



Premium Hospital Beds

MATRIX E50



## MONITORING AND SURVEILLANCE

Accessible Intensive Care

### Continuous Weighing

Improves the quality of the stay and increases the availability of caregivers with real-time patient weight display, without leaving the bed.

It includes weighing registration history with twelve memories, as well as zero and tare functions.



### Interactive Alarms

The bed integrates audible and visual alarms, alerting to the exit of the patient until they are deactivated.

With the same technology, the system alerts to the overload, safeguarding the operation of the bed and therefore the patient's health.

## Universal Healthcare

The simplicity of the solutions that characterise Matrix E50 makes it possible to increase patient accessibility to Intensive Care Units.

With the main features required to care for critically ill patients, such as emergency medical positions, weight monitoring and tools to reduce hospitalisation times, it becomes a bed that meets patients' therapeutic requirements and an indispensable tool for healthcare professionals.



Embedded in the foot panel

**7" touch screen**

1



2



3



4



## 1 Handset Control

Highly shock resistant. Portable control powered by an extendable helical cable.

Allows the following positions:

- Back and Legs
- Height
- Reverse Trendelenburg
- Cardiac Chair
- Examination
- Rest

## 3 Foot Controls

Used bilaterally, it makes it possible to position the bed with hands free for more effective treatments.

Allows the following positions:

- Height
- Cardiac Chair
- CPR

## 2 Nurse Control

Located in a drawer at the foot of the bed and recessed in the foot of the bed panel. With selective locks as protection against accidental or improper use. Powered by an extendable helical cable.

Allows the following positions:

- Back and Legs
- Auto Contour
- Height
- Trendelenburg and Reverse
- Cardiac Chair
- Examination
- Shock
- CPR

Equipped with LED to indicate:

- Battery state
- Selective lock

## 4 Built-In Controls

Integrated in the upper side rails, they are composed of 2 caregiver and 2 patient controls. Activation by GO button and selective locks as protection against misuse.

Equipped with LED to indicate:

- Battery state
- Selective lock
- GO button

Allows the following positions:

- Back and Legs
- Height
- Trendelenburg and Reverse
- Cardiac Chair
- Examination
- Shock
- CPR
- 30° Back
- Night Light

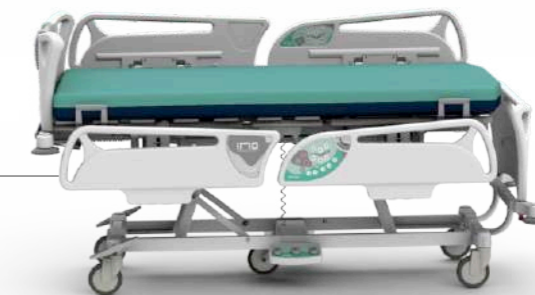
## Cardiac Chair

Automatically performs, by the activation of a single button, the sitting position. Improves respiratory function and facilitate the administration of medication and the practice of autonomous activities.



## Examination

Automatically performs, by the activation of a single button, the position of maximum height and levels the mattress platform. Ensures an ergonomically correct posture for carers during examinations and treatments.



## Shock

It performs automatically, by the activation of a single button, the Trendelenburg position and levels the mattress platform. Used to reverse hypoxic episodes in vital organs.



## CPR

Automatically sets the minimum height position and levels the mattress platform at the push of a single button. Ensures correct posture for patient and caregivers during cardiopulmonary resuscitation manoeuvres.



3 STEPS OF  
EARLY MOBILITY

30° Back Function  
Breath Well

# 1 Stabilization



Angle Gauges  
Precise Medical Positions

Seated Position  
High Backrest

# 2 Verticalization



Reverse Trendelenburg  
Set the Uprising

Rails Handgrip  
Safe Movements

# 3 Mobilisation



Low Minimum Height  
Easy Bed Exit/Entry

**3 STEPS OF EARLY MOBILITY**  
Better Outcomes

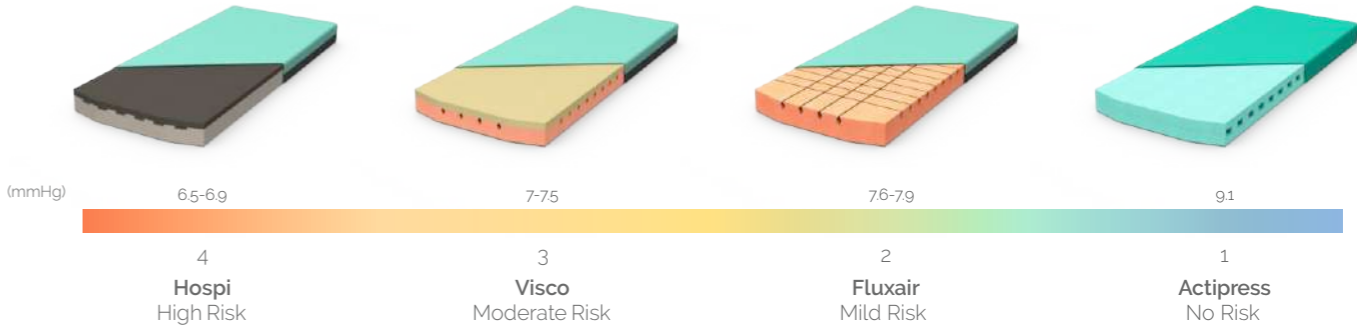


**Double Autoregression**

The articulation of the mattress platform (back + legs) causes harmful muscular pressure in the abdominal and lumbar areas. By lifting the back and leg articulations, they simultaneously perform a synchronised horizontal glide

**Pressure Ulcer Prevention**

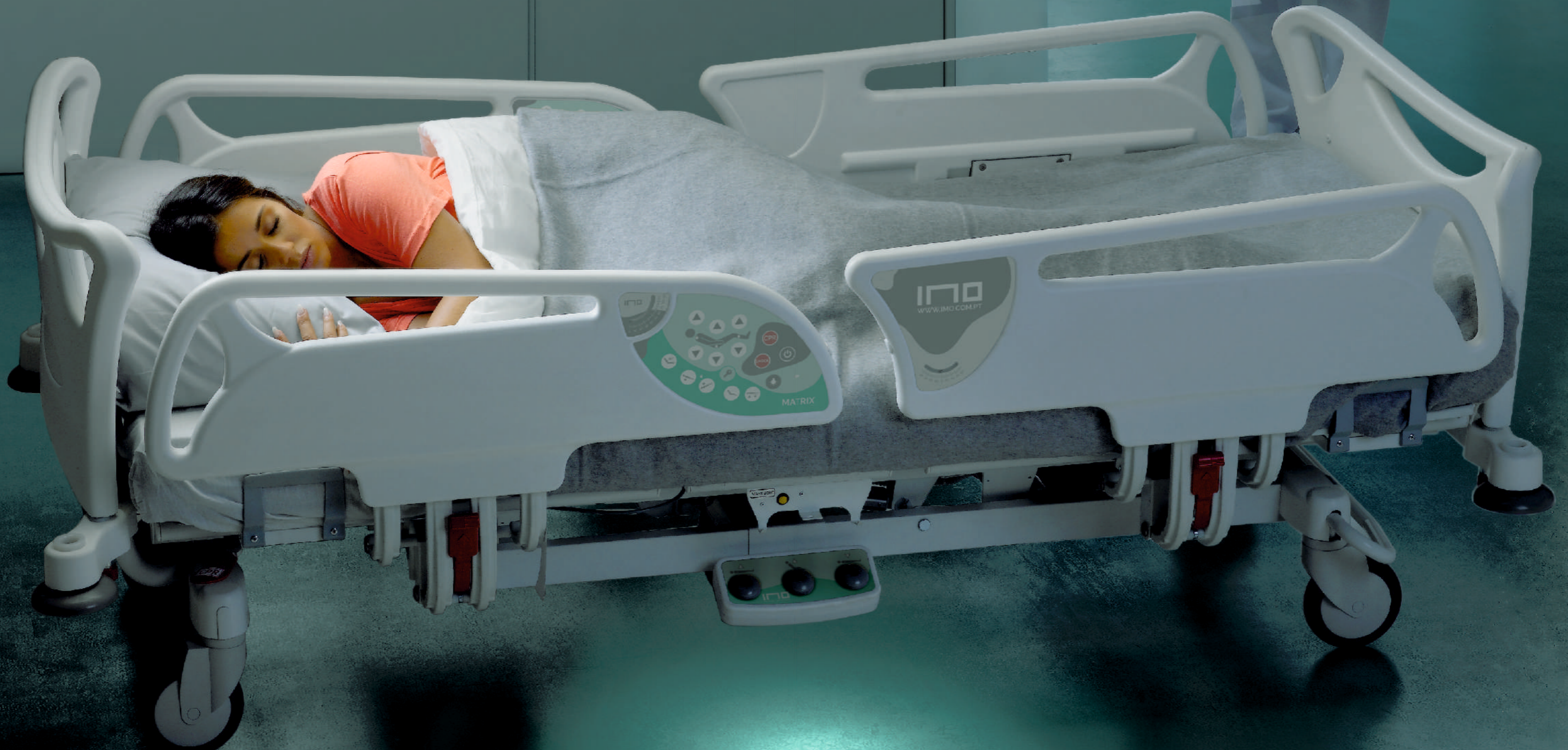
The double autoregression of the back and leg articulations causes decompression and relief of the sacroiliac area, a critical point in the development of pressure ulcers.



**ENHANCED SAFETY**  
Fall Prevention

## Night Light

Matrix E50 model has a night light option that facilitates patient orientation in low light environments. Bicoloured light, it changes its colour when at minimum height, thus allowing a quick check whether the bed is in the safe sleeping position.



## ENHANCED SAFETY

Fall Prevention



### EN 60601-2-52 Standard

Side rails comply with EN 60601-2-52.

They prevent and avoid the risk of injuries caused by accidental falls through high side coverage.

### Self-Confidence

The bed has features designed to help in the recovery such as the design of the split side rails, so that only one rail is lowered, helping in the exit of the bed, or the automatic stop in the best bed exit height.



### Bed Exit Alarm

Activated from the monitoring screen, it is triggered when the system no longer detects the patient's weight, activating an audible and visual warning. This feature dramatically decreases the time it takes to assist patients who need help getting out of bed, thus mitigating the effects of potential falls.



## ENHANCED SAFETY

Emergency Procedures



### Endotracheal Intubation

The bed end panels are vertically removable. However, the headboard support structure is fixed to the base, allowing unobstructed intubation. By raising the mattress platform to the Examination position with a single button, removal of the panel becomes unnecessary.

### Selective Locking

The electrical functions of the bed can be selectively disabled for reasons of functional convenience or safeguarding the patient's health, the exception being the emergency functions, which are not affected by selective locking.



### Manual CPR

The bed has bilateral quick-folding handles on the back section for cardiopulmonary resuscitation manoeuvres. They are located at the apexes of the back section for easy access and use.

## INFECTION CONTROL

Hospitality



### Mattress Platform

The bed frame consists of 11 modular components made of plastic (PPC) or 4 phenolic panels (HPL). All the components can be extracted for cleaning using a quick-lock system

### Support Drawer

The foot panel has an optional, telescopic-opening, retractable linen holder to support the bed changing service.



### One Hand Bed Extension

One-handed adjustable foot panel, allowing for quick and easy extension of the bed. Telescopic mattress support grid, allowing the extension to be maintained with the articulated foot section

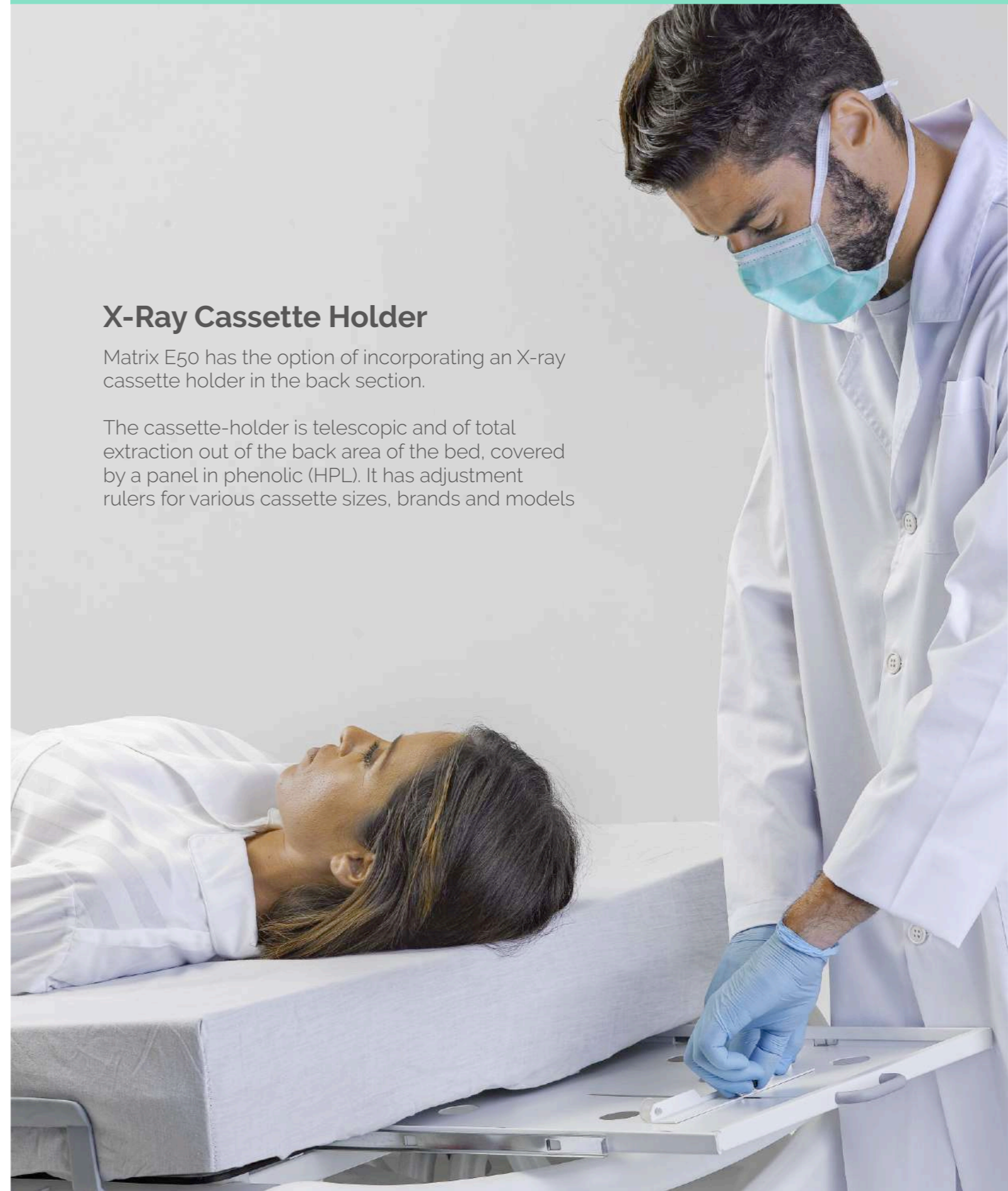
## LIGHT HANDLING

Emergency Procedures

### X-Ray Cassette Holder

Matrix E50 has the option of incorporating an X-ray cassette holder in the back section.

The cassette-holder is telescopic and of total extraction out of the back area of the bed, covered by a panel in phenolic (HPL). It has adjustment rulers for various cassette sizes, brands and models



## LIGHT HANDLING

Easier Transport



### 1 Power Cable Protection

Power cables damaged by transport is one of the most frequent malfunctions in electric hospital beds.

Matrix E50 is equipped with a convenient portable cable holder to fit on top of the head panel in addition to the fixed frame reel.

### 2 Batteries

Beds equipped with a battery system to maintain the operation of the bed when disconnected from the power supply. For long autonomy, we rely on a high-performance lithium battery.

When connected to the power supply, it electronically manages the charging, making it unnecessary to disconnect the power socket once the batteries are charged. Certified with electrical surge protection and anti-static wheel option.

### 3 Total Disinfection

The design of the bed has been conceived to facilitate the cleaning process. Reducing as far as possible the points where dirt accumulates.



### Transport Handgrips

The bed end panels design incorporates handgrips so the caregivers have a smooth and easy transport handling.



### Brake Bar

Option of bed equipped with cross-brake bar, with centralised braking on all 4 wheels and directional lock on one.

### Zero Gap

When folded down, the side rails fold out from under the bed. This allows a stretcher to be placed against the bed and the patient to be safely transferred, facilitates patient entry and exit and does not disturb medical interventions.



### Transport Locks

The bed end panels have buttons to block their removal, ensuring safer transport for patients and caregivers.



### Brake Pedals

Bed equipped with brake pedals, with centralised braking on all 4 wheels and directional lock on one.



### Fifth Wheel

System that improves the manoeuvrability of the bed in tight spaces by rotating 360° on a vertical axis.

For movement in a straight line, the drive is carried out on the brake pedals in directional lock position.

## LIGHT HANDLING

Easier Transport



1



2

- 1 Integral double ABS Ø150mm
- 2 Integral Smart single ABS Ø150mm
- Casters available in anti-static version

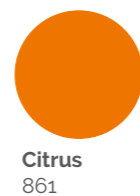
## Brake Alarm

Available as an option, it is triggered when you unlock the bed without first removing the plug from the building's power socket.

This function considerably reduces bed maintenance costs.

## Barriers Decoration

Availability of non standard finishes on request.



## TECHNICAL FEATURES

Model 944.E5

**Standard** - feature included as standard.

**Optional** - choose from various options.

**Extra** - feature not included as standard.

**Standard**  
**Optional**  
**Extra**

### Base

Open design base to prevent dirt build-up	●		
Base corners protected by plastic fairings	●		
Integral Ø150mm ABS double casters		●	
Integral Smart Ø150mm ABS casters		●	
Central locking and steering control pedal		●	
Central locking and steering control bar		●	
Adjustable fifth wheel			●
Anti-static wheel			●
Brake alarm			●

### Mattress Platform

4 sections bed frame (3 articulated + 1 fixed)	●		
Modular PPC panels extractable for cleaning		●	
Phenolic (HPL) panels extractable for cleaning		●	
Double autoregression	●		
Flexible mattress shoulders	●		
Bilateral levers for a quick manual CPR release	●		
Foot section manually adjustable by a mechanical rack	●		
X-ray cassette holder and radiolucent HPL backrest			●

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**Standard**  
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**Extra**

**Standard**  
**Optional**  
**Extra**

## Structure

Bed frame with lpx4 protection	●
Robust metal frame epoxy painted	●
Mobile components zinc plated or/and stainless steel	●
Headboard frame fixed to base	●
Corners protected by soft bumpers	●
Bilateral foley bag hooks	●

## Side Rails

Splitted, in HDPE medical (High Density Polyethylene)	●
Backrest and Trendelenburg angle gauge	●
Collapsible and folding system Gap Zero	●
Soft drop released by red handle	●

## Head/Foot Boards

In HDPE medical (High Density Polyethylene)	●
Easily removable	●
Transport lockers (removed on demand)	●
One hand mattress platform extension	●
Foot end with rack for nurse control support	●
Linen holder drawer	●

## Electric Setup

Motions managed by a microprocessed unit	●
Low voltage motors DC24V (4 linear actuators)	●
Lithium batteries with discharge alarm	●
Cable holder for transport	●

## Control

Side rails built-in controls (2 exterior + 2 interior)	●
Handset control with extendable helical cable	●
Nurse control with extendable helical cable	●
Bilateral foot control	●
Bicoloured night light (rest position)	●

## Load Monitor

Integrated weighing system	●
Bed exit alarm	●
Overload alarm	●

Monitoring touch screen	●
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IV Pole

Monitor Stand



Serum support  
Stainless steel column  
Adjustable rod with 4 hooks

910.104i

Serum support  
Epoxy painted column  
Adjustable rod with 4 hooks

910.104



Support for monitor with straps  
Epoxy painted structure  
Foldable top in phenolic (HPL)

910.810

Lifting Trapezee

Urinal Holder



Patient lifting  
Stainless steel column  
Trapezee with adjustable handle

910.200

Patient lifting  
Stainless steel column  
Trapezee with auto-adjustable handle

910.201



Support for urinal  
Calibrated stainless steel rod construction  
Removable and adjustable

910.530

Bilateral DIN bar for accessories  
4 sliding hooks included

Optional

O2 Tank Holder

Crutches Holder



Support for oxygen tank  
Fitting on the corners of the bed  
In stainless steel

910.530



Support for 2 crutches  
Rubber fitting  
Epoxy painted structure  
Removable and adjustable

910.570

## MATRIX E50

\* Ø150mm double ABS caster, PPC frame

### Dimensions +/- 5%

Recommended mattress dimensions	1970 x 860 x 120/150 mm
External dimensions	2195 x 1000 mm
Width with raised siderails	1020 mm
Min/Max height	410/783 mm*

### Joints +/- 5%

Maximum back incline	70°				
Maximum Cardiac Chair	90°				
Maximum leg incline	40°				
Maximum foot lowering	25°				
Maximum incline	<table border="1"> <tr> <td>Trendelenburg</td> <td>17°</td> </tr> <tr> <td>Reverse Trendelenburg</td> <td>17°</td> </tr> </table>	Trendelenburg	17°	Reverse Trendelenburg	17°
Trendelenburg	17°				
Reverse Trendelenburg	17°				

### Capacities +/- 5%

Maximum patient weight	250 Kg
Power supply	100-240 VAC, 50/60 Hz
Control unit power	390 VA
Battery charge	18 W
Electrical protection	Class 1 Applied parts type B



## Registry and Conformity

- CE Mark
- Officially registered as Medical Device Class I, n° 125/DM/2017/01/217 - Infarmed
- Over the scope of Regulation (EU) 2017/745/EU and Decree-Law 145/2009
- Certified according to the standard EN ISO 9001 - Quality Management System
- Certified according to the standard EN ISO 13485 - Medical Devices Conception and Manufacturing

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