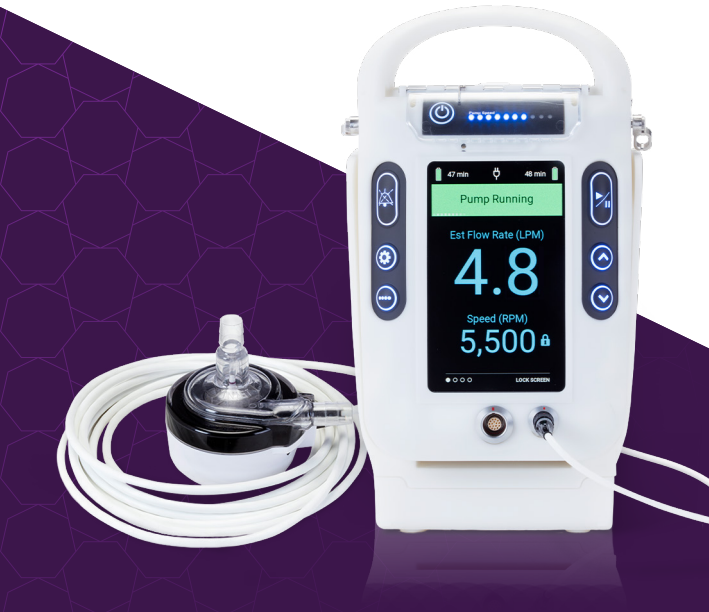
The Evolution of ECMO in the Cardiac Catheterization Lab

POWERED BY

LifeSPARC



Simple | Powerful | Versatile

The **LifeSPARC™** ECMO difference

Simple enough for new programs

Powerful enough for emergent rescue

Versatile for a variety of cannulation configurations

Customer experience with LifeSPARC

"Our data show that a medium-size (less than 500 available total beds) community hospital can effectively handle a large number of ECMO patients. We were able to achieve this because of our intensivist team and 24-hour advance practice provider coverage. The rapid training of our medical intensive care unit (MICU) nursing staff to become ECMO competent was also particularly important to our outcomes. We had limited perfusionist involvement in the day-to-day ECMO care as we have only a few perfusionists covering our entire hospital and all cardiothoracic cases.

> **We used the LifeSPARC pump (TandemLife) at our institution. Its simplicity of use allowed our MICU nurses to quickly become comfortable with the set-up and were able to adjust settings as necessary.**

Some literature shows that nurse-led ECMO management has no difference in survival compared to perfusion-led ECMO management and may have cost benefits."[1]

Image above is a stock photo; not a real customer.

When the risk of death is imminent, be prepared with **LifeSPARC™**

Delivering ECMO to more patients in more places

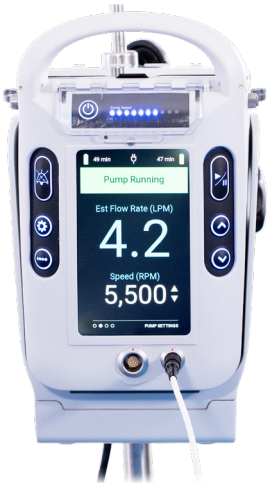
The Cardiac Catheterization Lab (CCL) is the hub of cardiac innovation, offering a wide spectrum of tools to treat many disease states. Many patients with acute cardiac events visit the CCL annually, but only a fraction of centers will have access to ECMO when it's needed. Despite advancements, the widespread adoption of ECMO is limited by the complexity of the devices and the challenges associated with learning how to use them effectively. Interventional Cardiologists play a crucial role in deploying ECMO at the opportune moment. A team-based approach with comprehensive CCL tools is essential for advancing acute cardiac care in a post-pandemic world.[2]

LifeSPARC: From door to support within minutes

Designed to streamline the initiation of support

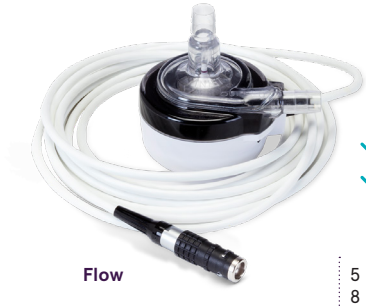
THE LIFESPARC CONTROLLER

- ✓ Simple user interface
- ✓ Lightweight and portable



Dimensions	H 30.38 cm (12 in) W 21.59 cm (8.5 in) D 20.32 cm (8 in)
Weight	16.5 lbs (7.48 kg)
Mobility Options	Mount to IV pole Detachable controller - 6 lbs (2.72 kg)
Interface	Four loop panel GUI
Alarms	Multiple visual and audio indications
Power Source	AC power via docking station Removable, rechargeable Lithium ion batteries

THE LIFESPARC PUMP



5 LPM rated for percutaneous application

- ✓ Sterile on-patient pump
- ✓ Quick and easy to prime

Flow	5 LPM percutaneous 8 LPM surgical
Speed	2,000-7,500 RPMs
Max Pressure	600 mmHg at 7,500 RPM
Bearing	Magnetic pivot bearing
Pump Body Priming Volume	16 mL

In under 3 minutes, learn how to prime the LifeSPARC pump

Setting new standards for ECMO education with LifeSPARC

Customized support and education to help you grow your program

Investing in the LifeSPARC system will provide you with complimentary resources and support from your local LivaNova team and grants you the opportunity to collaborate with our Professional Education Consultants, who have extensive real-world ECMO experience.

With the goal of developing a program that is primed for early success, our consultants will work closely with you and your team to create a tailored and immersive education experience. Courses have a strong focus on hands-on, advanced education encompassing:

- Device selection
- Device management
- Staff training

Here are examples of the included coursework:

CANNULATION CONSIDERATIONS FOR VA ECLS

Decide the best cannulation strategy and gain hands-on experience with large bore cannulation, circuit setup with wet-to-wet connections, and initial post-cannulation considerations.

ECLS TROUBLESHOOTING AND CIRCUIT EMERGENCIES

The first few hours of ECLS support can be a challenging time for the patient and HCPs. This course is designed to provide the attendees with an understanding of the most common troubleshooting scenarios and circuit emergencies and how to address them.

Life support simplified

FOR MORE PATIENTS IN MORE PLACES

For more information, visit our LifeSPARC ECMO Learning Hub

Indications For Use:
The LifeSPARC System is a centrifugal blood pump system intended to assist in circulation of the patient's blood when part of an extracorporeal circuit including physiologic gas exchange of the patient's blood in adult patients with acute respiratory failure or acute cardiopulmonary failure, where other available treatment options have failed, and continued clinical deterioration is expected or the risk of death is imminent.
These may include:

- Failure to wean from cardiopulmonary bypass following cardiac surgery in adult patients
- ECMO-assisted cardiopulmonary resuscitation in adults

References:
1. West JL, Nutting A, Daughtry B, Frey AM, Nicolas CT, Saab R, Sibley DH, Smith J, Roan R, Crain M. Coronavirus 2019 (COVID-19) venovenous extracorporeal oxygenation: Single community hospital results and insights. J Card Surg. 2022 Jul;37(7):2009-2014. doi: 10.1111/jocs.16514. Epub 2022 Apr 19. PMID: 35438810; PMCID: PMC9115259.
2. Pattni K, Saladino CJ, Brown WE. Extracorporeal Membrane Oxygenation (ECMO) Access in the 30 Largest U.S. Metros. University of Nevada-Las Vegas (UNLV) Health Fact Sheet No 1. 2018 Oct;1:6.

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