Alex - Tilt version

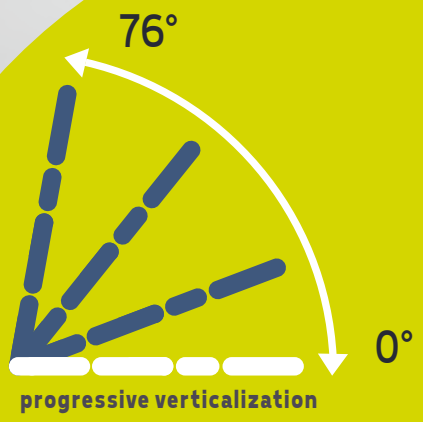
Verticalizing bed with integrated weighing system

Early mobility and Progressive Verticalization

BED WITH INTEGRATED SCALE

Frequent usage

- Nursing home special care unit
- Semi intensive care unit
- Intensive care unit
- Rehabilitation
- Severe brain injuries
- Coma recovery unit
- Hospitalization
- Long term hospitalization
- Transplant centre
- Burn center



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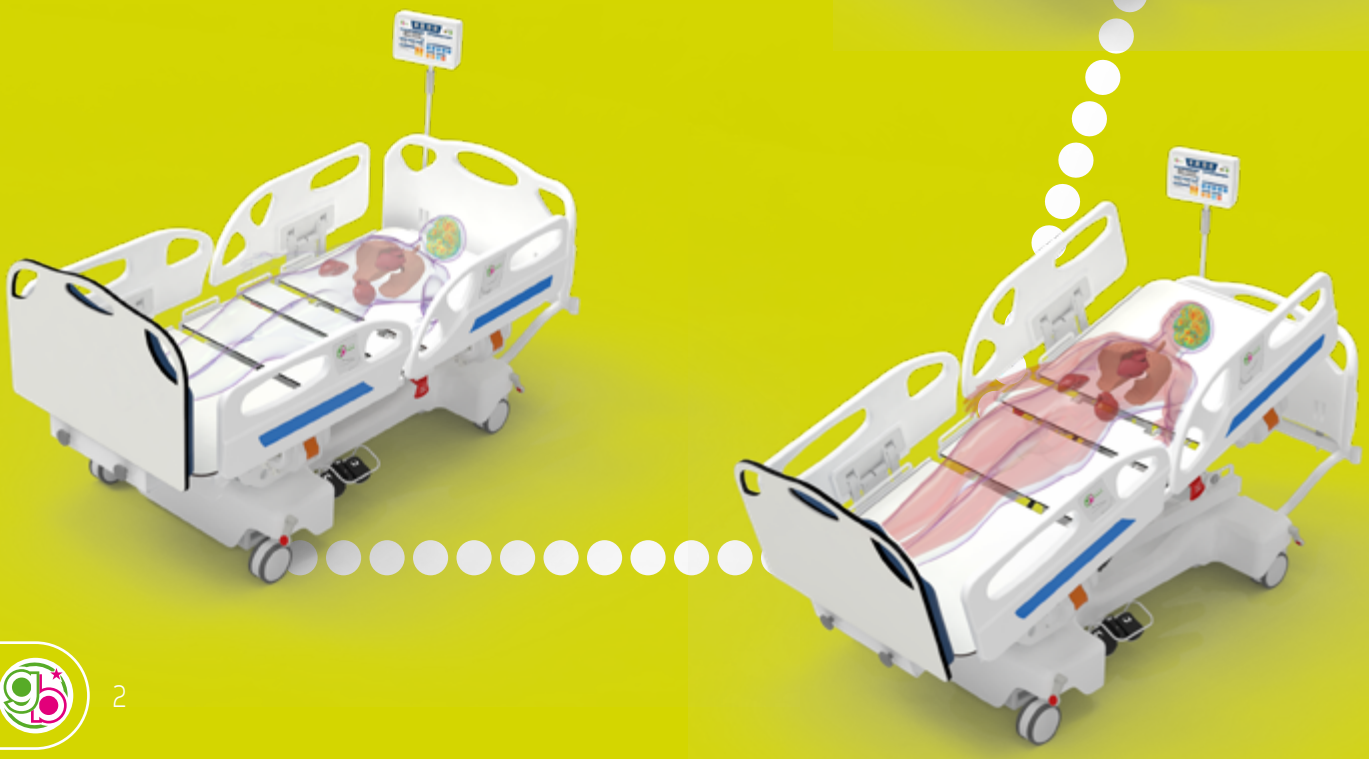
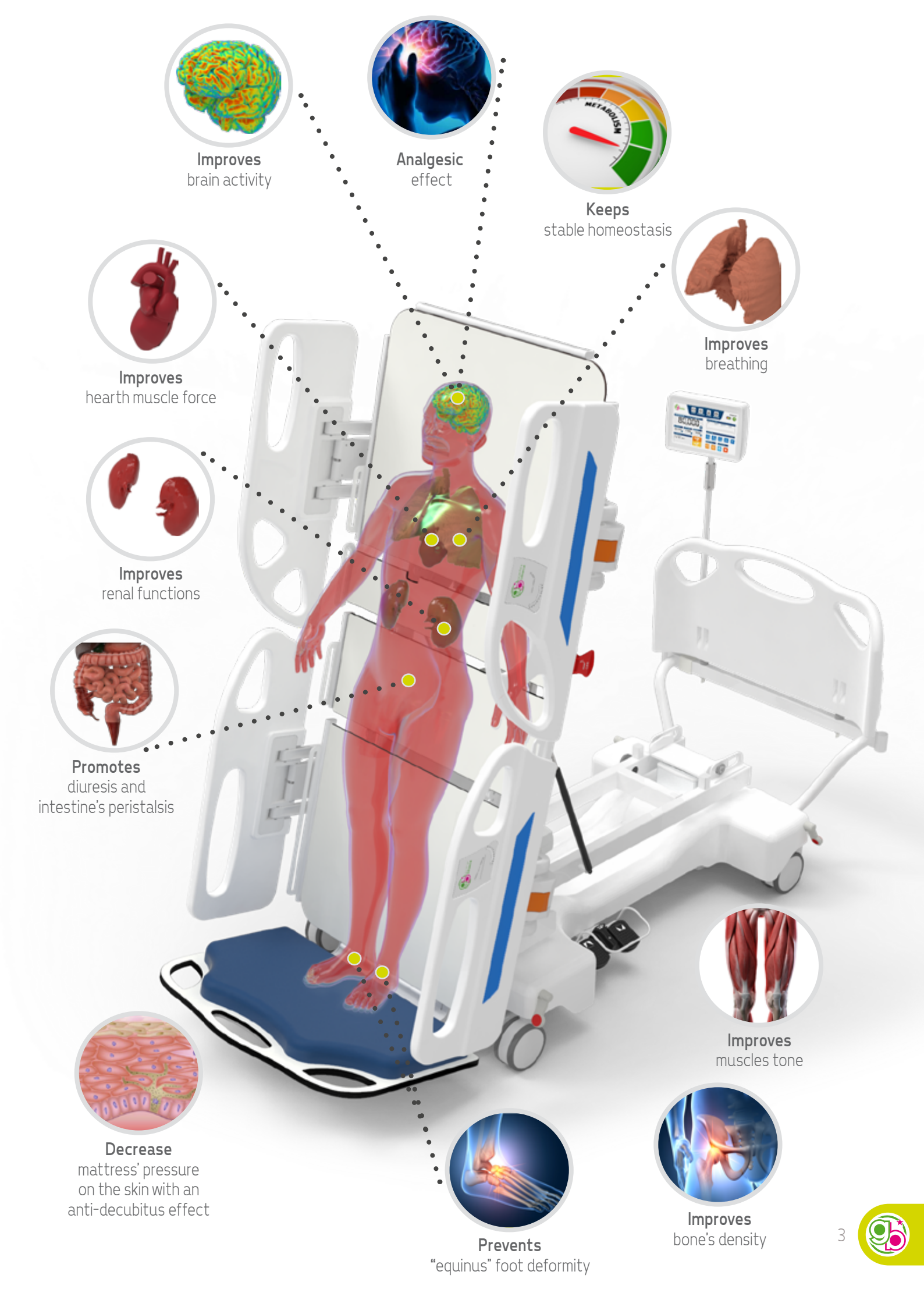
Benefits

Progressive verticalization and early mobility

Alex Version Tilt is a scale bed that autonomously allows the early mobilization of bedridden patients avoiding the risky transfer of them to other medical devices designated for this purpose. Through cycles of **passive mobilization** (such as progressive verticalization and / or lateral tilt) the patient will have a functional recovery that is very important to have an early discharge.
The advantages of passive postural gymnastics in standing and/or tilt are synthetically represented in the following chart but already widely known in the scientific literature. Starting the mobilization process from the early stages of of bedridden patient's hospitalization is in fact clinically strategic since it significantly reduces the side effects of long immobility that ususally occur with some severe pathologies.

The **early mobility** of patients also represents a significant advantage for the healthcare organization, and it is even more important if performed with this medical device which can be operated by a single operator via easily accessible controls. During the movements, the patient is completely protected by 4 safety belts adjustable in width. The **early progressive mobility** and rehabilitation of clinically stable patients, performed with the Alex Tilt Version, allows the patient's emotional participation even if they are going through an acute phase of severe pathology. In fact, the patient experiencing progressive early mobility usually perceives a range of sensations and emotions that are usually linked to positive achievements and gradual recovery.




Improves
brain activity
Analgesic
effect
METABOLISM
Keeps
stable homeostasis
Improves
hearth muscle force
Improves
breathing
Improves
renal functions
Promotes
diuresis and
intestine's peristalsis
Improves
muscles tone
Decrease
mattress' pressure
on the skin with an
anti-decubitus effect
Prevents
"equinus" foot deformity
Improves
bone's density

TOUCH SCREEN
SCALE'S DIPLAY
EQUIPMENT CODE AC167

(MOVEMENTS CAN BE
CONTROLLED ALSO THROUGH
THE DISPLAY)

Benefits

Weighing system

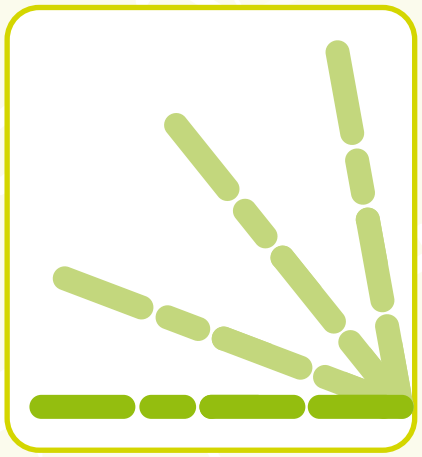
Alex scale bed is equipped with an integrated digital weighing stystem, metrologically approved and at the top of accuracy compliant to directive NAWI 2014/31/EU.

- The weight is displayed on a touch screen HD 10" with a 160° visual angle (the display controls also bed's movements).
- Low voltage power
- Box in palstic with IP65 insulation.
- Soft Touch Button to switch the screen on
- POST - Power-on Self Test
- Countdown for weight loss
- Full scale limit
- Scale stabilizer
- Weight loss alarm.
- Patient exit alarm.
- Programmed maintenance alarm.
- Battery indicator
- System's updates
- Patient's identification data
- Patient's place indicator
- Automatic zero at switch-on
- Tare: Automatic and manual, always visible
- Reading mode: This features will enlarge the section related to the weight on the screen up to 8,5"
- Initial weight: Automatic initial weight memorization into patient's personal data sheet. All the data will be transmitted
- automatically to the USB and Ethernet port with Checksum protection.
- Final weight: Automatic final weight memorization into patient's personal data sheet. All the data will be transmitted automatically to the USB and Ethernet port with Checksum protection.
- Weight loss: Graphical and numerical display of the weight.
- Optimized graphic with instantaneous weight display - weight loss duration - weight loss delta - countdown. Excellent digital graphic and prompt displaying of the following data: weight loss - weight loss time - weight loss delta - countdown, with relative graphic representation; Intelligent system that recognizes the presence of the patient on the bed.
- Unit of measurement indicator: The unit of measurement can be choose between kgs and lbs.

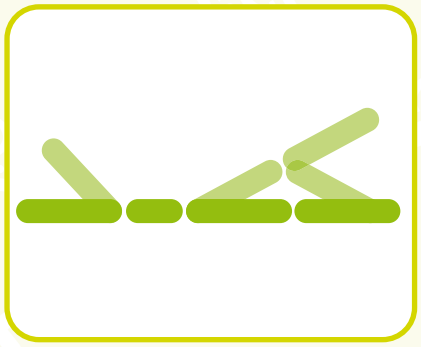
Benefits

Weighing system

- PC data transmission RS232 or LAN 10/100. With a max load capacity of 200 kg automatic displaying of the minimal division of 50 g up to 150 kg and of 100g up to 200 kg. Triple scale option.
- Converter: 24 bit, 10000 DIVISIONS.
- Automatic data transmission to ports.
- Memory functions up to 120.000 weighing.
- Interfaces: No.1 Ethernet + N°2 USB (interfaces scan RS232/USB) - BT and Wi-Fi (optional).
- Battery status indicator.
- Hour and date always visible.
- PASSIVE MOBILISATION Programme.
- Six motors single or simultaneous activation.
- PUSH&GO motors system.
- Up to 5 available memories.
- Opprtunity to switch-on up to 4 external devices (e.g lamps, electric bell, operator advise).
- Display lightning control.
- Screen saver.
- Night mode.
- Smart function.
- Communication system between multiple indicators through Ethernet and WiFi.
- Complete check through app for Android/ Ios / Windows and GBSmart.
- Remote parameter control.
- Displaying of user manual and service manual.
- Connection to digital devices through RS485.
- Progammed maintenance option.
- Tampering protection with code NSA.
- Tampering protection cells ANTISWAP.
- Access register.
- Failure and malfunction handling.
- Error reset.
- Assistance call-button from the device.
- Remote failure identification.
- Remote maintenance.
- Remote tare verification (only when digital load cells are present).
- Remote locale software's update.
- Digital identifying label.
- Language setting: English - Italian - German - Spanish - French.
- Smart functions.
- Remote parameters verification.
- Full display of user and service manuals.
- Programmed maintenance setting.
- Box in palstic with IP65 insulation.



VERTICALIZZAZIONE



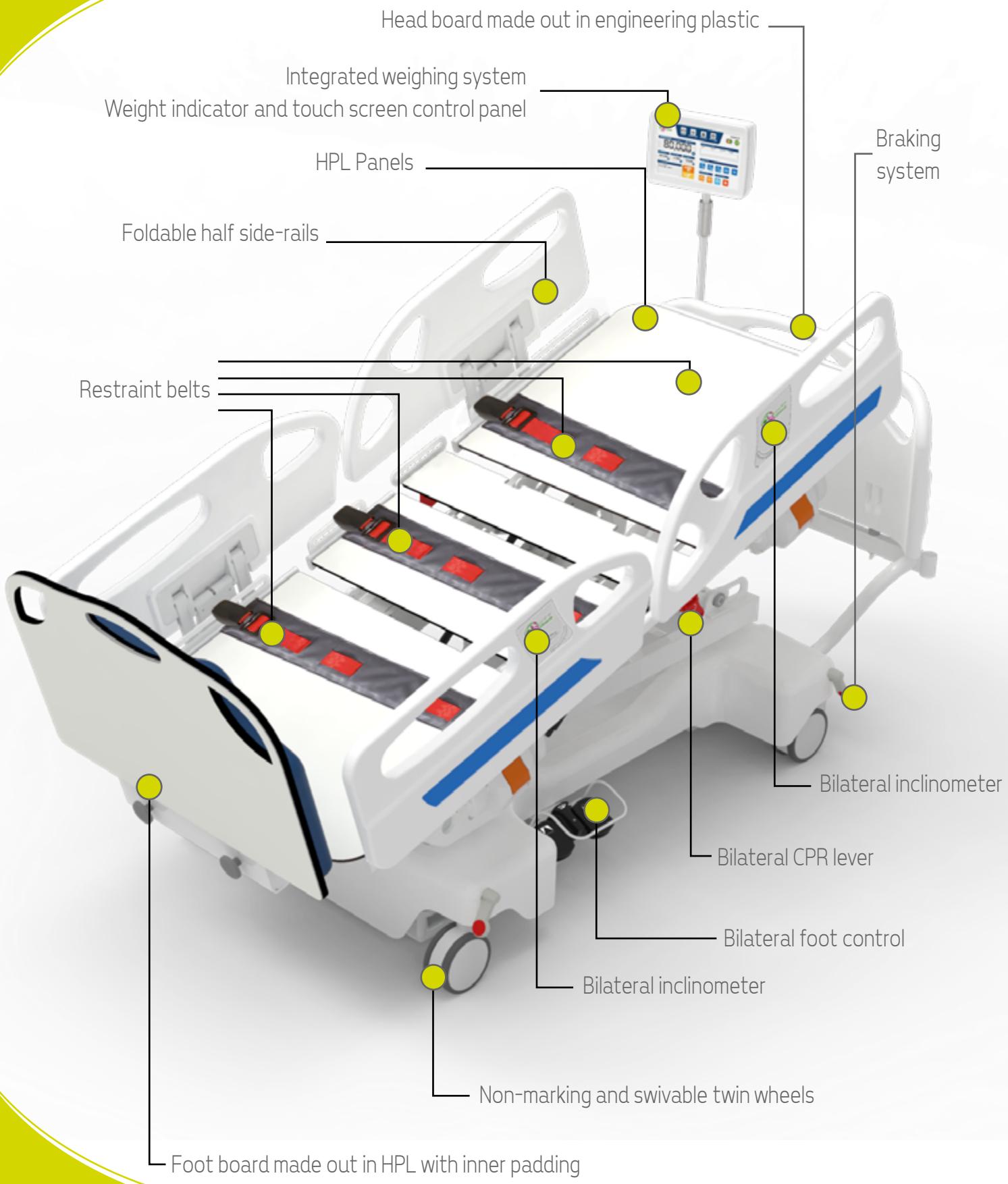
MOVIMENTAZIONI DELLE SEZIONI

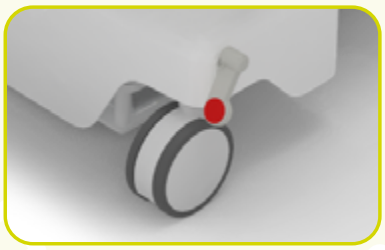
Benefits

Device

- Reinforced frame in S235JR steel, it is protected from wearing through a treatment with thermosetting epoxy paint.
- Ergonomic lying surface, divided in sections, protected by thermoformed removable HPL panels easily sanitizable.
- The structure is designed to allow an easy sanitization with the most common used detergent.
- Lying surface height 550mm.
- Head and foot board are made out of techno polymer. They can be easily removed through dedicated mechanism. Lightweight and sturdy at the same time.
- Head and foot board made out of HPL. The inner part of the panel is padded giving comfort to the patient while the bed is in upright position.
- Low voltage motors. Anti-crushing and anti-shearing.
- Quick release of the backrest through dedicated lever for CPR emergency manoeuvre.
- Cardiologic position with roto-translation of the backrest to avoid chest's crushing.
- Emergency power supply through rechargeable batteries - 10 cycles.
- Clearance for hoist.
- Easy access to the floor underneath the device for cleaning.
- Highly performing wheels to make the transport of the patient easy.
- Thermoformed ABS base cover.
- Absence of parts that need to be greased.
- Resistant to scratch and to all the chemical substances.
- No parts that need greasing.
- Customizable colours.
- Latex free and phtalates free.

Standard feature





DIRECTIONAL BRAKING SYSTEM
ACTIVATE THROUGH
BILATERAL PEDALS
EQUIPMENT CODE AC7L1/G.

Standard features

- Reinforced frame in S235JR steel, it is protected from wearing through a treatment with thermosetting epoxy paint.
- Lying surface divided in 4 sections and 3 articulations in washable HPL.
- Height of the lying surface: 550mm.
- Motorized movements:
  - No. 3 telescopic columns with rectangular section. Two of them at the leg end and one at the head end.
  - Low voltage 24v dc linear actuators with spline system.
- Verticalization through electric actuator located between the two upper frames.
- Motorized back section through electric actuator - Range 0-70°.
- Motorized femoral section through electric actuator - Range 0-25°.
- Motorized leg section through electric actuator. The movement of the leg section is synchronized with the femoral section.
- Height adjustment through motorized columns + 300mm.
- Verticalized position - Range 0/78°.
- Motorized Trendelenburg and reverse Trendelenburg through telescopic column - Range -17°/17°.

Standard features

- Translation of the backrest section of 11cm to avoid chest compression.
- Cardiologic position - Equipment code AC62.
- Twin wheels, swivable and non-marking, diameter 150mm.
- Directional braking system. It can be activated through bilateral pedals - Equipment code AC7L1/G.
- Quick release of the backrest through bilateral manual lever for CPR manoeuvre. - Equipment code AC8L. Suitable height for cardiac massage can be aslo achieved through the CPR key on the touch screen.
- Head board made out in engineering plastic with safety lock - Equipment code AC65/3.
- Foot board made out in HPL with padding to ensure comfort to the patient during verticalization.
- Foldable half side-rails couple with integrated angle indicator - Equipment code AC71.
- Restraint belts - One belt is provided with a locking sensor to start the verticalization process - Equipment code AC168.
- Head-strap - Equipment code AC178.
- Bilateral pedal controls located on the base frame. Push&Go system to raise the bed, keep the pedal pushed to lower it.
- Bed's movements are controlled by handset with a 3,5 mtl coiled cable. The handset is user friendly and has visual pictograms useful for partially sighted people. Insulation IP66.
- Bag holder hooks on DIN bar - Equipment code AC148.
- Equipotential node.
- Emergency battery - Equipment code AC17L.
- Cable support on both ends of the bed - Equipment code AC50L.
- Touch screen display located behind the head board - Equipment code AC167.
- Painted with epoxy and thermosetting paints.

BILATERAL LEVER FOR BACKREST QUICK RELEASE
EQUIPMENT CODE AC8L

HEAD PANEL SAFETY LOCK

SAFETY BELTS
EQUIPMENT CODE AC168

10 BUTTONS HANDSET

FASCIA REGGITESTA - CODICE DOTAZIONE AC178

Movements

Verticalization

Verticalization is controlled by:

- **Pedal control** located on both sides of the frame, it is equipped with protections that avoid uncontrolled pushings.
  The following sequence is activated by pressing on the pedals:
  - **Automatic closening of all the sections**
  - **Descent of the bed until lowest height**
  - **Verticalization of the lying surface**

  Verticalization can be stopped by pressing again the activation pedal once the degree of inclination needed by the operator has been reached. The inclination control is entrusted to the operator who reads the value on the inclinometer placed on the side of the bed.

  For descent, the dedicated pedal must be pressed and held down throughout the descent until reaching the horizontal position (or other angles of inclination).
- Multifunctional touch screen **control panel** - Equipment code AC167.

BILATERAL PEDAL CONTROL

TOUCH SCREEN CONTROL PANEL

Movements

Height Adjustment

Height adjustment is controlled by:

- **Ergonomic handset for the patient** with 10 keys and inhibition key.

PATIENT'S HANDSET

- Multifunctional touch screen **control panel**.
  Equipment code AC167.

TOUCH SCREEN CONTROL PANEL

Movements

Trendelenburg and reverse Trendelenburg

Trendelenburg and **reverse Trendelenburg** positions can be reached with the following means:

- **Ergonomic patient handset** with 10 key. It can be inhibited with a key.

PATIENT'S HANDSET

- **Multifunctional control panel** with touch screen function. Equipment code AC167

PANNELLO DI CONTROLLO TOUCH SCREEN

Movements

Cardiologic position (memory button)

Cardiologic position can be achieved through the following means:

- Multifunctional touch screen **control panel.**
  Equipment code AC167.

TOUCH SCREEN CONTROL PANEL

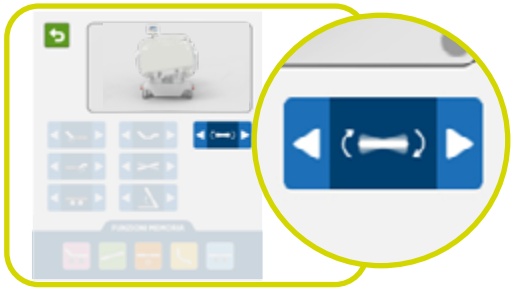
Available accessories

Lateral tilt - Range -20°/20° - Equipment code AC171

Alex medical device can also be equipped with a lateral tilt function with an inclination of -20°/20°. Scientific evidences have demontrated that many benefits come from **placing the patient on the side**, expecially when they are forced to long stays in bed without moving. **Passive postural gymnastics** (early movement therapy by bilateral tilt) is only one of the many advantages as well as the verticalizing system. The lateral tilt also reduces the strain of healthcare workers when handling the patient.

Lateral tilting is controlled by:

- Multifunctional touch screen **control panel**.
  Equipment code AC167.



TOUCH SCREEN CONTROL PANEL

Costum colours

Customizable shoulders, foot board and side rails

The inserts of the shoulders panels and of the side rails can be customized upon request with an adhesive vinyl insert that will give a colourful look to the entire device. The vinyl insert can be customized by choosing different colours: light blue, blue, green or other colors upon request.

HEAD BOARD
EQUIOMENT CODE AC65/3

HALF-SIDE RAIL
EQUIOMENT CODE AC71

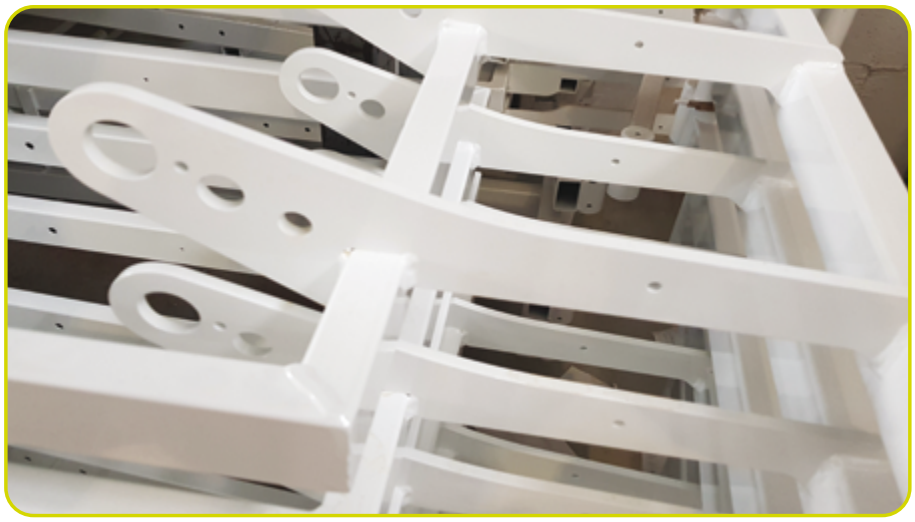
Personalizzazione colori

Foot board inner padding:

The inner padding of the foot board is customizable with external bielastic and extremely thick fabric (flame retardant leatherette UNI 9175/87 e 9175FA-1/94 class 1IM). The colour of the upholstery is customizable upon request - Equipment code AC87/1.

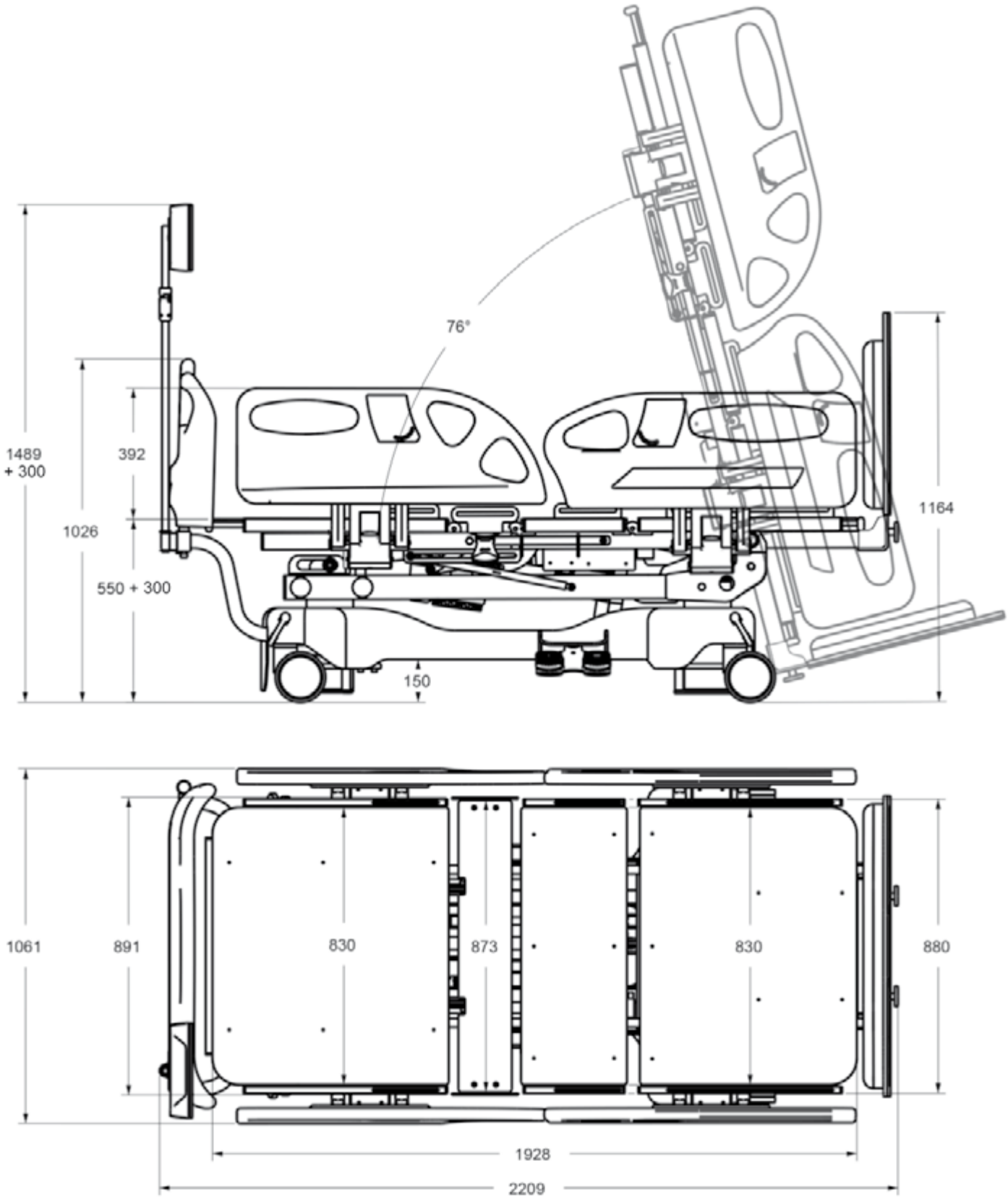
Frame:

The bed frame is made of very thick painted steel with epoxy powders and enriched with antibacterial. The color of the frame can be customized upon request.



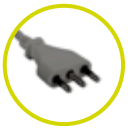
Would you like to customize upholstery or frame?
Scan or click the QR code and discover how to customize the device consulting our colour chart.

Dimensions


76°
1489
+ 300
392
1026
550 + 300
150
1164
1061
891
830
873
830
880
1928
2209

MAIN CORD


Type F - Schuko


Type L - 16A


Type I - Australia


Type B - Canada and USA


Type G - UK plug

Technical sheet

GMDN Code	-
ID Product	**GB0023.SP**
Intended use	Bed with integrated scale for weight determination of the patient for assessment, diagnosis and care purposes.
Manufacturer	GARDHEN BILANCE SRL
Spare parts	10 years
Weight	170 kg without accessories
Controls	10 buttons handset Touch screen control panel Bilateral pedals
Battery	10 cycles of autonomy
Battery weighing system	6 V self rechargeable (autonomy approx. 24 hours)
Power	Multivoltage 100-240 Vac 50-60 Hz
Main cord	Schuko or other upon request
Wheels	No. 4 swiveling and stainless 150 mm with braking system
Electric motors	Low voltage (24 V)
Max electrical input	Max 4A
Insulation	IP44
Max load capacity	200 kg
Safety working load	235 kg
Division	Displaying of the minimal division of 50g up to 150kg and of 100g up to 200kg.
Load cell power	5Vcc (from 1 to 4)
Display box	Display box in plastic material with IP65 insulation
Converter	24bit
Display	Touch Screen
Working conditions	From -10°C to +40°C with 60% max. humidity rate
Display power	7.5 Vdc
Status indicator	Luminous on the display and on controls
Alarms	Excessive or insufficient weight loss / Patient exit alarm / Brake disconnection alarm / Brake disconnection luminous alarm / Battery status indicator / Faults indicator / Maintenance deadline alarm
Data transmission	RS232 serial standard - usb - ethernet
I/O (opz.)	4 outputs
Antiblack-out function	Extra battery + software
Tare	Automatic and manual

For certifications please refer to "Certifications and Quality system" section

Dep. EN_277 rev. 27/09/2022

Literature

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Early rehabilitation for severe acquired brain injury in intensive care unit: multicenter observational study

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Mobilization in early rehabilitation in intensive care unit patients with severe acquired brain injury: An observational study

Christian Gunge Riberholt, Jane Lindschou, Christian Gluud, Jesper Mehlsen & Kirsten Møller
Early mobilisation by head-up tilt with stepping versus standard care after severe traumatic brain injury - Protocol for a randomised clinical feasibility trial

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Alex - Tilt Version

Verticalizing bed with integrated weighing system

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