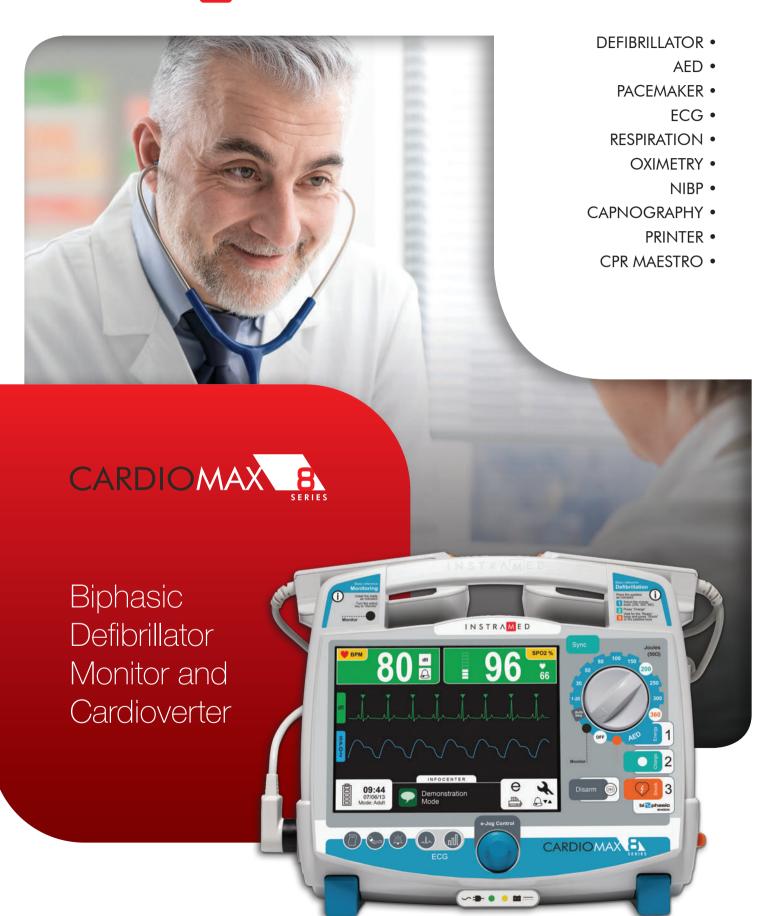
INSTRAMED





- Oximetry (SpO₂)*
- Non invasive pacemaker*
- Non-invasive pressure (NIBP)*
- Capnography (EtCO₂)*
- Printer*
- Removable rechargeable battery

THE IDEAL PARTNER FOR YOUR CARDIOMAX

Positioned on the patient's chest, the CPR Maestro provides real-time feedback on the rescuer's performance by guiding him through voice, LCD display and indications on the CardioMax screen about the procedure's optimal frequency, strength and interval.

The result is a much more effective and consistent performance of CPR, resulting not only in increased chances of patient survival, but reducing the occurrence of severe sequelae due to lack of oxygenation.



PRACTICAL

- Light.
- Ready to use in less than 6 seconds.
- Biphase power delivery of up to 360 J.
- AED Mode Automated External Defibrillator.
- CPR Maestro
 assists in performing
 cardiopulmonary
 resuscitation by
 measuring the
 frequency and depth of
 the chest compressions
 applied (optional).
- Internal battery, easy to replace, allows more than 100 shocks.

EASY TO USE

- Easy to use All operations centralized on just two buttons.
- Easy operation 1, 2, 3 standard.
- Quick access to main functions.
- Easy-to-use user interface - automatically adjusts itself to the number of active parameters, presenting clear and organized information.
- Large 8.4" color display.

SMART

- Auto Sequencing Charge function -When enabled, applies charges pre-configured by the user for the first, second and third shocks without the need to change the selector manually.
- Smart monitoring alarms.
- Sudden Death
 Prevention (SDP)
 technology. This
 characteristic allows
 CardioMax to
 monitor the patient
 continually and identify
 the beginning of a
 Ventricular Fibrillation
 or Rapid Ventricular
 Tachycardia episode.

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 postsales service.
- With more than 30 years in the business, Instramed is a manufacturer that maintains stock parts and components even for discontinued products.

GENERAL SPECIFICATIONS

· Pads dimensions

- 30.0 cm (11.81 in) length
- 21.5 cm (8.46 in) depth.
- 28.0 cm (11.02 in) height...

Weight

- Device 5.15 kg (11.35 lbs).
- Li-Ion battery 0.60 kg (1.32 lbs).
- External pads 0.85 kg (1.87 lbs).
- Complete set (Li-lon battery) 6.60 Kg (15.66 lbs) (except NIBP).

Electrical

- AC: 100 to 220 VAC, 50/60 Hz.
- DC external: 11 to 16 VDC

· Removable rechargeable battery

- Type: Li-lon, 14.4 VDC 4 A/h
- Duration: battery with full charge 3 hours in monitor mode, without printer, or a minimum of 140 shocks at 360 J or a minimum of 200 shocks at 200 J.
- Battery full-charge time (when fully depleted): 4h 30min.
- Type: Li-lon, 14.4 VDC 6 A/h
- Duration: battery with full charge 6.5 hours in monitor mode, without printer, or a minimum of 250 shocks at 360 J or a minimum of 400 shocks at 200 J.
- Battery full-charge time (when fully depleted): 7h 20min.
- **Check availability.

Memory

- Type: Nand Flash.
- Capacity: 2 Mbytes
- Patients stored: >150 patients
- ECG: 2 continuous hours of ECG curve recording, when in AED mode.
- Storage: 15 seconds of ECG when in shock, physiological alarm and panel events.

RTC - Real Time Check (Available when equipped with optional Li-ion battery)

 Defibrillation self-test, battery level, connected pads, power source connection check. Check is performed 3 times which are set in advance. This information is wirelessly transmitted to a PC with RTC System software installed and within range of the network.

ENVIRONMENTAL SPECIFICATIONS

• Temperature

- Operational: 0 to 50 °C.
- Storage: -20 to 50 °C.

Humidity

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

• IP rating

- IPX1 (standard) or IP44 (optional).

DEFIBRILLATOR

Waveform

 Biphasic truncated exponential. Waveform parameters adjusted in terms of patient's impedance.

Shock application

By means of multifunctional pads (adhesive) or defibrillation pads.

· Scales for adult/external defibrillation

- Scales: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 20, 30, 50, 80, 100, 150, 200, 250, 300 and 360 J (maximum power can be limited to 200 J). Maximum power limited to 50 J for children's pads.
- Commands: On/Off button, charge, shock, synchronise.
- Energy selection: selector switch in front panel.Charge command: button in front panel or
- buttons in external pads.Shock command: button in front panel or
- buttons in external pads.
 Synchronized command: sync button in front

· Charge auto-sequencing

 When enabled, it charges power previously set by the user for the first, second and third shocks, with no need to manually adjust the selector.

Maximum charge time in maximum energy

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

Charge indicators

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

· External pads size

- Adult = 10.3 cm x 8.5 cm.
 Contact area = 81.9 cm².
- Children = 4.5 cm x 4 cm. Contact area = 18 cm².

Cardioversion

- < 60 ms.

Pads

- Adult and child external (included)
- Adult and child external (optional).
- Multifunctional for pacemaker, monitoring and defibrillation (optional).
- Multifunctional extension (optional)

AED MODULE

· Functional characteristics

- Voice instructions, visual indications, CPR instructions, USB 2.0. Multilanguage.

USB

 USB 2.0 for transfer of the electrocardiogram stored in AED mode to a compatible PC.

SoftDEA

Software for viewing the data transferred to
the PC

· Maximum charge time

- 50 J: 2 seconds
- 150 J: 4 seconds.
- 200 J: 6 seconds.

EXTERNAL (OPTIONAL)

Modes

- Demand or fixed

Amplitude

 From 5 mA to 200 mA(resolution of 5 mA), accuracy 10%.

· Pulse width

- 20 ms (tolerance of 10%).

Frequency

From 30 PPM to 180 PPM (increments of 5 PPM), accuracy ± 2%.

· Refractory period

- 340 ms (from 30 to 80 PPM).
- 240 ms (from 90 to 180 PPM).

NIBP (OPTIONAL)

· Operating principle

- Oscillometric

Automatic mode

- 1, 2, 3, 4, 5, 10, 15, 30, 60 and 90 minutes.

Manual mode

- One measurement.

Measurement interval Adult range

- Systolic: 40 - 260 mmHg

- Mean: 26 - 220 mmHg.

- Diastolic: 20 - 200 mmHg.

Pediatric range

- Systolic: 40 160 mmHg
- Mean: 26 133 mmHg
- Diastolic: 20 120 mmHg.

Neonatal range

- Systolic: 40 130 mmHg
- Mean: 26 110 mmHg.
- Diastolic: 20 100 mmHg.

· Overpressure limit by software

- Adult: 290 mmHg max.
- Neonate: 145 mmHg max.

Overpressure protection by hardware

- Adult: 300 ± mmHg.
- Neonate: 150 ± mmHg.

Resolution

- 1 mmHg.

CPR MAESTRO (OPTIONAL)

Accessory for Cardiopulmonary Resuscitation (CPR)

- Feedback of the thoracic compressions.

DISPLAY

· Battery level indicator

- Yes.

• Size

- 128.2 mm x 170.9 mm.

Diagonal

- 8.4".

• Type

- Color LCD TFT.

Resolution

- 640 x 480 pixels (VGA).

· Scan speed

- 6.25, 12.5, 25 e 50 mm/s.

ECG (supports up to 12 simultaneous derivations when equipped with optional module)

Inputs

- 3 or 5 lead ECG cable.
- 10 lead ECG cable (optional).
- External pads.
- Multifunctional pads

Range

- 15 to 350 BPM.

Precision

+ 1 RPM from 15 to 350 RPM

· Rejection in common mode

Higher than 90 dB, in compliance with the AAMI standards for heart monitors (EC 13).

Sensitivity

- 5, 10, 15, 20, 30 and 40 mm/mV.

· AC line filter

- 60 Hz or 50 Hz.

· ECG response frequency

- Diagnostic mode: 0.05 -100 Hz.
- Monitor mode: 1 40 Hz.

Patient insulation

- Defibrillation proof.
- ECG: CF type.
- SpO₃: CF type.

Loose electrode

- Identified and shown with low level

Time to re-establish the ECG baseline after defibrillation:

≤ 3 seconds.

SpO_a (OPTIONAL)

- SpO, range
- 0 to 100%.

Pulse range

- 30 to 250 BPM.

• SpO_a precision

- ± 2% from 70 to 100%.

- ± 3% from 50 to 69%.

Pulse precision
 ± 2 BPM.

CAPNOGRAPHY (OPTIONAL)

• CO, measurement interval

- 0 - 99 mmHg.

Precision

- ± 2 mmHg (0 - 38 mmHg).

± 5% + 0.08%. For each 1 mmHg above 38 mmHg (39 – 99mmHg).

Consumption

- 1.5 W. • Compensation

- BTPS, N₂O and O₂.

PRINTER (OPTIONAL)

Prints up to three simultaneous

_ deriv

Type
 Thermal.

Weight

- 0,104 Kg. • **Speed**

25 or 50 mm/s with ± 5% precision. Paper size

- 58 mm (width) x 15 m (maximum length).

STANDARD
- NBR IEC 60601-1

- NBR IEC 60601-1 2

- NBR IEC 60601-1 4

- NBR IEC 60601-1-8

- NBR IEC 60601-2-4 - NBR IEC 60601-2-27

NBR IEC 60601-2-30NBR IEC 60601-2-49 or equivalent IECs.

Instramed Ltda.

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Some items are optional. Please verify availability.



ANVISA 10242950009



