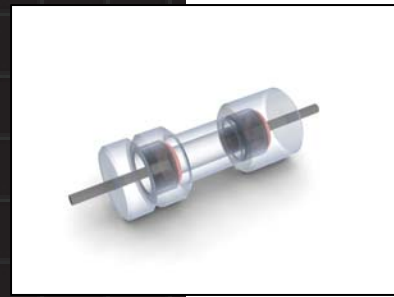
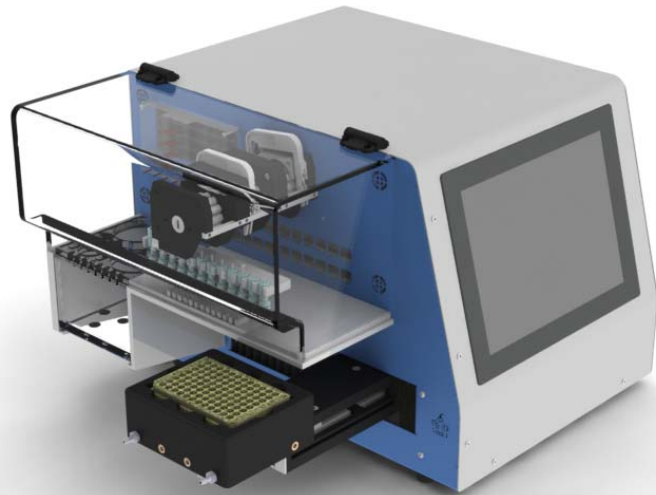
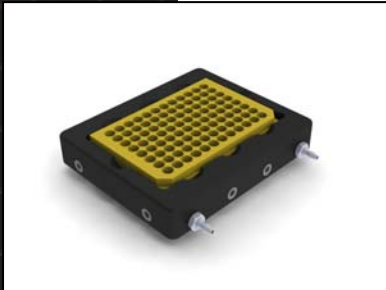


Perifusion System

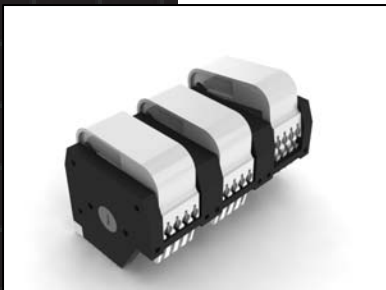
Model No. PERI-4.2



Perifusion
Sample
Container



96-Well Plate
with Cooling
Tray



12 -Channel
Peristaltic
Pump

The Perifusion System is used to perform *in-vitro* testing of islets of Langerhans. These cells act as natural sensors of glucose in the pancreas. We have developed a Perifusion System which enables a group of islets to be bathed with different solutions containing varying concentrations of glucose and/or secretagogues in a controlled temperature environment.

The perfusing fluid is pushed by a peristaltic pump through a sample container with the islets, and the perfusate is collected in a 96 well plate for further analysis. The well plate moves automatically according to the number of sample containers in use and the preset sampling rate. The well plate is kept to the desired temperature using an external water or alcohol circulating unit.

The system can accommodate one to twelve sample containers at a time. The Perifusion System can be used as a tool to assess the quality of the islets prior to transplantation.

Features:

- Touch-screen interface
- 96-well plate compatible (standard or deep-well)
- 12-channel precision peristaltic pump
- Accurate chamber air temperature control
- 96-well plate cooling system
- Automatic fluid handling system
- Customized protocol implementation
- Available in *Fully Automatic* or *Semi-Automatic* versions

***Patent Pending**

Touch-screen
Interface

▪ Specifications

	PERI-4.2
Operation modes	Automatic or Manual
Max. No. of Samples per Assay	12
Collection Tray	Standard or Deep 96-well plate
Flow rate range	0 to 450 µL/min (+/- 10 µL/min)
Temperature range	Room Temperature to 50 °C (122 °F)
Temperature sensor	Type T Thermocouple (+/- 1.0 °C)
Power supply	Voltage and frequency: AC 100 to 120V/220 to 240V +/- 10%, 50/60 Hz Required power capacity: 5A (100 to 120V) / 3A (220 to 240V)
Power consumption	Approx. 575W
Operating temperature	5 to 40 °C (41 to 104 °F)
Operating humidity	35 to 80% (no condensation)
Dimensions	W x D x H: 55.9 cm x 52.4 cm x 38.2 cm (22.0" x 20.6" x 15.0")
Weight	25 kg (55 lbs)
Packed dimensions	W x D x H: 67.3 cm x 71.1 cm x 55.9 cm (26.5" x 28.0" x 22.0")
Packed weight	55.5 kg (122 lbs)
Included items	24 perfusion chambers, cell loading rack, tubing set