

QUEST MPS[®] 3

Smarter Myocardial Protection™





MPS 3

72

65

0:25 On mm:ss

49 ml/L **56** ml

K⁺ 35 mEq/L **38** ml

HI K⁺ **Lo K⁺**

all Blood

Conduit

VG

Radial

Distal

Left-Main

LAD-prox

LAD-mid

D1

D2

D3

OM1

OM2

RCA

AM

PDA

PLB

Ramus

Other



QUEST MPS[®] 3

Smarter Myocardial Protection™

Introducing the Quest MPS[®] 3 Myocardial Protection System, the latest innovation from Quest Medical Inc. The Quest MPS 3 System coordinated drug delivery technology is well known for eliminating patient hemodilution and the associated sequela caused by cardioplegia delivery. This technology has been proven beneficial for improved patient outcomes as well as a sound investment for hospitals.^{1,2}

The QUEST MPS[®] 3 is Confidence

Safety. Versatility. Precision.

Confidence in Safety

Microplegia™- The Quest Strategy for Confident Myocardial Protection.

Microplegia is the pure blood initiative, a whole blood alternative to traditional blood-crystalloid cardioplegia. It provides superior myocardial protection without hemodilution, using the patient's own blood as the most physiologic buffer, and lowers transfusion rates.

Pure blood infused with specific drugs to arrest and optimally protect the





Introducing Auto-Start

Evolved technology for effective myocardial protection. A one-touch button that allows for fast aortic valve closure and a quick arrest, while in control of flow, pressures, and displays ECG output.



Internal Battery

With the Quest MPS 3 System, you no longer worry about a possible power surge or outage. With an all new internal battery you will experience seamless power regardless of external conditions.

Power through Precision

Know the precise drug concentrations, in real time. Accurately adjust the controls during the case.

Enhanced Drug Cartridges

New safety features and increased capacity, ensuring patient safety and a reduced need to refill on longer procedures using all-blood, single-dose strategies.

Real Time Data Collection

The ability to collect and review data and analytics anytime throughout or after a procedure.

Active-Monitoring Controller (AMC)

The command center for the perfusionist. Control flow rate, monitor doses and more – all at your fingertips. The Quest MPS 3 System allows for more precise and responsive control.

QUEST MPS® 3

Smarter Myocardial Protection™

Active Monitoring Controller

Evidence-based medicine.

AMC

The all new AMC allows perfusionists to observe:

- Real-time ECG monitoring
- Critical delivery parameters
- Drug names, volumes, concentrations, and summaries
- Temperature control and displays
- Alarms and alerts for safety
- Time recordings throughout the case

Utilizing the Data

Download core data and easily utilize by converting into spreadsheet format for analysis.



Cardioplegia delivery and cardiac activity are now visually connected with our new Active Monitoring Controller (AMC). Observe patient activity and stay ahead of critical moments.

Ease of Use

- Create up to 64 custom protocols
- Streamline case setup: all saved protocols are available at a touch of a button
- A master file is created and can be transferred to all other Quest MPS 3 System controllers: protocols can easily be updated, keeping the whole fleet current

Knowledge is Power

Imagine the possibilities of training and education from the data analytics provided from Quest.

Review individual case logs for drug distribution and usage, and digital case files to assist with budget management.

Better Patient Care and Outcomes

The Quest MPS 3 System is a powerful tool for the cardiovascular team and, with detailed data analytics, promotes better patient care.



New Safety Features

The Quest MPS 3 System disposables make setup quick and easy. The new smart drug cartridges can be pre-filled and offer a refilling port if necessary during a case.

MPS 3 Specific Drug Cartridges. Designed for safety and ease of use.

- Reduce the need to refill during longer cases using all-blood, single-dose strategies with new, larger drug cartridges – 75mL capacity
- Visually manage independent drug delivery through translucent cartridges with mL markers, and color-coded LED lighting.
- Volume accuracy and delivery precision are now at your fingertips – drug cartridge sensors interface with the Active Monitoring Controller (AMC)
- Cartridge securement ensures proper placement onto arrest and additive pumps

Safeguard patient safety and prevent accidental connections with a new, non-standard luer* on the arrest cartridge.



Mobile and Adaptable

The Quest MPS 3 Console's flexibility and versatility adapt to any setup, seamlessly integrating with your heart-lung machine.

- 30% smaller
- 44% lighter - just 37 pounds!

Control and ease of use is provided by the adaptable positioning for the AMC - putting power in the hands of the perfusionists.



Confidence in Versatility

Protocols for perfusionists are always changing. Regardless of what tomorrow holds, the Quest MPS 3 System has you covered. The future is now.

Compliance with Any Protocol

ANY Ratio

ANY Strategy

ANY Methodology

ANY TIME

All parameters are easily and quickly adjustable during the case, providing accurate and agile control for better myocardial protection.

The AMC provides a snapshot of critical information to the perfusionist, giving them a command center for control.

Temperature

Real-time ECG display

Visual Display of Pressure and Flow

Intuitive Icons



Precise drug concentrations and volumes are now available and easily managed on the new Active Monitoring Controller (AMC).

Input custom drug lists including concentration values.

Throughout the case, the Quest MPS 3 System actively monitors amount delivered and saves the data in the case file for future reference.



Instructional safety alerts/alarms display on the AMC which guide the perfusionist to a quick resolution.

Train in Safety with Trainer Mode:

Each AMC has a Trainer Mode for ease of learning and case scenario simulation prior to patient use.



Digital time-stamps are saved in the case file in addition to all aspects of the case.

Pressure

Flow

Confidence in Precision



Auto-Start and the Induction Dose

Experience the evolution of control and accuracy.

The Quest MPS 3 System has redefined the induction dose with its all new feature - Auto Start. Innovative technology for myocardial protection allows for fast aortic valve closure. Targeted parameters of flow and pressure, set within the Active Monitoring Controller (AMC). The Quest MPS 3 System quickly initiates and auto-regulates ramp-up reaching targeted values for a fast and safe arrest.

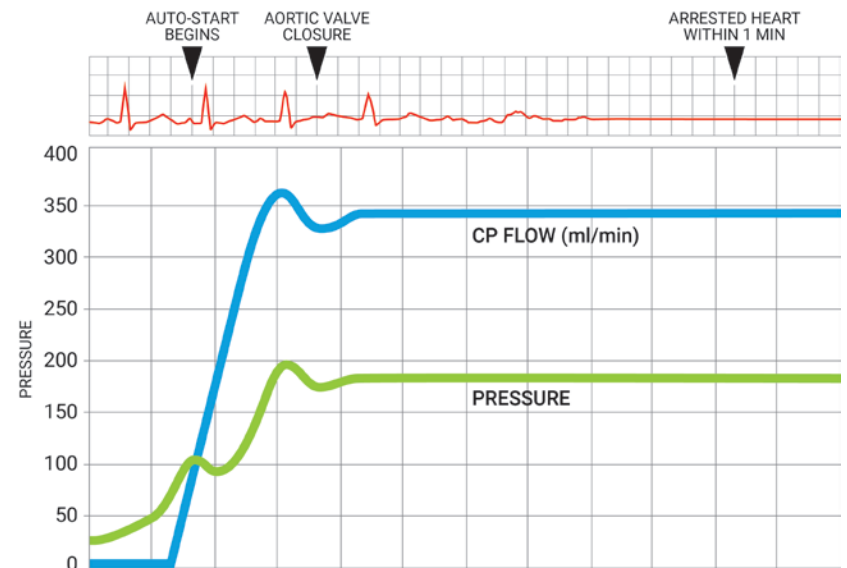
The most effective induction dose possible, all with the touch of a button.

Real Time Data Collection

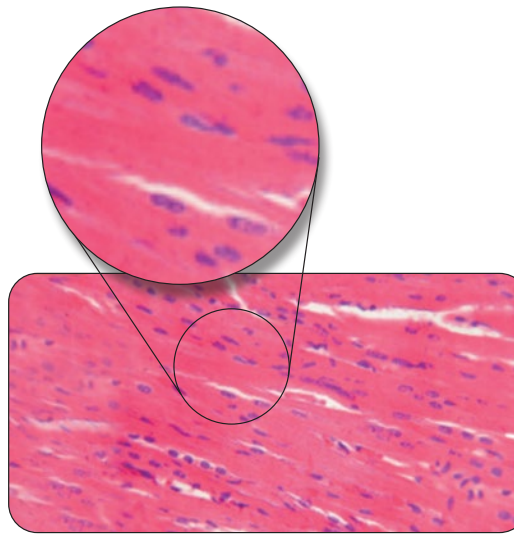
The Quest MPS 3 System, captures and records all drug volumes and concentrations, in real time. The agility of the system allows for changes any time during the procedure. The console and freestanding controller work in unison to provide accurate and safe delivery of arrest and additive agents, no matter which cardioplegia protocol you prefer.

Power through Precision

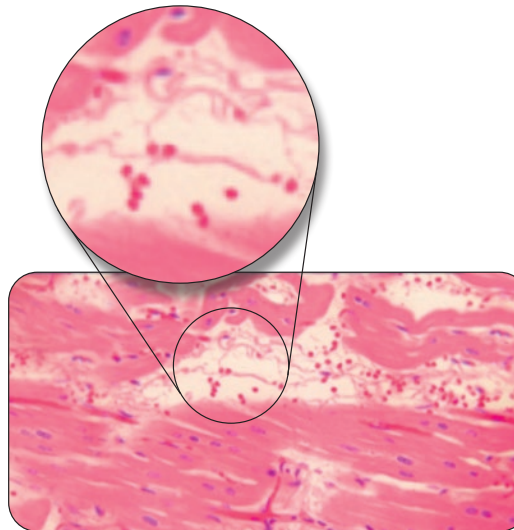
- Avoid medication errors with organized drug records
- Know the precise drug concentrations given to your patient, in real time
- Increase patient safety with evidence-based medicine



Microplegia is superior myocardial protection without hemodilution. Only Quest MPS Technology delivers precision microplegia by independent control of additive and arrest agents.



Healthy Myocardium³



Interstitial Edema³

Precision drug delivery WITHOUT hemodilution¹

Positive Benefits of Microplegia

Provides superior myocardial protection with natural distribution.

- Maximizes aerobic environment for the myocardium
- Reduction of hemodilution
- Lowers transfusion rates
- Minimizes use of hemoconcentrator
- Reduces inotropes/blood products

DILUTED cardioplegia¹

Traditional 4:1 (Blood:Crystalloid)

Negative effects of Using Crystalloid

Excessive dilution may lead to:

- Tissue Edema
- Increased use of blood transfusions
- A low HCT
- Elevated glucose levels
- Low cardiac output syndrome⁴
- Increased Potassium levels

The Sound Investment

The Quest MPS 3 System is an investment to benefit both patients and hospitals through advanced technology. It provides a tool for surgeons and perfusionists to enhance their talents and provide the best care for better patient outcomes. Better patient outcomes benefiting your hospital.

Benefits of MPS technology that can improve the bottom line

Improved Patient Outcomes²

Proven to reduce adverse events with less/no edema for a faster recovery.

Patient Safety

The Quest MPS 3 System is a safe and reliable cardioplegia delivery system. With monitoring capabilities at the fingertips of the perfusionist, precision and accuracy are unmatched by any other system. For peace of mind, there is an internal backup battery in case of a facility power outage.

Data Collection

Key data is captured and stored on the controller. This information is available to further identify and evaluate trends for continuous improvement.

Reduce pharmacy and hospital costs²

Precise drug delivery without dilution simplifies the prep and use of cardioplegia.

The Quest MPS 3 System is more than a capital expenditure – it completes the cardiovascular team.

Contact us to setup a free demonstration.



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Be a part of the evolution.
Confident myocardial protection
with the **Quest MPS 3 System**

Setup a free demonstration of the Quest MPS 3 System
by calling customer service at **1.800.627.0226**
or visiting **QuestMPS3.com**

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