FRESENIUS KABI

CATSmart

Continuous Autotransfusion System

SIMPLY BRILLIANT.
BRILLIANTLY SIMPLE.

- Technology that gets you up and running quickly
- Design that helps you operate smoothly
- Performance that lets you deliver for every patient

At the heart of CATSmart is our proprietary continuous-flow technology. Unlike bowl-based systems, its one-size-fits-all kit multi-tasks all process steps. Coupled with situation-specific wash programs, an Auto-Start function, and a PRC pump sensor, you can set up fast and be certain PRC is available when your patient needs it.
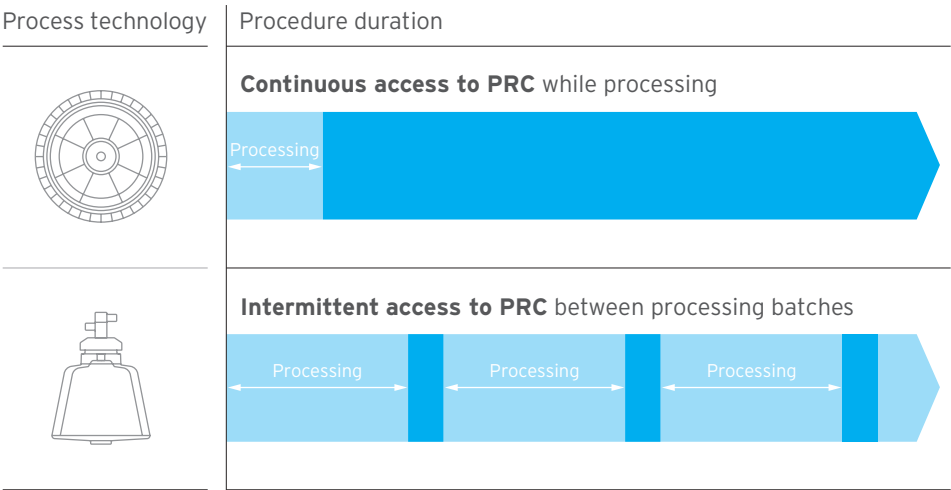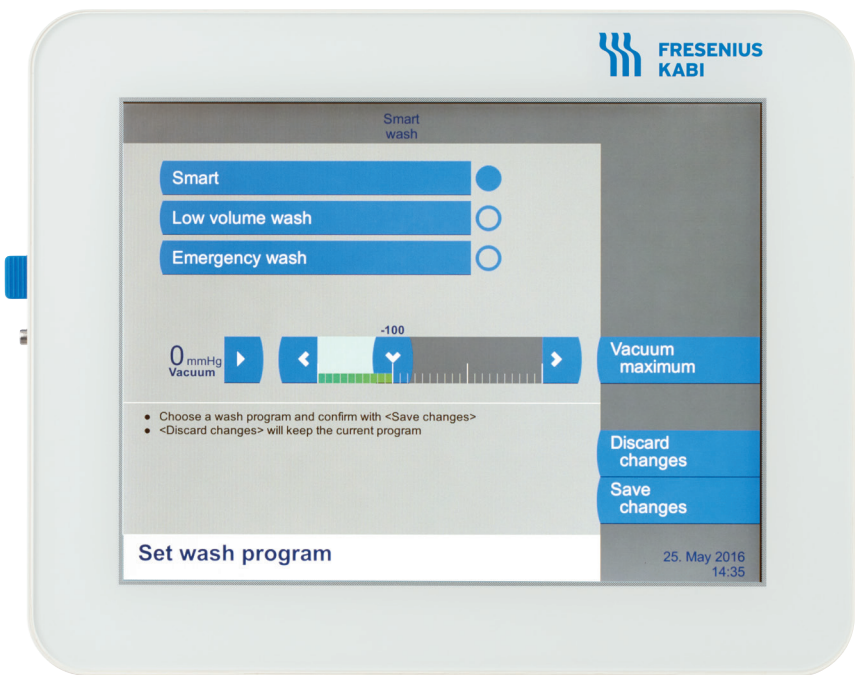
Quick to start technology

Wash Programs and Auto-Start
Clear settings for swift selections.

CATSmart's three wash programs – Smart, Low Volume, and Emergency – simplify your set-up and in-process changes.

The Auto-Start function can be pre-set based on the expected amount and speed of blood loss, so you can focus on your patient rather than monitoring the collection reservoir.

Process technology	Procedure duration

Continuous access to PRC while processing

Processing

Intermittent access to PRC between processing batches

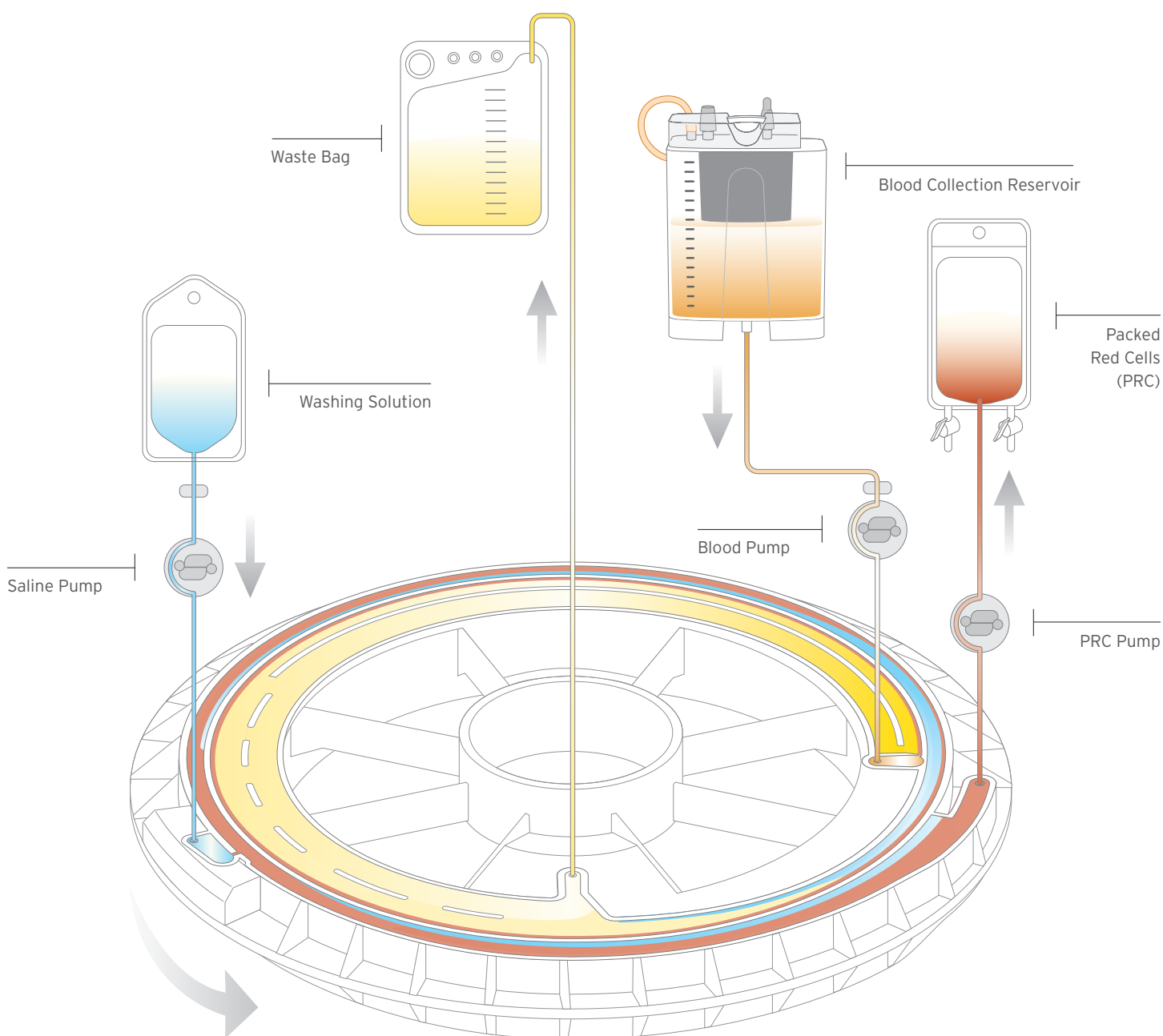Processing   Processing   Processing

PRC Sensor
Reinfusion-ready with minimal mLs.

CATSmart's PRC sensor directs the system to start pumping to the reinfusion bag when PRC volume in the washing chamber registers at as little as 30 mL. Once in the bag, PRC can be accessed for patient use, immediately or whenever required, by pausing the system.

Continuous Processing

All-at-once ease. Non-stop results.

CATSmart continuously pushes shed blood through the spiral channel of the washing chamber and simultaneously separates, washes, and packs red cells. The PRC sensor monitors the RBC interface and auto-adjusts pump flow rates, for optimal results, every time.

AT3 Kit

One-size-fits-all efficiency.

CATSmart's AT3 kit simplifies inventory, decision-making, and set up. The single-sized washing chamber can process any volume of shed blood – an easy choice for every patient or procedure. And with all components pre-connected, including the new hematocrit sensor, installation is equally easy.

Waste Bag

Blood Collection Reservoir

Washing Solution

Packed Red Cells (PRC)

Saline Pump

Blood Pump

PRC Pump

CATSmart's features and functions include a lighter, slimmer, more agile, and fully adjustable body, a tablet-sized display, quiet-run acoustics, and accessible data management tools.* All specifically designed to take into account your unique workflow, work style, and work space.
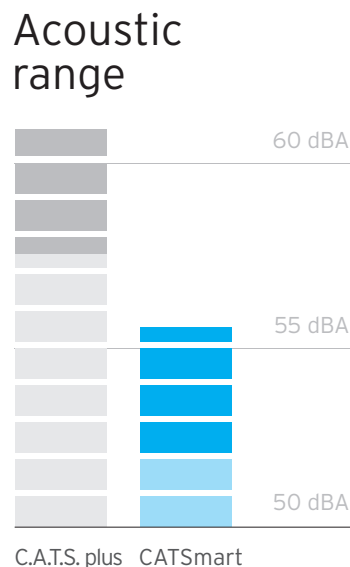
Easy to operate design

Acoustics

Runs quiet, so you can stay focused.

CATSmart's enhanced soundproofing surrounding both the washing chamber and vacuum pump minimizes equipment-related distractions in your OR — it takes three CATSmart devices running side-by-side to generate the decibel level of one C.A.T.S. plus.

Data Management

In-reach tools. Complete reports.

CATSmart's USB interface and optional barcode scanner and matrix printer add speed and simplify accurate data collection and transfer to meet rising reporting needs.

Up to

50%

quieter

CATSmart fades into the background of your OR.

Acoustic range

60 dBA

55 dBA

50 dBA

C.A.T.S. plus   CATSmart

Install set | Priming | Smart wash | Save final PRC | **Remove** set

15% Hct_in   2593 ml NaCl   70% Hct_out   3013 ml Waste

734 ml WB   314 ml PRC

0 mmHg Vacuum   -100

- You may see a step by step removing guidance by touching < ? >
- You may save the process data to a connected USB pen drive
- <End program> allows you to start a new wash program

Remove set   ?

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* Compared to CATS Plus Autotransfusion System

3

Quick-glance data. Glove-touch controls.

CATSmart's full-color interface makes it easy to see patient data in any light and simple to access all functionality – including Set-up and Help – even in gloved hands.

Light, slim, agile. For stunning mobility.

Weighing 17lbs lighter and measuring 9″ shorter than its predecessor – with smooth-glide, 360°-spin wheels and a bi-pedal, fast-brake system – CATSmart's body is easy to adjust and nimble to maneuver.

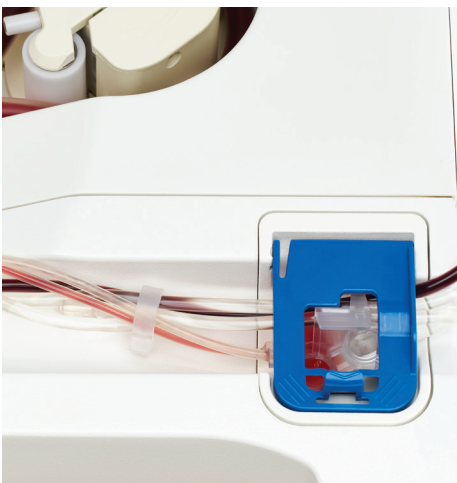## Sitting or standing, it's all within reach.

CATSmart lets you position control right at your fingertips – and eye level. The body raises or lowers to one of five comfort-set heights and the display arm swings smoothly for a clear line of sight to procedure data.

Turn and pull the knob located at the rear of the device to unlock CATSmart's spring-assisted body.

Regardless of the wash program you select, CATSmart delivers PRC with high hematocrit and washout rates – including non-emulsified fat – for every patient and every program, while its on-board vacuum and suction system give you the control to manage hemolysis.

Sure to deliver performance

HCT Sensor

Keeps an eye on quality.

CATSmart's two ultrasonic sensors continuously measure incoming and outgoing hematocrit levels. All captured data is visualized, real-time, on the display and can be recorded for post-op reporting or review.

Vacuum Pump

On-board for on-demand viability.

CATSmart makes it easy for you with a built-in, optional vacuum pump that's controlled through the touchscreen display.
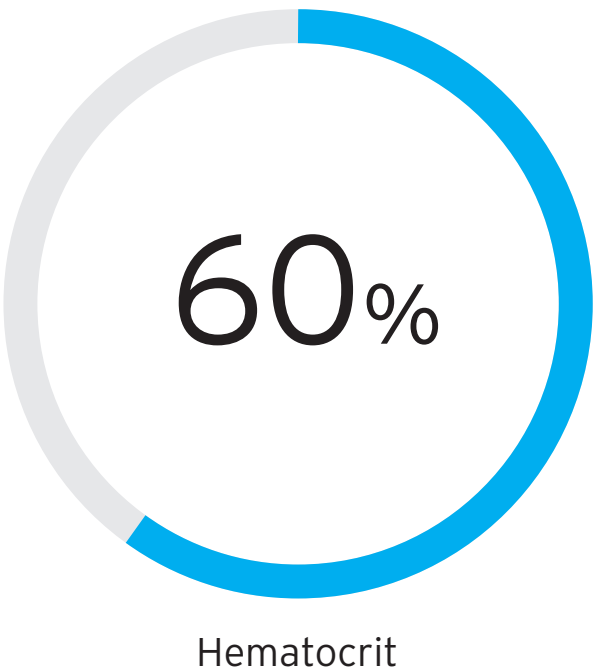
PRC Quality
High HCT. Low fat. No tradeoffs.

All three of CATSmart's wash programs deliver RBC recovery levels above 85% along with impressive HCT and washout rates. You will never need to sacrifice high HCT for low non-emulsified fat – CATSmart provides both, at the same time, minimizing patient risk of postoperative cognitive decline and fat embolisms.[1]
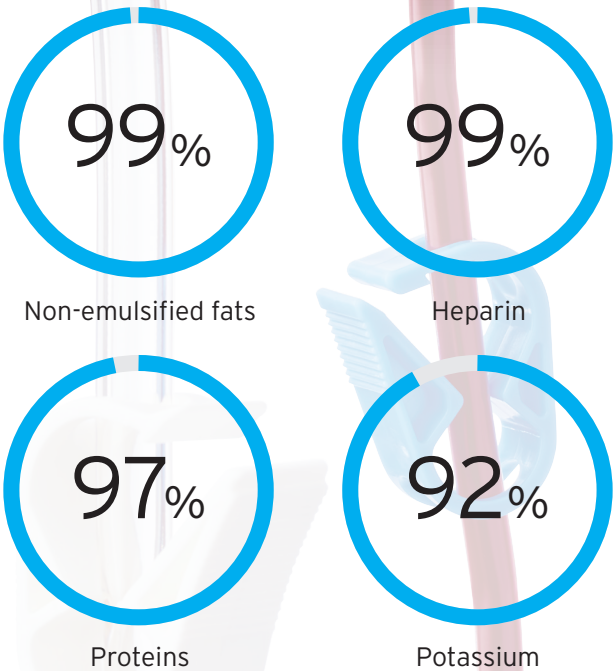
	Wash Program		
	Low Volume 200mL | 700mL	**Smart** 1000mL	**Emergency** 1000mL
Hematocrit	56 | 62	64	57
Non-emulsified fats	>99*	>99	>99
Heparin	>99*	>99	>99
Albumin	99 | 97	99	95
Proteins	98 | 97	99	94
Potassium	92 | 92	94	90
Hemolysis	.15 | .06	.04	.02
			Values above are %

* Starting volume was 400mL for Low Volume wash

CATSmart delivers[2]
On average regardless of wash program

60%

Hematocrit

CATSmart eliminates[2]
Without reducing final HCT levels

99% Non-emulsified fats

99% Heparin

97% Proteins

92% Potassium

1. Data on file at Fresenius Kabi.
2. As demonstrated in published studies.

Technical Information

Wash Programs	PRC Flow
Low Volume Wash	25 mL/min
Smart Wash	20 - 40 mL/min
Emergency Wash	50 - 100 mL/min

Delivery Flow Rates	
Red Blood Cell Pump	0 - 190 mL/min
Shed Blood Pump	0 - 350 mL/min
Washing Solution Pump	0 - 400 mL/min

Centrifuge Speed	0 - 2400 rpm

DESIGNED AND MANUFACTURED BY
FRESENIUS KABI IN FRIEDBERG, GERMANY.

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caring for life

INFUSE ~ TRANSFUSE ~ NOURISH

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Order Information

Order Number	Description	Units/Case
Hardware and Hardware Accessories		
9005901	CATSmart Autotransfusion System	1
9005861	CATSmart Auto-Start Reservoir Holder	1
M690991	CATSmart ATH Reservoir Holder	1
9005761	CATSmart Tray	1
M695501	Centrifuge Lid Cover	1
9005781	CATSmart Scanner	1
9005771	CATSmart Matrix Printer	1
9005801	CATSmart Black Ribbon for Matrix Printer	1
9005791	CATSmart Paper for Matrix Printer	1
Aspiration Assembly		
9005851	CATSmart Vacuum Pump	1
9108554	ATV Vacuum Line (70cm)	15
9108544	ATV Vacuum Line (180cm)	12
M649951	Overflow Protector	1
6799181	Hydrophobic Filter	1
M679011	Smoke Filter	1
6780881	Bacterial Filter	100
Disposable Sets		
9108444	ATF 40 Fast Start Kit (AT3) Includes AT3 Set, 40 micron collection reservoir, ATS Suction Line, 10L Waste Bag, PRC Reinfusion Bag	4
9104444	ATF 120 Fast Start Kit (AT3) Includes AT3 Set, 120 micron collection reservoir, ATS Suction Line, 10L Waste Bag, PRC Reinfusion Bag	4
9108494	ATF 40 Fast Start Kit (AT1) Includes AT1 Set, 40 micron collection reservoir, ATS Suction Line, 10L Waste Bag, PRC Reinfusion Bag	4
9108504	ATF 120 Fast Start Kit (AT1) Includes AT1 Set, 120 micron collection reservoir, ATS Suction Line, 10L Waste Bag, PRC Reinfusion Bag	4
Individual Components and Accessories		
9005444	AT3 Autotransfusion Set	8
9005104	AT1 Autotransfusion Set	8
9108414	ATR 40 Collection Reservoir	8
9108474	ATR 120 Collection Reservoir	8
9108484	ATS Suction Line	8
9108434	ATO Oxygenator Line	20
9006284	Waste Bag 10L	20
9005204	Reinfusion Bag 1000mL	20
9005164	Reinfusion Bag 1000mL w/Y Adapter	20
9108404	ATY Y Adapter	8
9108574	ATR Cap Set	120