The proven safe and reliable, world-leading perfusion system, now optimized for minimally invasive and pediatric surgery.
S5™ Min.I. isn’t just another configuration of the S5 system. Optimized with the aim of improving outcomes during extra-corporeal circulation in minimally invasive and pediatric surgery, S5 Min.I. is a global approach to minimally invasive perfusion.

**The world-leading perfusion system just got better**

It’s the maximum expression of over 40 years’ experience and worldwide leadership in heart-lung machine design and manufacture. All components derive from this heritage and are proven safe, flexible and modular.

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**Mini Maxi Me**

**Redefining minimally invasive perfusion solutions**
Mini Maxi Me

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The world-leading perfusion system

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Optimized ergonomics and console height with reduced footprint allow an easy interaction with the system by the operator. The gas blender is well protected during use and transport and is integrated within the central console together with handy storage drawers.

“Closer to you, Closer to your patients”

Optimized console as all pump control panels are arranged in a linear, horizontal way within the shelf of the three size console, there is better visibility to the oxygenator and tubings as well as to the surgical field.

Lean and clean

Additional, newly designed cable guides enable a lean configuration and design with cables protected and clearly organized, allowing to optimize ergonomics and prevent interfering with accessories or disposables.

“I am using the S5 in various configurations according to the different weight of my patients. This helps me to achieve an optimum relation between the priming and blood volume of the patient. The flexible mast mounted pumps allow a very close positioning of the whole system to the patient”

Frank Münch, Chief perfusionist
University hospital Erlangen, Germany

Maxi

Ergonomics, flexibility and modularity

The S5 system design is fully modular, to be configured according to the specific clinical needs of the perfusionist, allowing to accommodate a large variety of clinical practices and applications. With its fully mast-mounted pumps architecture, S5 Min.I. represents the ideal configuration for pediatric and minimally invasive adult cardiac surgery.

Adult minimally invasive configuration

The adult minimally invasive configuration allows a centrifugal or a large roller pump to control arterial flow, and offers a flexible combination of integrated large and small double roller pumps for suction and cardioplegia delivery. Additional pumps with external control panels can be added, providing a total customization.

Pediatric configuration

The pediatric configuration can hold up to one large and two integrated small double roller pumps or alternatively three integrated small pumps, allowing the lowest possible priming circuit design for the benefit of the smallest patients. Additional pumps with external control panels can be added, providing a total customization.

Redefining minimally invasive perfusion solutions
Mini hemodilution protection

EFFECTIVE PROTECTION FROM AIR BUBBLES
The S5 bubble module along with the bubble sensor allow for extremely fast detection of air bubbles in the tubing set.

INTEGRATED CONTROL
Using a dedicated sensor, the blood level in the reservoir is carefully controlled to prevent air from entering in the oxygenator.

Maxi neurological protection

CENTRALIZING ALL PERFUSION DATA ON ONE SCREEN

DATA ANALYSIS AND CUSTOMIZABLE QUALITY INDICATORS

COMPLETE ELECTRONIC PERFUSION RECORD

INTEGRATED MONITORING
The integrated B-Care 5 system B-Care 5 allows continuous monitoring for Hct, SvO2, and venous blood temperature. Accurate monitoring of Hct and blood flow is key to implement Goal-Directed Perfusion (GDP), which helps to reduce the risk of acute kidney injury (AKI) and red blood cells (RBC) transfusions.

ELECTRONIC REMOTE CLAMP FOR ULTIMATE EASE OF USE AND SAFETY
Available with the CP5 centrifugal pump, the electronic control clamp minimizes the risk of cerebral embolism. In combination with the air bubble sensor and blood level sensor, it allows to quickly occlude the arterial line if air bubbles or back-flow are detected.

Outstanding flexibility with fully mast-mounted pumps allows S5 Min.I to be positioned closer to the patient, reducing tubing lengths, thus minimizing priming volumes and blood contact surface area, helping reduce the risk of transfusions-related complications during and after cardiac surgery.

S5 offers advanced technology in terms of air bubble management systems, allowing perfusion optimization with the utmost safety, helping clinicians to protect their patients from neurological damage.

CONNECT is LivaNova’s innovative and intuitive perfusion data management system designed to assist the clinician in minimizing transcription errors and bias, focusing more on the patient and circuit, maximizing traceability, liability and clinical practice and implementing Goal-Directed Perfusion (GDP).

...through
Goal-Directed Perfusion System to reduce Acute Kidney Injury

The HeartLink System is the first perfusion management system to assist with the implementation of Goal-Directed Perfusion, a perfusion therapy aimed at reducing the occurrence of acute kidney injury, shortening ICU and hospital length of stay, and potentially decreasing blood transfusions by respecting the metabolic needs of each patient during cardiac procedures.

HeartLink™ System

The first automatically integrated Perfusion Management System designed for improved patient outcomes, increased clinical efficacy and Goal-Directed perfusion.

IMPROVING CLINICAL EFFICACY
* The use of an automated system provides the opportunity to minimize transcription errors and bias *

REDUCING AKI & BLOOD TRANSFUSIONS
* The AKI rate started declining in our institution the year GDP was introduced. This suggests that GDP may actually be beneficial regarding renal protection *

HeartLink™ Card

REDUCING AKI & BLOOD TRANSFUSIONS
* It is of note that with the use of ultra low prime oxygenators, GDP actually exerted its potential *

FOCUSING ON NEUROLOGICAL PROTECTION
* The new IPAT protocol featured in XTRA significantly increases fat elimination, yielding results comparable with continuous processing technology *

XTRA

GDPTM MONITOR

CONNECTTM

INSPIRETM

TOP QUALITY TECHNICAL SERVICE
Our top quality technical service support is available in over 100 countries on all continents. LivaNova offers numerous training sessions that are divided into different levels to skillfully prepare the hundreds of technicians and trainers that participate every year. This guarantees fast and reliable service support all around the world.

REDUCING AKI & BLOOD TRANSFUSIONS
* The use of an automated system provides the opportunity to minimize transcription errors and bias *

BENEFITS

"GDP is providing us with a new opportunity to continually improve patient care in real-time during the critical period of CPB" 

Ian Johnson, Liverpool Heart and Chest Hospital NHS Foundation trust

Maxi reliability and proven safety

that only a world-leading platform can guarantee

HIGHLY RELIABLE TECHNOLOGY
The direct drive technology ensures years of problem-free performance offering the advantages of very low noise and vibration, reliable, maintenance-free pumps without any belts and a gearbox.
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