

# Argos® Cardiac Output Monitor

## Advanced Multi-Beat Analysis Algorithm – Better Data Saves Lives

No Disposables • 1 Minute Set Up • Consistently Accurate



# Argos® Cardiac Output Monitor



## Advanced Multi-Beat Analysis (MBA™)

The advanced algorithm called Multi-Beat Analysis built into the Argos monitor was developed at Massachusetts Institute of Technology (MIT) and Michigan State University. **Unlike other monitors that analyze only one beat at a time, the Argos MBA algorithm analyzes multiple heart beats from the blood pressure signal to model the patient's vascular resistance directly.** This algorithm provides accurate hemodynamic data even during changes in vasomotor tone, low cardiac output, and arrhythmia. Our technology enables healthcare professionals to provide individualized data driven treatment to high risk surgical and critically ill patients.

## Comprehensive monitoring of vital data

You deserve accurate comprehensive hemodynamic data to help you give your patients the care they need. The innovative Argos monitor provides the following parameters:

- Cardiac output (CO)
- Cardiac index (CI)
- Blood pressure (BP)
- Heart rate (HR)
- Stroke volume (SV)
- Stroke volume index (SVI)
- Mean arterial pressure (MAP)
- Systemic vascular resistance (SVR)
- Systemic vascular resistance index (SVRI)
- Pulse pressure variation (PPV)

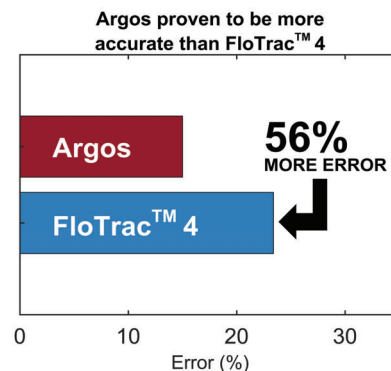
## Detect and Treat Becomes An Em



## Accurate

Trusted accuracy with MBA technology validated in US, France and Germany.

- In a head-to-head comparison study against the leading competitor, the Argos system proved to be >50% more accurate.<sup>1</sup>
- Proven in the toughest patient populations: cardiac surgery, liver transplant, off pump cardiac surgery, neurosurgery, major abdominal surgery and post-surgery in the ICU.<sup>2-6</sup>
- Accuracy maintained with arrhythmia patients, changes in vasomotor tone, and low flow states.<sup>4-6</sup>
- 30,000+ patients monitored to date



*Data on file. Comparison based on percent changes in cardiac output before and after hemodynamic interventions in a retrospective study of 60 off-pump CABG patients with the Argos and FloTrac™ 4. Prospective results may vary.*

# Shock Before It Emergency



## Easy-to-Use

1 minute set up that  
any clinician can do

- 1 cable connects the Argos to your bedside monitor to acquire the invasive BP signal
- Start monitoring in less than 1 minute
- No calibration required
- Intuitive multi touch screen interface
- Training in under 5 minutes



*The Argos connects to the analog output of the IBP signal from a compatible bedside monitor*



## Cost Effective

Unlimited use with no  
disposables

- Unlimited use makes it affordable to use on any patient with an A-line
- Internal data shows an average yearly cost savings of \$62,500 per monitor in the OR. (Calculation based on eliminating 250 disposables (1 per patient) costing \$250 each in one year.)
- Reduce and save on costly complications such as AKIs, MINS, and SSIs by implementing hemodynamic care protocols<sup>7</sup>
- Increase ICU bed turnover via improved weaning from fluids and vasopressors guided by hemodynamic data<sup>8</sup>



*Better data supports enhanced recovery and rapid discharge.*

# Leading Academic and Highly Regarded Medical Centers Rely on the Argos Cardiac Output Monitor

- 3 out of the top 5 leading academic medical centers have implemented the Argos Cardiac Output Monitor for critical patient care
- Leading Level 1 trauma centers across the US and 14 countries
- Over 30,000+ patients monitored to date



...And More

## Clinically proven to effectively monitor hemodynamic data

“The accuracy of the Argos is really superior to other monitors that are currently on the market. It remains precise across a myriad of hemodynamic conditions and enables rapid and intelligent decision-making. It really is, quite simply, a leap forward in technology.”

- Benjamin Kohl; Vice Chair of Critical Care Medicine, Thomas Jefferson University

## Join our growing network of clinicians who rely on the Argos monitor to protect their High Risk Patients.

1. Data on file. Comparison based on percent changes in cardiac output before and after hemodynamic interventions in a retrospective study of 60 off-pump CABG patients with the Argos and Flotrac 4. Prospective results may vary.
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3. Greiwe G et al. Cardiac output estimation by multi-beat analysis of the radial arterial blood pressure waveform versus intermittent pulmonary artery thermodilution: a method comparison study in patients treated in the intensive care unit after off-pump coronary artery bypass surgery. J Clin Monitoring and Computing, doi: 10.1007/s10877-019-00374-0.
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7. Thomas R, et al. Goal directed therapy after cardiac surgery and the incidence of acute kidney injury, Journal of Critical Care. 2014Dec;29(6):997-1000.
8. Benes, J., Giglio, M., Brienza, N. et al. The effects of goal-directed fluid therapy based on dynamic parameters on post-surgical outcome: a meta-analysis of randomized controlled trials. Crit Care 18, 584 (2014). <https://doi.org/10.1186/s13054-014-0584-z>



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