



Horizon 300
Paediatric Bed Range
(suitable for PICU, wards)



## Horizon 300 Electrical Bed



Paediatric bed with two section platform, with Plexiglas siderails, monocoque molded section platform. Mattress platform electric height adjustable with possibility of Trendelenburg position and Reverse Trendelenburg movements. The bed is completely devoid of parts made of wood or wood derivatives as required by DIN 32623-2009-11 PATENTED PRODUCT.

The platform sections are moulded in recyclable plastic material and made in monocoque in order to facilitate the operations of cleaning and disinfection. The platform is fitted of two handles to lift or lower it. The backrest is fitted of stop mattress and side handles for easy adjustment. The platform in the area under the backrest, is closed to ensure the safety of the child in any situation.

The backrest can be adjusted by a gas spring that can be activated by two side controls. The inclination of the backrest is readable on two indicators corner at both sides of the backrest.

The head and footboards are made of monocoque molded plastic elements in transparent Plexiglas. These elements can be removed in case of an emergency by acting on two simple levers.

The height variable sleepdeck is electrically operated. Regulation of the height adjustment ensures the bed sleepdeck can attain the Trendelenburg and Reverse Trendelenburg positions.

The electric system comprises a control unit, two actuator motors, a back up battery and an operator handset.

The vertical sliding siderails are composed of an outer aluminium frame and an inner transparent Plexiglas panel with gas spring assisted motion lockable in two positions.

#### Supplied with:

- Plastic base cover thermoshaped in ABS
- Microban Protection

Dimensions: Length: 1885mm Height: 1515mm Width: 870mm

**Technical Information** 

Mattress maximum dimensions: 1460 x 720mm

Mattress maximum height: 100mm
Platform dimensions: 1470 x 715mm

Platform height adjustment (type): Electric
Platform height adjustment (range): 695 - 970mm
Back section inclination (type): Manual - gas si

Back section inclination (type): Manual - gas spring helped 70° (+2.0°; - 0.0°)

Trendelenburg movement: Max 12.5° +0.5° Reverse Trendelenburg movement: Max 12.5° +0.5° Max 12.5° +0.5°

Siderail height above the platform: 800mm (DIN 32623:2009-11)

Siderail height above 100mm mattress: 700mm Safe Working Load (SWL): 150kg

Castor diameter: 125mm (all lockable)

**Directives Conformity** 

Directive 93/42/EEC modified in accordance with Directive 2007/47/IEC

Device Classification: Class 1

DIN 32623:2009-11

UNI CEI EN ISO 14971:2009 - Medical Devices - Application of rick management to medi-

cal devices

UNI CEI EN 980: 2009 - Symbols and graphics used for the labelling of medical devices

UNI EN 1041:2000 - Information supplied by Manufacturers of medical devices.

CND Classification: V0801 - patient bed (not orthpaedic)

Repertoire No: 487027/R

AUS / NZ 2130

Siderail Standard Heights DIN 32623:2009-11 Siderail

Height: 800mm

Δ

US / NZ 2130 (1998) Siderail

Height 700mm

#### **Available Accessories**



Accessoriesmountingkit





Oxygen Bottle Holder



**IV Pole** 

Garment / accessories holder basin

## **Visibility**

This unique approach of 360 degree visibility has several benefits for the child, their families and the clinical team who care for them. Taking care of a chronically ill child is one of the most draining and challenging tasks a nurse can face.

Beyond handling the physical challenges and medical needs, they have to deal with the emotional needs the child may have and the emotional impact that the prolonged illness can have on the family.

The visibility created by this 360 degree Plexiglas design allows visual observation from every angle of the clinical environment ensuring the clinical staff have full uninterrupted visibility of the child at all times. The emotional needs of any child are critical in the care and recovery process, conventional side rail designs restrict the vision of the child and can cause distress and confusion in certain circumstances.

The ability to offer crystal clear vision to the child prevents them from feeling restricted and caged within the platform during what is already a stressful time for them. A sick child's condition can change in an instant, visual observation and assessment of the child is a key part of the clinical team's priorities, to ensure appropriate action is taken at the right time. In addition a child under observation following surgery, or the observing of an unconscious child, entails a constant watch on the child's clinical condition, the addition of monitors, IV infusions, infusion pumps and other necessary medical equipment can sometimes restrict direct visual observation of the child.





The ability for the child to see their family members helps to reduce stress and anxiety for both parents and children. For family members they get a full uninterrupted view of their child at all times, this visibility may prevent the need for lowering side rails that, in some circumstances, may compromise the child's safety.

This 360 degree uninterrupted view of the child will help ease the emotional impact of hospitalisation for both the child and his family.



# **Safety**

In line with the new safety standard DIN 32623:2009-11 on children's beds, these Plexiglas side rails are 800mm from the sleep deck, or 700mm from the mattress, the same height around the full circumference of the bed adds to the safe environment in which these children are being nursed. The transparent nature of the side rail design in combination with the new higher height ensures safety, whilst offering no obstruction of vision for the child or the child's carer. This bed boasts a full body developed in extremely strong PE plastic material, this ensures no wooden parts anywhere on the products. In addition its moulded design has moulded lateral push handles as well as both side horizontal push handles reducing stress when pushing, and ensuring the caregiver adopts the most ergonomically acceptable position for his height when pushing the bed therefore minimising the risk of back injury.



This plastic construction ensures an incredibly lightweight product that is easy and safe to move but is stable and strong and won't break or crack under even the most vigorous pressure.

This fully functional bed allows many positional changes including height adjustment seating position and Trendelenburg positions. Each position is easily achieved by one carer, preventing the need for manual handling and therefore reducing the risk of caregiver injury.

4 corner bumpers ensure safety for the child in transport, if there is an accidental bump on a wall, the impact will be taken up by the bumpers and minimise the shock to the sleep deck and the child, whilst at the same time ensuring no potential scratch damage to the bed.

The seating position and important head angle indicator enhances safety in the sick child, its vital task of visually showing the carer what angle the patient is being nursed at can have a positive impact on patient outcomes for some clinical conditions, such as respiratory problems, ventilator associated pneumonia or raised intracranial pressure.

The sturdy design of the undercarriage offers great stability, to ensure safe mobilisation of the bed and child, the 4 double castors which also add to the stability, are set within the footprint of the bed. This ensures caregivers can comfortable push the bed without the risk of injury to the foot.

The side rail design allows full visibility enhancing safety for the child; **the side rail has 4 locking positions ensuring safety in all aspects of the child's care.** They are easy to use allowing care staff and family to access the child easily without the need to bend or stoop, thus reducing the risk of back injury, whilst also allowing easy locking if the child is to be left unattended.

The side-rail locking mechanism has a double lock security avoiding accidental un-locking by the care giver and also prevents use by the child. The gas assisted rails prevents them falling once unlocked, and will aid in lifting to secure them – making them lightweight easy and safe to use for the caregiver whilst ensuring safety at all times for the child.

The sleep deck is moulded with mattress retainers designed to snugly fit the mattress once in position on the bed. This will prevent it from slipping and sliding in use, and therefore prevent the risk of patient entrapment

between the bed and the mattress.





The seating position and important head angle indictor enhances safety in the sick child, its vital task of visually showing the carer what angle the patient is being nursed in can have a positive impact on patient outcomes for some clinical conditions, such as respiratory problems, ventilator associated pnuemonia or raised intracranial pressure.



This fully functional bed allows many positional changes including height adjustment seating position and Trendelenburg positions. Each position is easily achieved by one carer, preventing the need for manual handling and therefore reducing the risk of caregiver injury.



The 4 double lockable castors which also add to the stability, are set within the footprint of the bed. This ensures caregivers can comfortably push the bed without the risk of injury to the foot.

## **Patient Positioning and Bed Access**

This Horizon 300 paediatric bed offers complete patient positioning. The care giver can adjust the sleep-deck position using simple and intuitive controls. The mattress platform is fully adjustable allowing the care givers to choose the safest position for the child's unique needs and the best position to carry out nursing procedures with straight back therefore reducing risk of back injury.



A 12 degree angle can be achieved by easily moving the platform into one of 4 preset positions. The head down position can be easily and quickly accessed in an emergency where neck access is required or intubation is needed. This quick and easy function ensures flexibility and safety in all aspects of the child's care pathway. The reverse Trendelenburg or the head up position in children can aid in getting a good sitting position, aid in postural lung drainage or can be used to improve general lung capacity. In the event where a child is being sick the head up position can be selected quickly and easily to prevent aspiration of vomit.



The mattress platform has 4 locking positions. The platform is fully height adjustable, allowing the safest position to be chosen for the child's unique needs. Each child will have different levels of mobility and different levels of observation requirements. The manually adjustable height allows care staff to individually assess the child's needs and choose the safest position. The highest can be used by the care givers to carry nursing procedures with straight back therefore reducing the risk of caregiver injury. The lowest platform height is 695mm from the floor, with 100mm mattress on the platform the lowest effective height is 795mm. This is about the height of your average desk. This allows ease of access for CPR if being proformed by average height or less, staff members. Some competitors in the market place have higher platform / mattress lowest effective heights, making CPR difficult for some staff.

The two section mattress platform has a manual back section which is operated with an easy to use gas spring handle. This assisted function allows an easy to achieve sitting position. The angle of the sitting position can be carefully selected by the nursing staff, this visible angle indicator indicates thesemi-recumbent position up to 30° of head elevation, this angle is important to increase the lungs capacity in a sick child as well as help in the prevention of ventilator associated pneumonias in the critically ill child. Access to the child is achieved easily and safely, the side-rails offer 2 childproof locks allowing the caregiver to lower the side rails into 4 locking positions. Additionally the removal of the head and footboard allows access for emergency reasons or simply provides access for clinical procedures



This easy to operate function allows a quick and easy sitting position (up to  $70^{\circ}$ ). Sitting up not only affects comfort but also increases residual capacity in the lungs by up to 30%. The gas assisted movement makes this an easy and safe operation to do for the care giver, minimising the need for manually handling the child and this assisted function allows an easy to achieve sitting position

In ICU environments or emergency situations it is critical for the anaesthetist or intenstivist to gain head access for intubation purposes: the removable head and foot boards allow easy and quick access when required



The side rail has 2 locking positions ensuring safety in all aspects of the child's care. They are easy to use allowing care staff and family to access the child easily without the need to bend or stoop, thus reducing the risk of back injury, whilst also allowing easy locking if the child is to be left unattended

The side-rail locking mechanism has a double lock security avoiding accidental un-locking by the care giver and also prevents use by the child, the gas assisted rails prevents them falling once unlocked, and will aid in lifting to secure them – making them lightweight easy and safe to use for both caregiver and child





Address: 31 Airlie Road, Pullenvale, Queensland 4069 Australia Phone: 07 3166 9769 Fax: 07 3011 1029 Mobile: 0410 537 746 Email: sales@newmedical.com.au Web: www.newmedical.com.au

ABN: 63 124 888 348

