Terumo® Advanced Perfusion System 1

System enhancements increase safety and reduce risk.

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Proven design — continuously enhanced to increase safety and reduce risk.

Since its introduction in 2002, perfusionists and surgical teams have relied on the Terumo® Advanced Perfusion System 1 to deliver the highest quality care and achieve the best possible patient outcomes. To maintain this standard of excellence, the technology and design of the Terumo System 1 have continuously evolved, resulting in an exceptional heart-lung machine for the perfusion team.

Not always outwardly visible, many recent design changes have been built "inside," ensuring reliable and consistent performance, and allowing the user's focus to stay where it should be — on the patient.

A Legacy of Safety and Usability that Clinicians Count On

- **Flexible:** From basic to complex configurations, the Terumo System 1 evolves as user needs change.
- **Modular:** Components can function and be controlled individually.
- **Centralized Control:** Intuitive user control is facilitated through Central Control Monitor (CCM).
- **Advanced Functions:** Added safety connections and pump response features can be activated at any time.
- **Redundancy:** Safety and control functions are designed with redundancy to provide users confidence in reducing risk.

Compact, space-saving base with choice of brackets and holders facilitates the optimal pump configuration without expensive hardware costs.

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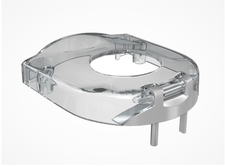
Terumo® Advanced Perfusion System 1

Roller Pumps

- Base- or pole-mounted pumps with rotating raceways help reduce circuit length and hemodilution.
- System supports up to eight pumps, including two centrifugal pumps.
- Users may choose 6" or 4" roller pumps to adapt to different protocols.
- Pumps are controlled from the speed control knob or the CCM.
- Pump status and safety messages can be viewed on both the pumps' local controls and the CCM.

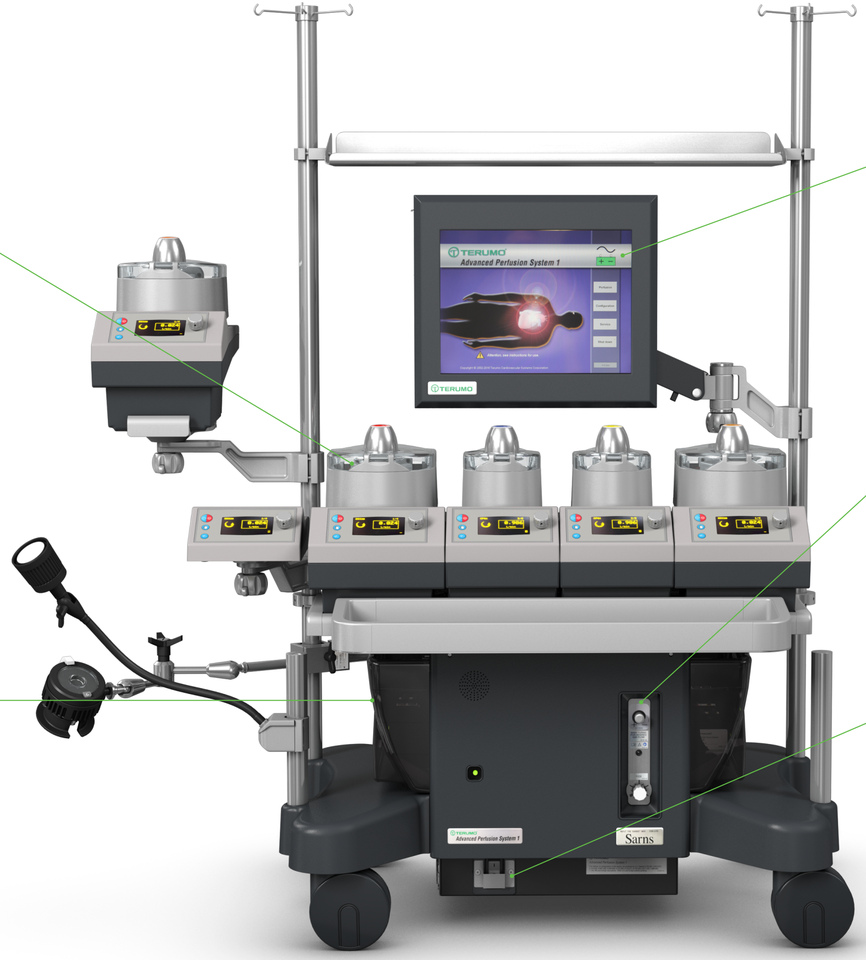
Recent enhancements:[1]

- Updated roller pump software improves pumping performance.
- Newly designed roller pump lids improve accessibility to the pump raceway. New metal pump lid hinge is strong and durable.
- Colorful new roller pump caps include instructional graphic to make operation more intuitive and help guide users as they change occlusion levels. Integrated magnet secures colored cap to occlusion knob.



Modules

- Users may integrate up to 18 safety and monitoring modules, selecting individual responses for each, with the option of adding or changing modules as needed.
- Modules are available for ultrasonic level detector (alert/alarm) and air bubble detectors; flow, pressure, and temperature sensors; electronic venous line occluder; and, CDI® Blood Parameter Monitoring Systems.



Central Control Monitor (CCM)

- Fast processing, high-resolution touch screen serves as both a safety monitor and as the central interface for operating the system components.
- Intuitive graphic interface helps users organize information and view current perfusion parameters on a single screen without having to look at multiple displays.
- Users can create up to 12 customized perfusion screens.
- Priority messaging area displays color-coded alarms, alerts, status, and error messages in order of priority.
- Critical patient and system information can be viewed and responded to with no more than two screen touches.

Electronic Patient Gas System (EPGS)

- Integrated oxygen analyzer measures oxygen content of the blended gas and displays it on the CCM.
- Settable low FiO_2 alarm displays on the CCM screen in the case of an out-of-range level.
- High and low gas source pressure alarms display on the CCM if the gas supply is outside the recommended pressures.

Recent enhancements:[1]

- Software updates streamline and improve the EPGS calibration process.
- Increased messaging and changes to the CCM display better inform users of gas blender status.

Internal Battery Backup and Power

- System comes standard with a minimum of 60 minutes of internal battery backup.

Recent enhancements:[1]

- New circuitry and software algorithms enhance battery performance. New battery charge level display increases accuracy.
- Enhanced battery reporting and new A/C visual indicators on CCM splash screen during power up improve battery status communication to users.
- System periodically reminds users to perform a battery health test.
- Sealed power switch adds durability. New protective plate on switch prevents inadvertent power downs.

1. Performance claims based on product validation test results. Data on file.

TERUMO

Our products stand beside you in the cardiovascular OR.

With a continuing focus on product quality and technology, we see ourselves as a vital part of your surgery team, helping to save lives.

We work with our customers to advance practices and improve patient outcomes. You inspire us every day, driving us to be better.

For the most up-to-date information on the Terumo System 1 heart-lung machine, including specifications and ordering information, visit our website or contact your local Terumo Sales Representative.

terumo-cvgroup.com/system1

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