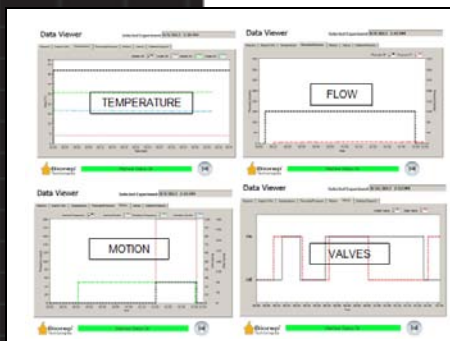
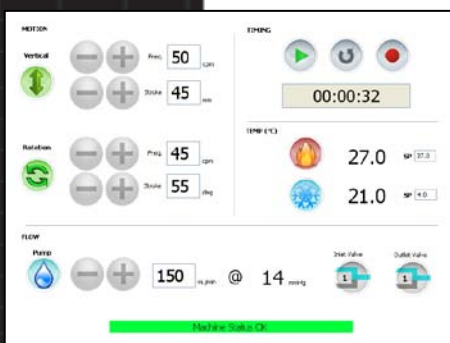


Ricordi® Islet Isolator Model No. RI-05



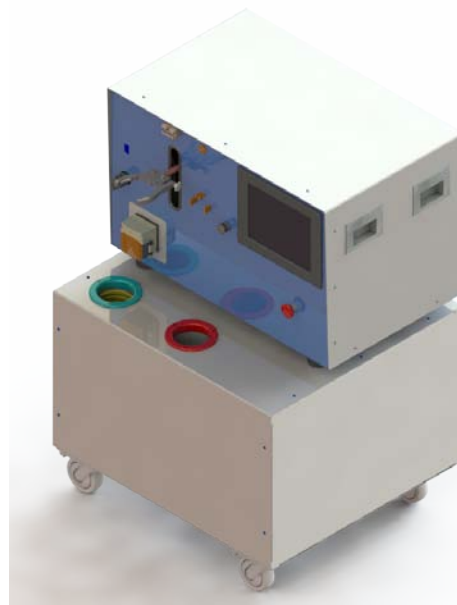
**Multi-Parameter
Data logging**



**Touch-Screen
Interface**



**Easy Report
Generation**



Included items:

- Biorep Thermoprobe
- Tubing Set with Coil
- Ricordi Chamber
- Silicon Nitride Marbles
- Shaker Clamp

The Ricordi Isolator was developed to assist in the dissociation process of an isolation procedure by automating and monitoring pancreas digestion. The machine accurately controls chamber agitation, temperature, and flow.

Advanced software uses a variety of sensors to monitor and ensure a controlled and safe isolation process. In addition, the machine has the ability to store a time-lapse record of every parameter used during the procedure.

The Ricordi Isolator enables the researcher not only to analyze each digestion, but also to refine the procedure into a repeatable and efficient protocol with the creation of custom recipes for the machine to execute.

The machine can function automatically with the easy-to-use data acquisition and playback functionality. Manual control of the machine is also possible through the use of the touch-screen interface.

▪ Specifications

	RI-05-HVPC
Operation modes	Manual or Automatic
Pressure sensor range	0 to 300 mmHg (+/- 2 mmHg)
Flow rate range	0 to 400 ml/min (+/- 2 mL/min)
Vertical oscillation frequency	0 to 200 cycles/min
Vertical stroke	0 to 110 mm (0 to 4.3")
Rotation oscillation frequency	0 to 150 cycles/min
Rotation stroke	0 to 180 degrees
Heating temperature range	Room temperature to 50 °C (122 °F)
Cooling temperature range	Room temperature to 0 °C (32 °F)
Temperature sensor	Type T Thermocouple (+/- 0.5 °C)
Power supply	Voltage and frequency: AC 100 to 120V/220 to 240V +/- 10%, 50/60 Hz Required power capacity: 8A (100 to 120V) / 4A (220 to 240V)
Power consumption	Approx. 960W
Operating temperature	5 to 40 °C (41 to 104 °F)
Operating humidity	35 to 80% (no condensation)
Dimensions	W x D x H: 74 cm x 66 cm x 110 cm (29.3" x 26.0" x 43.3")
Weight	157 kg (398 lbs)
Packed dimensions	W x D x H: 102 cm x 122 cm x 137 cm (40" x 48" x 54")
Packed weight	310.7 kg (685 lbs)
Included items	One Sterile Ricordi Chamber, One Set of Sterile Silicon Nitride Marbles, One Sterile Thermoprobe, Sterile Tubing Set including heat exchange coil

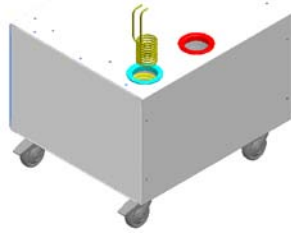
▪ Standard Options

Automatic Temperature Control System and Peristaltic Pump

An advanced algorithm accurately controls the temperature within the Ricordi Chamber. Built-in safety features prevent a temperature overshoot.

Temperature is distributed by circulating fluid through a coiled stainless steel tube. The temperature is constantly monitored at several critical points throughout the system. The control system, together with the peristaltic pump minimizes the tubing required, which minimizes the amount of enzyme used.

The system consists of a temperature-controlled heating segment, cooling segment, and a heat exchange coil. The machine's temperature control system cools or heats the respective segment to the targeted temperature. When cooling is desired, the coil is submerged in the cooling tank and the digested preparation is circulated through the coil. Alternatively, when heating is desired, the coil is moved and submerged in the heating tank.



Automatic Pinch Valve

The 3-way pinch valves can be used to divert the flow from a digestion line to a collection line. These valves can be programmed to open and close automatically.

One valve is used for size 16 tubing (input line) and one valve is used with size 17 tubing (output line).



Pressure Sensing

Pressure build-up can cause a critical failure of the isolation as well as personal injury. The Ricordi Isolator has an option for a pressure sensor that will stop the pump if there is a crimped tube or a clog in the Ricordi Chamber filter.

In addition, the machine can be operated with pressure control for perfusion applications.

