minimum of 200 shocks at 200 J.
- Time to fully charge the battery (when fully depleted): 8 hours.
- Battery level indication on display.

**•Optional rechargeable battery\*:**

- Type: Li-Ion, 14.8 VDC 4.4 A/h
- Duration: 3 hours (fully charged battery), without the printer or a minimum of 140 shocks at 360 J or a minimum of 200 shocks at 200 J.
- Time to fully charge the battery (when fully depleted): 8 hours.
- \* Consult availability.

**•Consumption (maximum):**

- AC: 400 W.
- Battery 15 A.

**•Fuse:**

- 5 A power supply

**•Battery storage:**

- Storing the battery for long periods of time in temperatures higher than 35° C will reduce its capacity and lifetime.

**•Protection index:**

- IPX1.

**•Classification:**

- Class I, internally energized.
- CF Type.

**•Operating mode:**

- Continuous operation.

**ENVIRONMENTAL SPECIFICATIONS****•Temperature:**

- Operational: 0 to 50°C.
- Storage: 0 to 70°C.

**•Humidity:**

- Operational: 10 to 95% RH, without condensation.
- Storage: 10 to 95% RH, without condensation.

**DEFIBRILLATOR****•Waveform:**

- Biphasic truncated exponential.
- Wave shaped parameters adjusted according to the patient's impedance.

**•Shock application:**

- By means of multifunction pads or external adult/child pads.

**•Scales for adult/external defibrillation:**

- 5, 10, 15, 20, 30, 40, 50, 80, 100, 150, 200, 250, 300 and 360 J.
- Maximum energy limited to 50 J in internal or child pads.

**•Operation:**

- Standard sequence "1-2-3".

**•Selector key:**

- Allows turning the equipment on and off, selecting energy scales and activating functional test mode.

**•Command keys:**

- Charge, Shock, Disarm and Sync (Synchronism).

**•Charge command:**

- CHARGE button in front panel, button in external pads.

**•Shock command:**

- SHOCK button in front panel, buttons in external pads.

**•Disarm command:**

- DISARM button in front panel.

**•Synchronized command:**

- SYNC button in front panel.

**•Charge indicators:**

- Audio indication of equipment being charged, audio indication of charge completed, LED on external pads and charge level indicated on display.

**•Maximum charge time in maximum energy:**

- < 6s with 90% to 100% of the minimum specified voltage.
- < 6s with a full charge.
- < 13s from equipment initialization.

**•External pads size:**

- Adult = 10.3 cm x 8.5 cm – Area: 81.9 cm<sup>2</sup>
- Children = 4.5 cm x 4 cm – Area: 18 cm<sup>2</sup>

**•Automatic internal discharge:**

- 30 seconds.

**•Synchronism:**

- Synchronism circuit with external signal of 1V/mV of a cardiograph or electrocardiograph.

**•Time of synchronized discharge:**

- < 60 ms after R wave peak.

**•Maximum output voltage:**

- 2000 V.

**•Maximum output electric current:**

- 80 A (25 Ω).

**•Defibrillation pads:**

- External adult and child (included).
- Internal adult and child (optional).

**DISPLAY****•Battery level indication:**

- Yes.

**•Size:**

- 99 mm x 19 mm.

**•Type:**

- Alphanumeric LCD.
- 12.5, 25 e 50 mm/s.

**STANDARDS**

- NBR IEC 60601-1
- NBR IEC 60601-1-2
- NBR IEC 60601-1-6
- NBR IEC 60601-2-4 or equivalent IECs.