# Our most advanced innovation: intelligent brain combined with a user-friendly interface.

Healthcare is facing complex challenges due to an aging population and reduced healthcare resources. The World Health Organization projects a shortfall of 10 million healthcare workers globally by 2030<sup>(9)</sup>, presenting significant challenges to delivery of quality healthcare.

To provide the best possible care for individuals at risk of pressure ulcers/injuries, we must not only treat their medical conditions but also consider values that affect well-being and quality of life, such as reduced pain and improved comfort. At the same time we need to enable healthcare to dedicate more time to patient care.

This is where CuroCell® IQ and the Pulsating Mode™ comes into play.

Care of Sweden is committed to reducing the risk of pressure ulcers/injuries for all individuals while providing healthcare professionals with the tools for personalized care and a good health economy.

To achieve clinical effectiveness and patient safety while also freeing up valuable time for healthcare providers, we have opted to develop CuroCell® IQ.

With CuroCell® IQ, we aim to address the complex challenges of an ageing population and the shortage of healthcare workers.

Designed for ease of use and a quick learning time, the control unit offers our most user-friendly interface, seamlessly integrated with our most advanced technology.



#### Streamline resources and enhance patient safety

CuroCell® IQ has been developed to enable healthcare professionals to focus on patient-centered care. Powered by AI and advanced algorithms, the system uses high-precision sensors to continuously monitor the individual's weight, height, and position, adapting to each individual. If the individual's weight or position changes, the system reacts and adjusts the contact pressure between the individual and the support surface.

The aim is to enhance comfort, improve patient safety, reduce the risk of cell damage, and reduce the need for manual adjustment. This, in turn, simplifies the caregivers' workflow and ensures adequate pressure relief and distribution.

Due to the recirculation of air within the support surface, the system does not require continuous operation. This reduces wear and tear, allowing us to offer a service-free system for the initial five years.

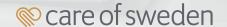
#### Prevention and treatment of pressure ulcers/injuries Undisturbed sleep and reduced pain

While prioritizing preventive care is crucial, the Pulsating Mode<sup>™</sup> has also demonstrated efficacy as an aid in the actual treatment of pressure ulcers/injuries. The Pulsating Mode<sup>™</sup> has been pressure ulcers/injuries in 30 days<sup>(1)</sup>, compared to the expected healing time of up to 155 days(2).

The cost of pressure ulcer/injury care decreases significantly when these wounds can heal within a shorter time frame. The time and care that healthcare professionals need to spend on each patient also decreases, freeing up resources that can be used more efficiently within the healthcare system(10).

Sleep and a calm environment are key components for recovery and well-being. It is during sleep that the cells in the body are repaired(5)(6), promoting wound healing.

The Pulsating Mode™ is developed to improve comfort and stability by reducing movements and fluctuations in the support surface. In addition, the silent running<sup>(3)(4)</sup> of the control units enables conditions for undisturbed sleep and recuperation. In a clinical study, the individuals even reported pain reduction while using a support surface with the Pulsating Mode™ (1).





#### **Fully autonomous**

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



#### In the event of a CPR-situation

Disconnect the CPR connection from the control unit and leave the lid open to quickly deflate the support surface.



#### Quiet and comfortable

The Air Flow Control™ system reuses air, enabling the control unit to operate quietly and intermittently, supporting restful sleep and recovery.



#### Maintains air during transport and power failure

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.



#### Clinically proven

The Pulsating Mode<sup>TM</sup> uses artificial intelligence to combine soft, alternating movements with constant low pressure to offer a large contact area and to reduce high peak pressures. Its clinical effectiveness is well-documented<sup>(1)</sup>.



#### Easier handling and infection control

Pack&Go® enables the support surface to be deflated without the need to manually deflate air from potentially contaminated products, for the system to be easily packed away.



Technical specification				
Pressure ulcer/injury category	Up to and including category IV <sup>(5)</sup>			
Technical life time	5 years			
Size control unit	11 cm x 30 cm x 20 cm			
Sound level control unit	Max 17dBA <sup>(3)</sup> , 25dBA <sup>(4)</sup>			
Output voltage	12 V DC			
Input voltage	100-240 V / 50-60 Hz / 0,6 A			
Material air cells	TPU			
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 surfaces are registered and marked separately in accordance with MDR (EU) 2017/745.			
Other features	PVC-free materials, Individual and replaceable cells			



#### 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.



#### Mute information signal

Is used to mute notifications, preventing any alerts from creating a distracting environment.



#### Pack & Go

Pressing a button is all that is required to deflate the support surface, this process takes approximately 20 minutes.



Always read the instructions for use prior to use.

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#### References

(Raepsact, C., Zwaenepoel, E., Manderlier, B., Van Damme, N., Verhaeghe, S., Van Hecke, A., & Beeckman, D. (2021). A Fully Automated Pulsating Support System for Pressure Injury Prevention and Treatment in 10 Belgium Nursing Homes: An Observational Study. Journal of wound, ostomy, and continence nursing: official publication of The Wound, Ostomy and Continence Nurses Society, 48(2), 115–123. https://doi.org/10.1296/10.0007/10.000000000000746 (2) Dealey, C., Posnett, J., & Walker, A. (2012). The cost of pressure ulcers in the United Kingdom. Journal of wound care, 21(6), 261–266. https://doi.org/10.12968/jowc.2012.21.6.261 (3) EN ISO 11201 Acoustics - Determination of sound power levels and sound energy levels of noise sources using sound pressure extremination 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" (5) European Pressure Ulcer Advisory Panel, National Pressure Injury Advisory Panel and Pan Pacific Pressure Injury Prevention and Treatment of Pressure Ulcers/Injuries: Clinical Pressure Injury Advisory Panel and Pan Pacific Pressure Injury Prevention and Treatment Pressure Injury Prevention and Pressure Injury Prevention and Treatment Pressure Injury Prevention and Pressure Injury Prevention and Pressure Injury Prevention and Treatment Pressure Injury Prevention and Pressure Injury Prevention and Treatment Pressure Injury Prevention and Pressure Injury Prevention and Pressure Injury Prevention and Treatment Pressure Injury Prevention and Pressure Injury Prevention and Treatment Pressure Injury Prevention and Pressure Injury Prevention and Treatment Pressure Injury Preve



Comparison of main features	CuroCell® CX10	CuroCell® CX15	CuroCell® CX16	CuroCell® CX20
Recommended user weight	Up to 200 kg	Up to 220 kg	Up to 200 kg	Up to 250 kg
Height	10 cm	15 cm	16 cm	20 cm
Sizes	80/85/90/100/105/120 × 200/210 cm			
Overlay mattress	<b>✓</b>			
Replacement mattress		<b>✓</b>	<b>✓</b>	<b>✓</b>
Safety air mattress		<b>✓</b>		<b>✓</b>
Safety foam mattress			<b>✓</b>	
Carrying handles		<b>✓</b>	<b>✓</b>	<b>✓</b>
Integrated cable holder	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
Replaceable top part		<b>✓</b>	<b>✓</b>	<b>✓</b>

#### A modular mattress system

The CuroCell® IQ system is modular, offering mixand-match flexibility. This means the same control unit can adapt to various care needs by seamlessly integrating with multiple support surfaces. The control unit can be replaced individually without the need to replace the entire system, reducing unnecessary patient movement.

#### Designed to reduce the risk of shear

With the CuroCell® CX15, we offer a 15 cm replacement mattress featuring a two-layered construction, allowing the two layers to move relative to one another. Shear forces occurs between the two air layers instead of between the skin and the surface, reducing the risk of PU's/PI's caused by shear. The lower mattress height of 15 cm is compatible with most hospital beds, ensuring that standard safety rails are sufficient to maintain patient safety.

#### Covers for hygiene and reduced shear

The support surface is supplied with a removeable 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>(a)</sup> to lower the risk of skin maceration. The hygiene cover also features a liquidproof zipper.

#### Available covers:

Stone (CuroCell CX10)

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

#### Olivia (CuroCell CX10)

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





#### Integrated heel function

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



#### Adapts to type of support surface

The CPR connection features an identifier that automatically selects the corresponding program in the control unit based on size and type of support surface.



#### Bottom part CuroCell

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



#### 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

