

# CuroCell iA<sup>®</sup> Automatic

Individualized advance

## By embracing the real problem, a real solution

CuroCell iA<sup>®</sup> is a Care of Sweden innovation. It has been developed to enable a system to sense, learn and take action whenever the high pressure that can cause injuries arises. It takes learnings from years of research and development and applies them to a support surface for widespread use in a range of care settings, such as hospitals and home care.

With Gentle Alternating Low Pressure, the CuroCell iA<sup>®</sup> system makes the step from mechanical to digital, from manual to autonomous, and a fine tuned total support that we've never been able to deliver before in this segment.

## Like an extra pair of eyes

CuroCell iA<sup>®</sup> uses artificial intelligence to constantly monitor pressure across the patient's contact area and calculates its response. The system identifies the patient's weight and height and can detect changes, such as when the patient adopts a new position.

## Like an extra pair of hands

The AI-based, CuroCell iA<sup>®</sup> control unit was developed with the aim to improve patient safety and allow professionals to provide a new level of person-centered care. Should a patient's new posture result in excessive pressure, CuroCell iA<sup>®</sup> will take action, managing individual cells to adjust the contact between the patient and the mattress. This can reduce the amount of manual adjustments or heavy lifting the care team must undertake.

## Quietly and comfortably

With the Care of Sweden innovation Air Flow Control™, the air inside the support surface is reused, eliminating the need for the control unit to run continuously. In combination with the use of magnetic valves, the control units operate more quietly, creating conditions for undisturbed sleep and recuperation.

Due to the air recirculation within the support surface, the system ensures a more consistent temperature throughout the surface, aiming to enhance overall comfort.



Service-free  
for the first  
five years

## Service- and maintenance-free for the first five years

The Air Flow Control™ system recirculates the air within the support surface, eliminating the need for continuous operation, and thus reducing wear and tear. This allows us to offer a maintenance-free solution for the first five years while achieving low energy consumption.

# CuroCell iA®

## Features of the control unit



### Facilitates during transport

By disconnecting and sealing the CPR connection, the air pressure in the support surface can be maintained for at least 12 hours without being connected to the control unit.



### Fully autonomous

Internal pressure automatically adjusts based on the patient's weight, height, and position.



### Gentle Alternating Low Pressure (GALP)

Dynamic program that regularly alternates the air pressure with soft movements to relieve the pressure on the body, offering prevention of pressure injuries and comfort.



### Constant Low Pressure (CLP)

In the Constant Low Pressure mode, the pressure is evenly distributed over the entire support surface. In this mode, the cells do not alternate but are filled with an equal amount of air all the time.



### Panel Lock

Panel lock prevents the control unit from being inadvertently adjusted. The control unit locks itself automatically 30 seconds after a new setting is entered.



### Maximum pressure (Caring mode)

The air cells are filled with maximum air pressure to provide stability during bed entry/exit and during patient care. Returns to the previous settings after 20 minutes.



### Information signals

Sensors in the system will detect if there is an error and provide audible and visual notifications. The system also provides an alert if an upcoming service is predicted.



## Technical specification

Pressure injury category	Up to and including category IV <sup>(3)</sup>
Technical life time	5 years
Size control unit (D x L x H)	11 cm x 27 cm x 15,5 cm
Sound level control unit	22 dBA <sup>(1)</sup> , 35 dBA <sup>(2)</sup>
Output voltage	External 12 DC power supply
Input voltage	AC100-240V/50-60Hz
Material air cells	TPU coated nylon
Cleaning instruction	Cleaning of cover: Wipe with cleaning agent and/or disinfectants. Machine wash max 95 °C, tumble drying
Optional	Transport bag
CE- marking	Control unit and support surface are registered and marked separately in accordance with MDR (EU) 2017/745. 
Other features	PVC-free materials



Always read the instructions for use prior to use.

Care of Sweden and CuroCell are trademarks of Care of Sweden AB.  
© Care of Sweden AB, 2025. All rights reserved. Last update: 2025-11-20.

## References

(1) EN ISO 11201 Acoustics - Noise emitted by machinery and equipment - Determination of emission sound pressure levels, SP 2018.(2) ISO 3746:2010 "Acoustics - Determination of sound power levels and sound energy levels of noise sources using sound pressure - Survey method using an enveloping measurement surface over a reflecting plane" (3) National Pressure Injury Advisory Panel, European Pressure Ulcer Advisory Panel and Pan Pacific Pressure Injury Alliance. Prevention and Treatment of Pressure Ulcers/Injuries: Clinical Practice Guideline. The International Guideline: Fourth Edition. Emily Hässler (Ed.). 2025.(4) SS-EN ISO 5496:2004, DIN 53122-1.

# CuroCell® Ci PRO

Individualized advance

## A modular system for different care needs

Our system is modular, providing you with mix-and-match flexibility and freedom. We've made sure that the CuroCell iA® Automatic and CuroCell iA® Manual control units are compatible with multiple support surfaces.

The same control unit can adapt to various care needs by being compatible with three different support surfaces: a 10 cm overlay mattress and two replacement mattresses, measuring 17 cm and 20 cm.



## Enables a lower total cost of ownership

Our watchwords are durability and flexibility. The CuroCell iA®'s interchangeable parts are developed with the aim to make it easy to use and own.

Moving a patient in order to replace a complete mattress system is arduous for staff and inconvenient and sometimes painful for the patient. With CuroCell iA®, just the support surface or the control unit can be swapped out when needed.

The result is fewer patient moves, less need to replace equipment sets, simpler inventory and reduced storage requirements. Overall, this flexibility makes operation simpler and enables a lower total cost of ownership.

## Reduces shear forces

With the CuroCell® Ci17 PRO, we offer a 17 cm replacement mattress featuring a two-layered construction, allowing the two layers to move relative to one another. Shear forces occur between the two air layers instead of between the skin and the surface, reducing the risk of PI's caused by shear.

The lower mattress height fits most hospital beds, this makes installation simple and the most common safety rails will be sufficient to maintain patient safety.

## Suitable as a rental system

The support surfaces are easy to store and handle. Both the overlay- and safety mattress consist of air cells. The construction is developed to be light and easy to fold and pack so that installing or collecting it is straightforward. Combine this with the low bed height of the 17 cm replacement mattresses, and you have a solution which can be rented and easily recovered for cleaning or full reconditioning.



## A sustainable quality that endures

In line with our sustainability commitment to long product lifetime, the support surfaces are developed with durable and high quality material.

# CuroCell® Ci PRO

## Features of the support surfaces

Comparison of main features	CuroCell® Ci10 PRO	CuroCell® Ci17 PRO	CuroCell® Ci20 PRO
Recommended user weight	Up to 180 kg	Up to 210 kg	Up to 240 kg
Height	10 cm	17 cm	20 cm
Sizes	80/85/90/100/105/120 x 200/210 cm	80/85/90/100/105/120 x 200/210 cm	80/85/90/100/105/120 x 200/210 cm
Overlay mattress	✓		
Replacement mattress		✓	✓
Safety air mattress		✓	✓
Individually replaceable cells	✓	✓	✓
Inner cover in mesh fabric	✓	✓	✓
Replaceable top part		✓	✓



### Grip Lock cover

The Grip-Lock cover ensures a high-friction surface that keeps the support surface securely in place, eliminating the need for manual attachment with straps.



### Maintains air during power failure

The valves in the control unit open automatically in the event of a power failure and equalize the pressure in the mattress to a Constant Low Pressure. The air is retained for at least 12 hours.



### Integrated heel function

The support surfaces are designed with an integrated heel function, aiming to reduce pressure on the heels.

## Covers for hygiene and reduced shear

The support surface is supplied with a removable and liquidproof hygiene cover for easy cleaning. The hygiene cover is manufactured in a four-way stretch fabric to reduce the risk of shear forces, and is vapour-permeable<sup>(4)</sup> to lower the risk of skin maceration. The hygiene cover also features a liquidproof zipper.

### Available covers:



#### Stone

- Welded seams
- Color: dark grey
- Material: 61 % polyamide 39 % polyurethane coating



#### Olivia

- Stitched seams
- Color: light grey
- Material: 55 % polyester, 45 % polyurethane coating



#### Bottom part CuroCell

- Color: black
- Material: 100 % polyester polyurethane
- Integrated cable holder, carrying handles (for replacement mattresses only)



#### Bottom part Grip Lock

- Color: black
- Material: 55 % polyester, 45 % polyurethane coating
- Integrated cable holder



#### Bottom part Evac

- Color: black
- Zippers on four sides
- Handles on short and long sides for moving the mattress
- Velcro straps for securing patients in emergency situations
- Material: 100 % polyester polyurethane
- Integrated cable holder