

Product and Technical Specifications

The ACIST | CVi® Contrast Delivery System is intended to be used for controlled infusion of radiopaque contrast media for angiographic procedures.

| CVi system | |
|--|---|
| Flow Rates | |
| Contrast: | User-Responsive, pre-set Variable and Fixed rates from 0.8 to 40 ml/sec, in 0.10 ml/sec increments |
| Saline: | Fixed rate: 1.6 ml/sec |
| Volume | User-Responsive, pre-set limits with variable range of 0.8 to 99.9 ml, in 0.1 ml/sec increments |
| Pressure Limits | User defined from 200 to 1200 psi |
| Fill Rate | Manual or automatic refill of 3 ml/sec |
| Rise Time | User-defined 0 to 1 sec, in 0.1 sec increments |
| Program Routine Injection Modes | Cardiac: LCA, RCA, LV/Ao, and User Defined Peripheral Vascular: Pigtail, Selective, Microcatheter, and User Defined |
| Monitoring Sensors | Air Column Detect* Isolation manifold Contrast Source Empty Contrast Reservoir Refill and Contrast Source Isolation |
| Imaging Interface Synchronization** | Able to synchronize with most brands of X-ray imaging equipment |
| Injection Delay** or X-ray Delay** | 0–99.9 sec |
| KVO Feature*** | Range of 0.1 to 10 ml/min with 20 minute timeout; maximum of 200 ml of saline dispensed |
| Control Panel | 27 cm (10.5 inches) Color Touch Screen |
| Flexible Mounting Configurations | Table Mount with adjustable arm or stationary stem Pedestal Cart |
| Pedestal Cart Dimensions | Wheelbase footprint 53.3 × 63.5 cm (21 × 25 inches), height 91.4 cm (36 inches) |
| Contrast Reservoir | 100 ml |
| Consumable Kit Configurations | |
| Contrast Reservoir (5 patient): | Contrast Reservoir with contrast tubing spike and clamp (for use in up to 5 patient cases) |
| AngioTouch® Hand Controller & Tubing: | AngioTouch® hand controller, injection line tubing, and 3-way stopcock |
| Automated Isolation Manifold: | Integrated system with automated isolation-manifold, low-pressure tubing and saline spike, and supplied pressure transducer cartridge; kits with no transducer also available |
| Component Weights | Power supply 5.5 kg (12 lb), control panel and stem 3.2 kg (7 lb), pedestal cart 10 kg (22 lb), injector head 20.4 kg (45 lb), adjustable arm 0.66 kg (1.45 lb) |
| Power Requirements | Factory selectable: 100 to 120 VAC, 50–60 Hz, 10 A maximum or 200 to 240 VAC, 50–60 Hz, 5 A maximum |

* The air column detection sensor is designed to aid the user in the detection of air columns in the injection line, but it is not designed to replace the vigilance and care required of the operator in visually inspecting for air and clearing air

** Available in synchronized peripheral mode

*** Available in peripheral mode

ACIST | CVi®
Contrast
Delivery System



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The ACIST | CVi® Contrast Delivery System
Simplifying Contrast Injection

Simplifying Procedures

The ACIST|CVi® Contrast Delivery System – the sophisticated system that simplifies contrast injection for **ALL** your interventional and diagnostic cardiology procedures, from **small injections** in the coronary arteries, to **large volumes** in the ventricles and peripheral vasculature.



Simplifying Control

The ACIST CVi system's **innovative design** helps make it simple to operate, allowing you to generate **quality images** and to focus on what's important – your patient and the procedure.

Simplifying Patient Care

We are passionate about patient care. The ACIST CVi system has been shown to **reduce procedure time and the volume of contrast delivered** to the patient by providing precise contrast delivery.



The ACIST CVi boasts an array of **advanced, built-in safety** features that provide **continuous and automated monitoring** of all critical systems functions, and can deliver contrast with ease even through 4Fr catheters². By reducing overall procedure time the ACIST CVi helps to reduce radiation exposure³.



- ① The **AngioTouch® hand controller** allows real-time, variable-flow control of the contrast injection rate for precise and consistent contrast administration, and has been **shown to reduce per-patient contrast dosage by up to 20%**¹
- ② The **touch screen monitor** provides intuitive on-screen prompts for set-up, adjustable injection volume and flow rate limits, contrast tracking information, and real-time readout for continuous system and procedure monitoring
- ③ The **built-in air column detection sensor** alerts the clinician and **stops the injection if air is detected** in the single-use patient tubing connected to the catheter*
- ④ The five-patient, **isolated contrast reservoir** with rapid automatic refill can **reduce contrast waste** and save time between cases
- ⑤ In-line, continuous hemodynamic monitoring provides a **real-time pressure reading**, and the automated isolation manifold provides a **barrier to the contrast reservoir**



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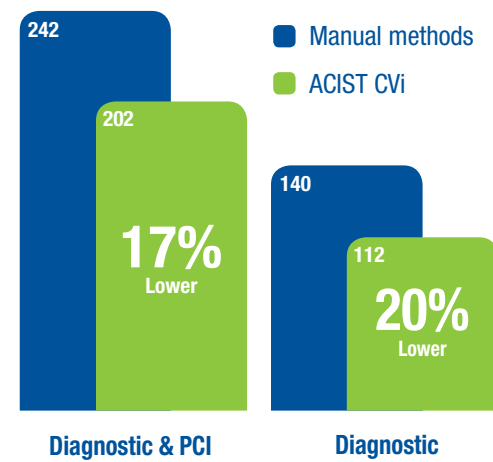
1. Anne G, Gruberg L, Huber A, et al. *J Invasive Cardiol.* 2004;16(7):360-362
 2. Khoukaz S, Kern MJ, Bitam SR, et al. *Catheter Cardiovasc Interv.* 2001;52:393-398
 3. Brosh D, Assali A, Vaknin-Assa H, et al. *Int J Cardiovasc Interv.* 2005;7(4):183-187

Simplifying Workflow and Efficiency

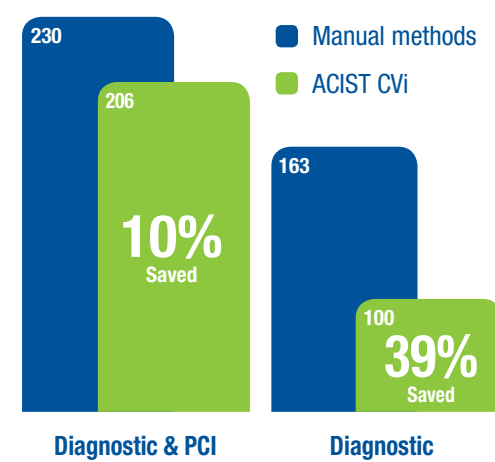
The ACIST CVi system is designed and built to **streamline procedures** and deliver faster case turnaround, while minimizing the use of contrast.

- Up to 20% reduction in contrast dosage to the patient¹
- Up to 40% reduction in contrast and cost^{1,2,3}
- Up to 31% reduction in procedure and setup time⁴

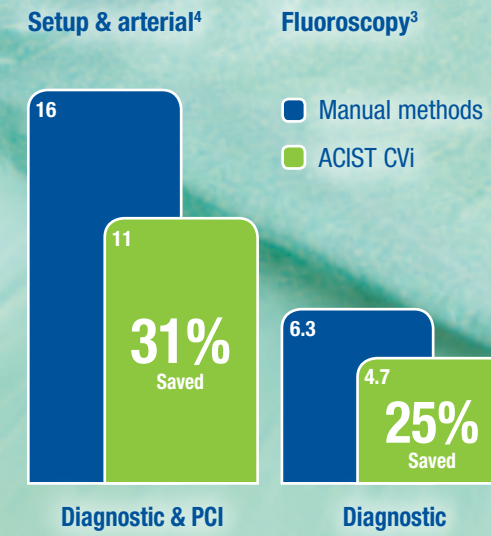
Lower average contrast dose¹
PER PATIENT IN MILLILITERS



Total contrast volume³
PER PATIENT IN MILLILITERS



Procedural time⁴
PER PATIENT IN MINUTES



1. Anne G, Gruberg L, Huber A, et al. *J Invasive Cardiol.* 2004;16(7):360-362
 2. Call J, Sacrinty M, Applegate R, et al. *J Invasive Cardiol.* 2006;18(10):469-474
 3. Brosh D, Assali A, Vaknin-Assa H, et al. *Int J Cardiovasc Interv.* 2005;7(4):183-187
 4. Lehmann C, Hotaling M. *J Invasive Cardiol.* 2005;17(2):118-121