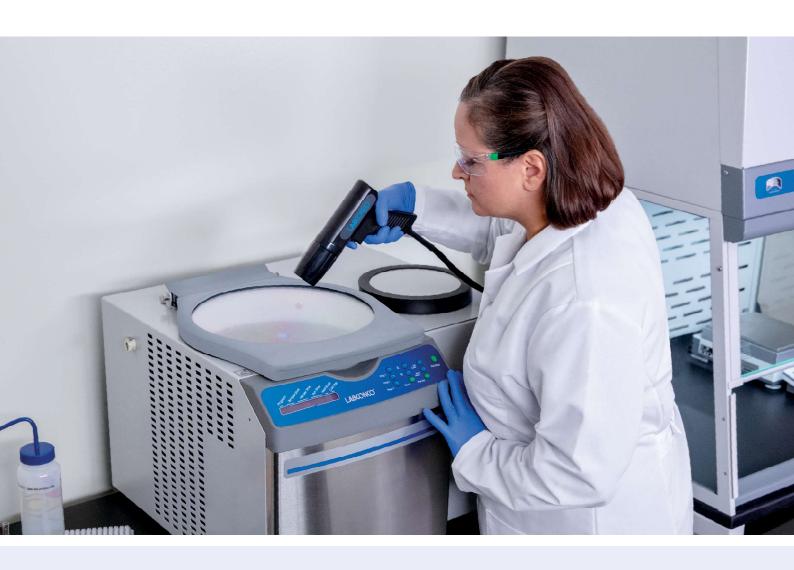
# **CentriVap**<sup>®</sup> Centrifugal Vacuum Concentrators & Cold Traps











### **Table of Contents**

Why Labconco?	3	Complete Vacuum Concentrators	18
Centrifugal Vacuum Concentrators At-a-Glance		Mobile Systems	20
Steps to Selecting a Vacuum		Concentrator Systems	22
Concentrator or Evaporator	4	Accession	0.4
CentriVap® Product Lines	5	Accessories	24
micro IR Vacuum Concentrators	6	Evaporation Rates	29
		Specifications	
Benchtop Vacuum Concentrators	8	CentriVap® micro IR Vacuum Concentrators	32
Refrigerated Vacuum Concentrators	10	CentriVap® Benchtop Vacuum Concentrators	33
3		Refrigerated CentriVap® Vacuum Concentrators	34
Acid-Resistant Vacuum Concentrators	12	Acid-Resistant CentriVap® Vacuum Concentrators	35
Cold Traps	14	CentriVap® Cold Traps	36
Cold Haps	14	CentriVap® DNA Vacuum Concentrators	37
<b>DNA Vacuum Concentrators</b>	16	CentriVap® Complete Vacuum Concentrators	38
		CentriVap® Mobile Systems	39

### Begin with the end in mind.

Scientific measurement is only as good as the sample preparation that precedes it. Yes, it's time consuming but we all know sample prep is the most important step in scientific analysis. Why take a risk?

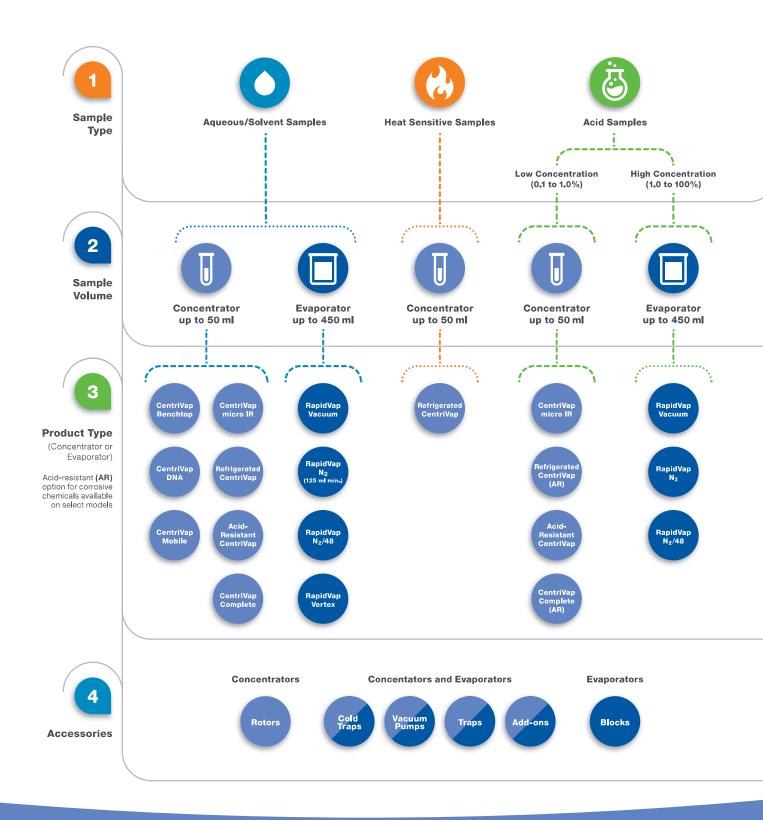
With Labconco's CentriVap® line, you can produce a high throughput of samples efficiently. Biological or non-biological, low volume or high, our concentrators ensure efficient production of multiple small samples without compromising integrity.

Choose from one of our seven different CentriVap concentrator models as compact benchtop equipment or create a laboratory system by combining with a CentriVap Cold Trap to protect against the corrosive effects of vapors and fumes.

Quality in. Quality out. Labconco has your back.



#### Steps to Selecting a Vacuum Concentrator or Evaporator



CentriVap® and RapidVap® Product Lines

#### **CentriVap Centrifugal Vacuum Concentrators**



#### **RapidVap Dry Evaporation Systems**





Rotors



**Cold Traps** 



**Vacuum Pumps** 







Add-ons



**Accessories** 

### CentriVap® micro IR Vacuum Concentrators

#### **Features & Benefits**



#### Smallest footprint available

Just right for tight spaces and budgets. Weighs just 20 lbs.

#### All-in-one

Simply plug it in. It's ready to use.

#### Ideal for small samples

Perfect for DNA and small throughput in molecular biology, genomics, genetics, proteomics, cell biology and drug discovery labs.

#### PTFE\*coated chamber

Resists corrosion, adds durability.

#### IR-emitting glass lid

Adds heat to chamber to speed evaporation while helping prevent condensation that can contribute to sample cross contamination. Glass resists etching from certain chemicals.

#### PTFE-coated aluminum rotor

Accommodates 24 1.5 ml microcentrifuge tubes. Optional accessory rotors available.

#### Vacuum gauge

Built-in front-mounted analog vacuum gauge indicates pump function.

#### CentriZap™ micro IR **Strobe Light**

Enables users to shine a light into chamber to easily view samples while rotor is spinning. Samples appear to be standing still. No need to stop rotor and lift lid to check sample dryness.

#### **Built-in PTFE-coated** diaphragm pump

Corrosion-resistant pump achieves ultimate vacuum of 160 mBar and pumping capacity of 5.5 L/min. Oil-free pump is low maintenance.

Full one year warranty

Fast evaporation Using Rotor 7548500, 24 each 1 ml samples in 1.5 ml microcentrifuge tubes, and the IR lid heat function, fast evaporation times were achieved.

Solvent	Temperature	Dry Time
Acetonitrile	45° C	61 minutes
Methanol	65° C	32 minutes
Water	60° C	145 minutes
Isopropanol	60° C	30 minutes
Ethanol	60° C	39 minutes





<sup>\*</sup>Polytetrafluoroethylene

### CentriVap® micro IR Vacuum Concentrators

#### **Ordering Information**



Catalog Number	Electrical Requirements	Receptacle & Plug Type	Overall Dimensions (w x d x h)	Shipping Weight
7701020	115V, 60 Hz, 2A	North America, 115V, 15A	8.8" x 12.9" x 8.9"	22 <b>l</b> bs. (10 kg)
7701030	230V, 50/60 Hz, 1A	Schuko	8.8" x 12.9" x 8.9"	22 <b>l</b> bs. (10 kg)
7701035	230V, 50/60 Hz, 1A	British (UK)	8.8" x 12.9" x 8.9"	22 lbs. (10 kg)
7701037	230V, 50/60 Hz, 1A	China/Australia	8.8" x 12.9" x 8.9"	22 lbs. (10 kg)

#### All models require (not included):

• Sample tubes. Contact your laboratory supply dealer.

#### **Optional Accessories**

#### **PTFE-coated Aluminum Rotors.**

Hold tubes at an angle to maximize surface area. Easily interchangeable. Rotor 7548500 is included with each CentriVap micro IR. Sample containers are not included. Shipping weight 1.0 lb. (0.5 kg)

Catalog Number	Tube Capacity	Tube Volume*	Tube Description
7548400	24	0.5 m <b>i</b>	0.5 ml microcentrifuge tubes
7548500	24	1.5 ml	1.5 ml microcentrifuge tubes
7548600	16	10 m <b>l</b>	vials, 18 mm dia. x 65 mm tall
		5 ml	5 ml microcentrifuge tubes
7548700	12	15 m <b>l</b>	vials, 20 mm dia. x 70 mm tall
7548800	8	25 m <b>l</b>	vials, 28 mm dia. x 70 mm tall

 $<sup>^{\</sup>star}$ Tubes should be filled no more than 1/3 to 1/2 of tube volume to prevent loss of sample during rotation.







7548500





7548700



7548800

### CentriVap® Benchtop Vacuum Concentrators

#### **Features & Benefits**



#### Rapidly concentrate samples

Utilizes centrifugal force, vacuum and heat.

#### Heat and run times are set separately

Each from 1 to 999 minutes. Heat may be programmed to shut down sooner than the run to protect heat-sensitive samples from excessive heat exposure after the solvent has evaporated. Once user-set run time has expired, all functions cease.

#### Large chamber holds up to 148 samples for maximum throughput

The 12" diameter chamber accommodates a variety of rotors. The 6-Place Microtiter Plate Rotor holds six standard 96-well plates or three deep well plates.

#### Stores 9 user-set programs

Parameters of temperature, heat time and run time can be easily set with the touch of a few buttons. User may also alter temperature and times while the program is in progress.

#### Quick-Start™ **One Button Start Up**

Start the rotor, heater, timers and vacuum pump simultaneously.

#### Quick-Stop™ System

Once run time has expired or the RUN/STOP button is pressed, within seconds the vacuum pump stops, the valve opens to bleed air into the chamber, and the rotor stops.

#### Full one year warranty



LCD shows program from 1 to 9, R for run.

#### **Heat Boost Option**

LCD shows Y when Heat Boost has been selected; N when not selected.

#### Quick-Start™ Buttons

Initiate user-set Program 1, 2 or 3 with a single push of a button.

#### **Preheat Button**

Press to turn on heater to preheat chamber prior to loading samples.





### CentriVap® Benchtop Vacuum Concentrators

#### **Ordering Information**



- Moderate to large sample throughput
- Optional glass lid for solvent samples
- Optional Heat Boost

Catalog Number	Built-In Option	Electrical Requirements		Receptacle & Plug Type	Overall Dimensions (w x d x h)	Shipping Weight
7810010		115V, 50/60 Hz, 12A*	11	North America, 115V, 15A	14.7" x 19.3" x 11.7"	48 <b>l</b> bs. (22 kg)
7810012	Heat Boost	115V, 50/60 Hz, 12A*	11	North America, 115V, 15A	14.7" x 19.3" x 11.7"	48 <b>l</b> bs. (22 kg)
7810014	Glass Lid	115V, 50/60 Hz, 12A*	11	North America, 115V, 15A	14.7" x 19.3" x 11.7"	48 <b>l</b> bs. (22 kg)
7810011		230V, 50/60 Hz, 6A**	<u></u>	North America, 230V	14.7" x 19.3" x 11.7"	48 <b>l</b> bs. (22 kg)
7810013	Heat Boost	230V, 50/60 Hz, 6A**	<u></u>	North America, 230V	14.7" x 19.3" x 11.7"	48 <b>l</b> bs. (22 kg)
7810015	G <b>l</b> ass Lid	230V, 50/60 Hz, 6A**	<u></u>	North America, 230V	14.7" x 19.3" x 11.7"	48 <b>l</b> bs. (22 kg)
7810030		230V, 50/60 Hz, 6A**	$\odot$	Schuko	14.7" x 19.3" x 11.7"	48 <b>l</b> bs. (22 kg)
7810031	Heat Boost	230V, 50/60 Hz, 6A**	$\odot$	Schuko	14.7" x 19.3" x 11.7"	48 <b>l</b> bs. (22 kg)
7810032	Glass Lid	230V, 50/60 Hz, 6A**	$\odot$	Schuko	14.7" x 19.3" x 11.7"	48 <b>l</b> bs. (22 kg)
7810034		230V, 50/60 Hz, 6A**	<u></u>	British (UK)	14.7" x 19.3" x 11.7"	48 <b>l</b> bs. (22 kg)
7810035	Heat Boost	230V, 50/60 Hz, 6A**	<u></u>	British (UK)	14.7" x 19.3" x 11.7"	48 <b>l</b> bs. (22 kg)
7810036	G <b>l</b> ass Lid	230V, 50/60 Hz, 6A**	<u></u>	British (UK)	14.7" x 19.3" x 11.7"	48 <b>l</b> bs. (22 kg)
7810038		230V, 50/60 Hz, 6A**	(1)	China/Austra <b>l</b> ia	14.7" x 19.3" x 11.7"	48 <b>l</b> bs. (22 kg)
7810039	Heat Boost	230V, 50/60 Hz, 6A**		China/Australia	14.7" x 19.3" x 11.7"	48 <b>l</b> bs. (22 kg)
7810040	G <b>l</b> ass Lid	230V, 50/60 Hz, 6A**	(1)	China/Austra <b>l</b> ia	14.7" x 19.3" x 11.7"	48 lbs. (22 kg)

#### All models require (not included):

- Vacuum Pump. See page 26
- CentriVap Cold Trap. See pages 14-15
- Rotor. See pages 24-25
- Sample tubes. Contact your laboratory supply dealer.

#### See pages 22-23 for ordering information on CentriVap Systems.

<sup>\*</sup>System amperage shown includes 8 amp maximum vacuum pump rating. \*\*System amperage shown includes 4.5 amp maximum vacuum pump rating.

### Refrigerated CentriVap® Vacuum Concentrators

#### **Features & Benefits**

#### Just right for heat-sensitive samples

Process multiple samples such as RNA and proteins, using centrifugal force, vacuum and controlled temperature.

#### **Exclusive temperature range**

CentriVap is the only available concentrator that combines a refrigeration system that cools to -4 $^{\circ}$  C with a heater that warms to +100° C to reach user defined temperatures.

#### Large chamber holds up to 148 samples for maximum throughput

The 12" diameter chamber accommodates a variety of rotors. The 6-Place Microtiter Plate Rotor holds six standard 96-well plates or three deep well plates.



#### Stores 9 user-set programs

Parameters of temperature and run time can be easily set with the touch of a few buttons. User may also alter temperature and times while the program is in progress.

#### Quick-Start™ **One Button Start Up**

Start the rotor, refrigeration and/or heater, timers and vacuum pump simultaneously.

#### Quick-Stop™ System

Once run time has expired or the RUN/STOP button is pressed, within seconds the vacuum pump stops, the valve opens to bleed air into the chamber, and the rotor stops.

#### Programming holds two temperatures and times

Set points for the first and second temperatures and run times are selected separately. A lower temperature may be programmed for the second run time to protect heat-sensitive samples from excessive heat exposure after the solvent has evaporated. Once the user-set second run time has expired, all functions cease.

Full one year warranty



LCD shows program from 1 to 9, R for run.

#### Refrigeration

LCD displays Y when refrigeration is on and N when it is off.

#### Quick-Start™ Buttons

Initiate user-set Program 1, 2 or 3 with a single push of a button.

#### **Preheat/Cool Button**

Activates the refrigeration system and heater to reach set point temperature.





### Refrigerated CentriVap® Vacuum Concentrators

### **Ordering Information**



- Moderate to large sample throughput
- · Ideal for heat-sensitive samples
- Optional Acid-Resistant models

Catalog Number	Built-In Option(s)	Electrical Requirements		Receptacle & Plug Type	Overall Dimensions (w x d x h)	Shipping Weight
7310020		115V, 50/60 Hz, 16A*	••	North America, 115V, 20A	14.3" x 21.7" x 16.6"	108 lbs. (49 kg)
7310021	G <b>l</b> ass Lid	115V, 50/60 Hz, 16A*	••	North America, 115V, 20A	14.3" x 21.7" x 16.6"	108 lbs. (49 kg)
7310022	Glass Lid, Acid-Resistant	115V, 50/60 Hz, 16A*	4.1	North America, 115V, 20A	14.3" x 21.7" x 16.6"	108 lbs. (49 kg)
7310040		230V, 60 Hz, 8A**	<u></u>	North America, 230V	14.3" x 21.7" x 16.6"	108 lbs. (49 kg)
7310041	G <b>l</b> ass Lid	230V, 60 Hz, 8A**	<u>-:</u>	North America, 230V	14.3" x 21.7" x 16.6"	108 lbs. (49 kg)
7310042	Glass Lid, Acid-Resistant	230V, 60 Hz, 8A**	<u>-:</u>	North America, 230V	14.3" x 21.7" x 16.6"	108 lbs. (49 kg)
7310030		230V, 50 Hz, 8A**	$\odot$	Schuko	14.3" x 21.7" x 16.6"	108 lbs. (49 kg)
7310031	G <b>l</b> ass Lid	230V, 50 Hz, 8A**	$\odot$	Schuko	14.3" x 21.7" x 16.6"	108 lbs. (49 kg)
7310032	Glass Lid, Acid-Resistant	230V, 50 Hz, 8A**	$\odot$	Schuko	14.3" x 21.7" x 16.6"	108 lbs. (49 kg)
7310035		230V, 50 Hz, 8A**	<u></u>	British (UK)	14.3" x 21.7" x 16.6"	108 lbs. (49 kg)
7310036	G <b>l</b> ass Lid	230V, 50 Hz, 8A**	<u></u>	British (UK)	14.3" x 21.7" x 16.6"	108 lbs. (49 kg)
7310034	Glass Lid, Acid-Resistant	230V, 50 Hz, 8A**	<u></u>	British (UK)	14.3" x 21.7" x 16.6"	108 lbs. (49 kg)
7310037		230V, 50 Hz, 8A**	(1)	China/Australia	14.3" x 21.7" x 16.6"	108 lbs. (49 kg)
7310038	G <b>l</b> ass Lid	230V, 50 Hz, 8A**	(1)	China/Australia	14.3" x 21.7" x 16.6"	108 lbs. (49 kg)
7310039	Glass Lid, Acid-Resistant	230V, 50 Hz, 8A**	<b>(1)</b>	China/Australia	14.3" x 21.7" x 16.6"	108 lbs. (49 kg)

#### All models require (not included):

- Vacuum Pump. See page 26
- CentriVap Cold Trap. See pages 14-15
- Rotor. See pages 24-25
- Sample tubes. Contact your laboratory supply dealer.

<sup>\*</sup>System amperage shown includes 8 amp maximum vacuum pump rating. \*\*System amperage shown includes 4.5 amp maximum vacuum pump rating.

### Acid-Resistant CentriVap® Vacuum Concentrators

#### **Features & Benefits**



#### Rapidly concentrates multiple samples with corrosive chemicals

Safely process 0.1 to 1% TFA, hydrochloric acid, acetic acid, hydrobromic acid, ammonium hydroxide and sodium hydroxide.

#### **Durable acid-resistant** components

Aluminum chamber is PTFE-coated, Glass lid and other components in the vapor path are constructed of acid-resistant materials for long life.

#### Large PTFE-coated chamber holds up to 148 samples for greater throughput

The 12" diameter chamber accommodates a variety of rotors. The 6-Place Microtiter Plate Rotor holds six standard 96-well plates or three deep well plates.

#### Stores 9 user-set programs

Parameters of temperature, heat time and run time can be easily set with the touch of a few buttons. User may also alter temperature and times while the program is in progress.

#### Quick-Start™ **One Button Start Up**

Start the rotor, heater, timers and vacuum pump simultaneously.

#### Quick-Stop™ System

Once run time has expired or the RUN/STOP button is pressed, within seconds the vacuum pump stops, the valve opens to bleed air into the chamber, and the rotor stops.

Full one year warranty



LCD shows program from 1 to 9, R for run.

#### **Temperature**

LCD shows heat from OFF to 99° C or HI (100° C).

#### Quick-Start™ Buttons

Initiate user-set Program 1, 2 or 3 with a single push of a button.

#### **Preheat Button**

Press to turn on heater to preheat chamber prior to loading samples.





### Acid-Resistant CentriVap® Vacuum Concentrators

#### **Ordering Information**



- Moderate to large sample throughput
- Ideal for 0.1 to 1% acid samples
- Glass lid

Catalog Number	Electrical Requirements	Receptacle & Plug Type	Overall Dimensions (w x d x h)	Shipping Weight
7810016	110/115V, 50/60 Hz, 12A*	North America, 115V, 15A	14.7" x 19.3" x 11.7"	65 lbs. (29 kg)
7810017	230V, 50/60 Hz, 6A**	North America, 230V	14.7" x 19.3" x 11.7"	65 lbs. (29 kg)
7810033	230V, 50/60 Hz, 6A**	Schuko	14.7" x 19.3" x 11.7"	65 lbs. (29 kg)
7810037	230V, 50/60 Hz, 6A**	British (UK)	14.7" x 19.3" x 11.7"	65 lbs. (29 kg)
7810041	230V, 50/60 Hz, 6A**	China/Australia	14.7" x 19.3" x 11.7"	65 lbs. (29 kg)

#### All models require (not included):

- Vacuum Pump. See page 26
- CentriVap Cold Trap. See pages 14-15
- Acid-Resistant Rotor. See page 25
- Sample tubes. Contact your laboratory supply dealer.

See page 22 for ordering information on CentriVap Acid Concentrator Systems.

<sup>\*</sup>System amperage shown includes 8 amp maximum vacuum pump rating. \*\*System amperage shown includes 4.5 amp maximum vacuum pump rating.

### CentriVap® Cold Traps

#### **Features & Benefits**



#### An integral part of every CentriVap system

Cold traps protect the vacuum pump by trapping moisture, vapors and corrosive fumes as they evaporate from the samples. Three collector temperatures are offered: -50° C, -84° C and -105° C; selection should be based on the freezing point of solvents being trapped.

#### **HCFC/CFC-free** refrigeration system

The -50° C Cold Traps have a high capacity 1/3 hp compressor to lower cold trap temperature to -50° C (-58° F) in less than 30 minutes and accelerate start up procedures. The -84° C Cold Traps have two compressors to lower cold trap temperature to -84° C (-119° F) in less than 40 minutes. The -105° C Cold Traps have two compressors to lower cold trap temperature to -105° C (-157° F) in less than 40 minutes.

#### Temperature graph

Displays relative collector coil temperature. Green LED lights indicate conditions are right for beginning a process.

#### Stainless steel collector

Holds up to four liters of liquid and accommodates an optional Glass Insert 7397605 for use with corrosives.

#### **Corrosion-resistant** collector drain

Corrosion-resistant polypropylene valve and stainless steel plumbing speed clean up and eliminate need for glass insert with non-corrosives.

#### Acrylic or stainless steel lid

Has two Quick-Disconnect fittings for 1/2" ID hose for connecting the Cold Trap and Concentrator. Lid is acrylic or stainless steel on -50° C Cold Traps and stainless steel on -84° C and -105° C Cold Traps.

#### **Optional secondary** chemical traps

Trap Inserts for removing acids, moisture, radiochemicals and solvents minimize release of contaminants into the atmosphere.

Full one year warranty





# **CentriVap**° Cold Traps

### **Ordering Information**







CentriVap -84° C Cold Trap



CentriVap -105° C Cold Trap

Catalog Number	Temperature	Lid	Electrical Requirements		Receptacle & Plug Type	Overall Dimensions (w x d x h)	Shipping Weight
7811020	-50° C (-58° F)	Acrylic	115V, 60 Hz, 7.0A	٩١	North America, 115V, 60 Hz	14.5" x 24.2" x 13.8"	80 lbs. (36 kg)
7811021	-50° C (-58° F)	Stainless Steel	115V, 60 Hz, 7.0A	4.1	North America, 115V, 60 Hz	14.5" x 24.2" x 13.8"	80 lbs. (36 kg)
7811040	-50° C (-58° F)	Acrylic	230V, 60 Hz, 3A	<u></u>	North America, 230V	14.5" x 24.2" x 13.8"	80 lbs. (36 kg)
7811041	-50° C (-58° F)	Stainless Steel	230V, 60 Hz, 3A	<u></u>	North America, 230V	14.5" x 24.2" x 13.8"	80 lbs. (36 kg)
7811030	-50° C (-58° F)	Acrylic	230V, 50 Hz, 3A	$\odot$	Schuko	14.5" x 24.2" x 13.8"	80 lbs. (36 kg)
7811031	-50° C (-58° F)	Stainless Steel	230V, 50 Hz, 3A	$\odot$	Schuko	14.5" x 24.2" x 13.8"	80 lbs. (36 kg)
7811035	-50° C (-58° F)	Acrylic	230V, 50 Hz, 3A	<u>:</u>	British (UK)	14.5" x 24.2" x 13.8"	80 lbs. (36 kg)
7811036	-50° C (-58° F)	Stainless Steel	230V, 50 Hz, 3A	<u></u>	British (UK)	14.5" x 24.2" x 13.8"	80 lbs. (36 kg)
7811037	-50° C (-58° F)	Acrylic	230V, 50 Hz, 3A	( <u>`</u>	China/Australia	14.5" x 24.2" x 13.8"	80 lbs. (36 kg)
7811038	-50° C (-58° F)	Stainless Steel	230V, 50 Hz, 3A	(1)	China/Australia	14.5" x 24.2" x 13.8"	80 lbs. (36 kg)
7460020	-84° C (-119° F)	Stainless Steel	115V, 60 Hz, 12A	4.1	North America, 115V, 60 Hz	14.5" x 22" x 20.9"	142 lbs. (64 kg)
7460040	-84° C (-119° F)	Stainless Steel	230V, 60 Hz, 6A		North America, 230V	14.5" x 22" x 20.9"	142 lbs. (64 kg)
7460030	-84° C (-119° F)	Stainless Steel	230V, 50 Hz, 6A	$\odot$	Schuko	14.5" x 22" x 20.9"	142 lbs. (64 kg)
7460035	-84° C (-119° F)	Stainless Steel	230V, 50 Hz, 6A	<u></u>	British (UK)	14.5" x 22" x 20.9"	142 lbs. (64 kg)
7460037	-84° C (-119° F)	Stainless Steel	230V, 50 Hz, 6A	(1)	China/Australia	14.5" x 22" x 20.9"	142 lbs. (64 kg)
7385020	-105° C (-157° F)	Stainless Steel	115V, 60 Hz, 13A	41	North America, 115V, 60 Hz	24.1" x 23.9" x 17.6"	170 lbs. (77 kg)
7385040	-105° C (-157° F)	Stainless Steel	230V, 60 Hz, 7A		North America, 230V	24.1" x 23.9" x 17.6"	170 lbs. (77 kg)
7385030	-105° C (-157° F)	Stainless Steel	230V, 50 Hz, 7A	$\odot$	Schuko	24.1" x 23.9" x 17.6"	170 lbs. (77 kg)
7385035	-105° C (-157° F)	Stainless Steel	230V, 50 Hz, 7A	<u></u>	British (UK)	24.1" x 23.9" x 17.6"	170 lbs. (77 kg)
7385037	-105° C (-157° F)	Stainless Steel	230V, 50 Hz, 7A		China/Australia	24.1" x 23.9" x 17.6"	170 lbs. (77 kg)

See pages 22-23 for ordering information on CentriVap Systems.

#### **Features & Benefits**



#### from DNA samples and other very small samples.

Two 177 milliliter glass traps Protect the vacuum pump and the environment. One is located between the chamber and vacuum pump. The other

is located at the pump's exhaust outlet.

#### Integrated diaphragm pump

Corrosion-resistant. Achieves vacuum of 7 mBar and has a pumping capacity of 38 L/min. The built-in pump is easily removed for service.

#### Large chamber holds up to 148 samples for greater throughput

The 12" diameter chamber accommodates a variety of rotors. The 6-Place Microtiter Plate Rotor holds six standard 96-well plates or three deep well plates.

#### Stores 9 user-set programs

Parameters of temperature, heat time and run time can be easily set with the touch of a few buttons. User may also alter temperature and times while the program is in progress.

#### Quick-Start™ **One Button Start Up**

Start the rotor, heater, timers and vacuum pump simultaneously.

#### Quick-Stop™ System

Once run time has expired or the RUN/STOP button is pressed, within seconds the vacuum pump stops, the valve opens to bleed air into the chamber, and the rotor stops.

#### Versatile DNA Rotor

Accommodates up to 60 each 1.5 ml and 72 each 0.5 ml microcentrifuge tubes.

Full one year warranty



LCD shows program from 1 to 9, R for run.

#### **Temperature**

LCD shows heat from OFF to 99° C or HI (100° C).

#### Quick-Start™ Buttons

Initiate user-set Program 1, 2 or 3 with a single push of a button.

#### **Preheat Button**

Press to turn on heater to preheat chamber prior to loading samples.





### **Ordering Information**



- Moderate to large sample throughput
- Ideal for DNA/RNA samples
- Compact all-in-one design

Catalog Number	Electrical Requirements	Receptacle & Plug Type	Overall Dimensions (w x d x h)	Shipping Weight
7970010	115V, 60 Hz, 12A	North America, 115V, 15A	15.1" x 28.5" x 11.2"	100 lbs. (45 kg)
7970011	230V, 50/60 Hz, 6A	North America, 230V	15.1" x 28.5" x 11.2"	100 lbs. (45 kg)
7970030	230V, 50/60 Hz, 6A	Schuko	15.1" x 28.5" x 11.2"	100 <b>l</b> bs. (45 kg)
7970035	230V, 50/60 Hz, 6A	British (UK)	15.1" x 28.5" x 11.2"	100 <b>l</b> bs. (45 kg)
7970037	230V, 50/60 Hz, 6A	China/Australia	15.1" x 28.5" x 11.2"	100 lbs. (45 kg)

#### All models require (not included):

• Sample tubes. Contact your laboratory supply dealer.

### **CentriVap®** Complete™ Vacuum Concentrators

#### **Features & Benefits**



#### All-in-one concentrator

Houses every component you need to begin processing multiple samples: vacuum concentrator, -50° C cold trap, diaphragm pump, rotor and CentriZap™ Strobe Light.

#### Large chamber holds up to 148 samples for greater throughput

The 12" diameter chamber accommodates a variety of rotors. The 6-Place Microtiter Plate Rotor holds six standard 96-well plates or three deep well plates.

#### **Aluminum Rotor**

Holds up to 40 microcentrifuge tubes and 108 each 12-13 mm tubes. Rotor is PTFE-coated metal with Acid-Resistant models.

#### CentriZap™ Strobe Light

Rotor appears to be standing still while rotor is spinning allowing user to view samples while the lid is closed.

#### Integral -50° C Cold Trap

**Built-in chemical-resistant** diaphragm pump

Full one year warranty

Fast evaporation Using Rotor 7455100, 30 each 5 ml samples in 13 x 100 mm tubes, and temperature settings noted at left, fast evaporation times were achieved.

Solvent	Temperature	Dry Time
Acetonitrile	75° C	63 minutes
Methanol	60° C	92 minutes
Water	100° C	188 minutes
Isopropanol	75° C	55 minutes
Ethano <b>l</b>	75° C	61 minutes
Methylene Chloride	45° C	40 minutes



#### **Program**

LCD shows program from 1 to 9, R for run.

#### **Temperature**

LCD shows heat from OFF to 99° C or HI (100° C).

#### **Cold Trap**

LCD shows Y when cold trap has been selected; N when not selected.

#### Quick-Start™ Buttons

Initiate user-set Program 1, 2 or 3 with a single push of a button.

#### **Preheat Button**

Press to turn on heater to preheat chamber prior to loading samples.

#### **Cold Trap Button**

Press to turn on the cold trap.





### **CentriVap**® Complete™ Vacuum Concentrators

### **Ordering Information**



- Moderate to large sample throughput
- All-in-one design
- Optional Acid-Resistant models

Catalog Number	Built-In Option(s)	Electrical Requirements		Receptacle & Plug Type	Overall Dimensions (w x d x h)	Shipping Weight
7315020		115V, 60 Hz, 12A	4.1	North America, 115V, 15A	26.1" x 22.7" x 16.9"	170 <b>l</b> bs. (77 kg)
7315021	Acid-Resistant*	115V, 60 Hz, 12A	41	North America, 115V, 15A	26.1" x 22.7" x 16.9"	170 <b>l</b> bs. (77 kg)
7315022	Heat Boost	115V, 60 Hz, 12A	(1 I	North America, 115V, 15A	26.1" x 22.7" x 16.9"	170 <b>l</b> bs. (77 kg)
7315023	Heat Boost, Acid-Resistant*	115V, 60 Hz, 12A	41	North America, 115V, 15A	26.1" x 22.7" x 16.9"	170 <b>l</b> bs. (77 kg)
7315040		230V, 60 Hz, 6.5A	<u></u>	North America, 230V	26.1" x 22.7" x 16.9"	170 <b>l</b> bs. (77 kg)
7315041	Acid-Resistant*	230V, 60 Hz, 6.5A	<u></u>	North America, 230V	26.1" x 22.7" x 16.9"	170 <b>l</b> bs. (77 kg)
7315042	Heat Boost	230V, 60 Hz, 6.5A	<u></u>	North America, 230V	26.1" x 22.7" x 16.9"	170 <b>l</b> bs. (77 kg)
7315043	Heat Boost, Acid-Resistant*	230V, 60 Hz, 6.5A	<u></u>	North America, 230V	26.1" x 22.7" x 16.9"	170 <b>l</b> bs. (77 kg)
7315030		230V, 50 Hz, 6.5A	$\odot$	Schuko	26.1" x 22.7" x 16.9"	170 <b> </b> bs. (77 kg)
7315031	Acid-Resistant*	230V, 50 Hz, 6.5A	$\odot$	Schuko	26.1" x 22.7" x 16.9"	170 lbs. (77 kg)
7315032	Heat Boost	230V, 50 Hz, 6.5A	$\odot$	Schuko	26.1" x 22.7" x 16.9"	170 <b>l</b> bs. (77 kg)
7315033	Heat Boost, Acid-Resistant*	230V, 50 Hz, 6.5A	$\odot$	Schuko	26.1" x 22.7" x 16.9"	170 <b>l</b> bs. (77 kg)
7315060		230V, 50 Hz, 6.5A		British (UK)	26.1" x 22.7" x 16.9"	170 <b> </b> bs. (77 kg)
7315061	Acid-Resistant*	230V, 50 Hz, 6.5A	<u>:</u>	British (UK)	26.1" x 22.7" x 16.9"	170 <b>l</b> bs. (77 kg)
7315062	Heat Boost	230V, 50 Hz, 6.5A	<u>.</u>	British (UK)	26.1" x 22.7" x 16.9"	170 <b>l</b> bs. (77 kg)
7315063	Heat Boost, Acid-Resistant*	230V, 50 Hz, 6.5A	<u></u>	British (UK)	26.1" x 22.7" x 16.9"	170 <b>l</b> bs. (77 kg)
7315070		230V, 50 Hz, 6.5A		China/Australia	26.1" x 22.7" x 16.9"	170 <b> </b> bs. (77 kg)
7315071	Acid-Resistant*	230V, 50 Hz, 6.5A		China/Australia	26.1" x 22.7" x 16.9"	170 <b>l</b> bs. (77 kg)
7315072	Heat Boost	230V, 50 Hz, 6.5A	(1)	China/Australia	26.1" x 22.7" x 16.9"	170 lbs. (77 kg)
7315073	Heat Boost, Acid-Resistant*	230V, 50 Hz, 6.5A	(1)	China/Australia	26.1" x 22.7" x 16.9"	170 <b>l</b> bs. (77 kg)

#### All models require (not included):

• Sample containers. Contact your laboratory supply dealer.

<sup>\*</sup>Chamber, rotor, collector and collector lid are PTFE-coated.

### CentriVap® Mobile Systems

#### **Features & Benefits**

#### Space-saving console

Combines the separate concentrator and cold trap components into one.

#### Built-in -50° C Cold Trap

Holds up to four liters of liquid and accommodates an optional Glass Insert 7397605 for use with corrosives (sold separately).

#### **Collector drain**

Corrosion-resistant polypropylene valve and stainless steel plumbing speed clean up and eliminate need for glass insert with non-corrosives.

#### Large chamber holds up to 148 samples for greater throughput

The 12" diameter chamber accommodates a variety of rotors. The 6-Place Microtiter Plate Rotor holds six standard 96-well plates or three deep well plates.



#### Stores 9 user-set programs

Parameters of temperature, heat time and run time can be easily set with the touch of a few buttons. User may also alter temperature and times while the program is in progress.

#### Quick-Start™ One Button Start Up

Start the rotor, heater, timers and vacuum pump simultaneously.

#### Quick-Stop™ System

Once run time has expired or the RUN/ STOP button is pressed, within seconds the vacuum pump stops, the valve opens to bleed air into the chamber, and the rotor stops.

#### Versatile 12-13 mm Rotor

Holds up to 108 tubes.

#### Built-in chemical trap canister with Solvent Trap Insert

Cutout in front panel provides at-a-glance trap monitoring.

#### Glass lid

Resists solvents that attack acrylic. Lid seal ensures good vacuum without potential for phenol contamination.

#### Space to house accessory vacuum pump

Full one year warranty



LCD shows program from 1 to 9, R for run.

#### **Temperature**

LCD shows heat (and Heat Boost, if activated) from OFF to 99 (° C) or HI (100° C).

#### **Heat Boost Option**

LCD shows Y when Heat Boost has been selected; N when not selected.

#### **Cold Trap**

LCD shows Y when cold trap has been selected; N when not selected.

#### **Quick-Start™ Buttons**

Initiate user-set Program 1, 2 or 3 with a single push of a button.

#### **Cold Trap Button**

Press to turn on the cold trap.

#### **Preheat Button**

Press to turn on heater to preheat chamber prior to loading samples.





# CentriVap® Mobile Systems

### **Ordering Information**



- Moderate to large sample throughput
- Portable

Catalog Number	Built-In Option	Electrical Requirements	Receptacle & Plug Type	Overall Dimensions (w x d x h)	Shipping Weight
7812010		115V, 60 Hz, 16A*	North America, 115V, 20A	14.1" x 27.9" x 38.2"	210 lbs. (95 kg)
7812013	Heat Boost	115V, 60 Hz, 16A*	North America, 115V, 20A	14.1" x 27.9" x 38.2"	210 lbs. (95 kg)
7812012		230V, 60 Hz, 8A**	North America, 230V	14.1" x 27.9" x 38.2"	210 lbs. (95 kg)
7812015	Heat Boost	230V, 60 Hz, 8A**	North America, 230V	14.1" x 27.9" x 38.2"	210 lbs. (95 kg)
7812011		230V, 50 Hz, 8A**	Schuko	14.1" x 27.9" x 38.2"	210 lbs. (95 kg)
7812014	Heat Boost	230V, 50 Hz, 8A**	Schuko	14.1" x 27.9" x 38.2"	210 lbs. (95 kg)
7812035		230V, 50 Hz, 8A**	British (UK)	14.1" x 27.9" x 38.2"	210 lbs. (95 kg)
7812036	Heat Boost	230V, 50 Hz, 8A**	British (UK)	14.1" x 27.9" x 38.2"	210 lbs. (95 kg)
7812037		230V, 50 Hz, 8A**	China/Australia	14.1" x 27.9" x 38.2"	210 lbs. (95 kg)
7812038	Heat Boost	230V, 50 Hz, 8A**	China/Australia	14.1" x 27.9" x 38.2"	210 lbs. (95 kg)

<sup>\*</sup>System amperage shown includes 8 amp maximum vacuum pump rating. \*\*System amperage shown includes 4.5 amp maximum vacuum pump rating.

### CentriVap® Concentrator System

#### **Ordering Information**



CentriVap Concentrator Systems include all components needed for operation except the vacuum pump, which is sold separately.

**△ WARNING:** Cancer—P65Warnings.ca.gov (California only)

#### **Aqueous Systems**

	•				
Catalog Number	Electrical Requirements	Receptacle & Plug Type	Components Included		Accessories Required
			Clear Canister Moisture Insert 12-13 mm Rotor Vacuum Tubing and 6 Clamps Plus one set of the following cor	7460900 7814900 7455100 mponents:	
7982010	115V, 60 Hz, 12A* 115V, 60 Hz, 7A <sup>†</sup>	North America, 115V, 15A	Benchtop Concentrator -50° C Cold Trap	7810010 7811020	Vacuum Pump 2 15A dedicated circuits
7982012	230V, 60 Hz, 6A** 230V, 60 Hz, 3A <sup>†</sup>	North America, 230V	Benchtop Concentrator -50° C Cold Trap	7810011 7811040	Vacuum Pump 2 10A dedicated circuits
7982011	230V, 50 Hz, 6A** 230V, 50 Hz, 3A <sup>†</sup>	Schuko	Benchtop Concentrator -50° C Cold Trap	7810030 7811030	Vacuum Pump 2 10A dedicated circuits
7982035	230V, 50 Hz, 6A** 230V, 50 Hz, 3A <sup>†</sup>	British (UK)	Benchtop Concentrator -50° C Cold Trap	7810034 7811035	Vacuum Pump 2 10A dedicated circuits
7982037	230V, 50 Hz, 6A** 230V, 50 Hz, 3A <sup>†</sup>	China/Australia	Benchtop Concentrator -50° C Cold Trap	7810038 7811037	Vacuum Pump 2 10A dedicated circuits

#### **Acid Systems**

Catalog Number	Electrical Requirements	Receptacle & Plug Type	Components Included		Accessories Required
			Clear Canister Acid Insert Acid-Resistant 12-13 mm Rotor Glass Trap Vacuum Tubing and 6 Clamps Plus one set of the following con	7460900 7814800 7455101 7397605 nponents:	
7983013	115V, 60 Hz, 12A* 115V, 60 Hz, 7A <sup>†</sup>	North America, 115V, 15A	Acid-Resistant Concentrator -50° C Cold Trap	7810016 7811020	Vacuum Pump 2 15A dedicated circuits
7983015	230V, 60 Hz, 6A** 230V, 60 Hz, 3A <sup>†</sup>	North America, 230V	Acid-Resistant Concentrator -50° C Cold Trap	7810017 7811040	Vacuum Pump 2 10A dedicated circuits
7983014	230V, 50 Hz, 6A** 230V, 50 Hz, 3A <sup>†</sup>	Schuko	Acid-Resistant Concentrator -50° C Cold Trap	7810033 7811030	Vacuum Pump 2 10A dedicated circuits
7983035	230V, 50 Hz, 6A** 230V, 50 Hz, 3A <sup>†</sup>	British (UK)	Acid-Resistant Concentrator -50° C Cold Trap	7810037 7811035	Vacuum Pump 2 10A dedicated circuits
7983037	230V, 50 Hz, 6A** 230V, 50 Hz, 3A <sup>†</sup>	China/Australia	Acid-Resistant Concentrator -50° C Cold Trap	7810041 7811037	Vacuum Pump 2 10A dedicated circuits

<sup>\*</sup>System amperage shown includes 8 amp maximum vacuum pump rating. \*\*System amperage shown includes 4.5 amp maximum vacuum pump rating.







### CentriVap® Concentrator System

#### **Ordering Information**



CentriVap Concentrator Systems include all components needed for operation except the vacuum pump, which is sold separately.

**△ WARNING:** Cancer—P65Warnings.ca.gov (California only)

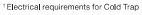
#### **Solvent Systems**

Catalog Number	Electrical Requirements	Receptacle & Plug Type	Components Included	Components Included	
			Clear Canister Solvent Insert 12-13 mm Rotor Vacuum Tubing and 6 Clamps Plus one set of the following component	7460900 7815200 7455100 ents:	
7995810	115V, 60 Hz, 12A* 115V, 60 Hz, 12A <sup>†</sup>	North America, 115V, 15A	Benchtop Concentrator with Glass Lid -84° C Cold Trap	7810014 7460020	Vacuum Pump 2 15A dedicated circuits
7995812	230V, 60 Hz, 6A** 230V, 60 Hz, 6A <sup>†</sup>	North America, 230V	Benchtop Concentrator with Glass Lid -84° C Cold Trap	7810015 7460040	Vacuum Pump 2 10A dedicated circuits
7995811	230V, 50 Hz, 6A** 230V, 50 Hz, 6A <sup>†</sup>	Schuko	Benchtop Concentrator with Glass Lid -84° C Cold Trap	7810032 7460030	Vacuum Pump 2 10A dedicated circuits
7995835	230V, 50 Hz, 6A** 230V, 50 Hz, 6A <sup>†</sup>	British (UK)	Benchtop Concentrator with Glass Lid -84° C Cold Trap	7810036 7460035	Vacuum Pump 2 10A dedicated circuits
7995837	230V, 50 Hz, 6A** 230V, 50 Hz, 6A <sup>†</sup>	China/Australia	Benchtop Concentrator with Glass Lid -84° C Cold Trap	7810040 7460037	Vacuum Pump 2 10A dedicated circuits

#### **Proteomic Systems**

Catalog Number	Electrical Requirements	Receptacle & Plug Type	Components Included	Accessories Required
			DNA Rotor 74629 Vacuum Tubing and 6 Clamps Plus one set of the following components:	900
7989600	115V, 60 Hz, 16A* 115V, 60 Hz, 7A†	North America, 115V, 20A & 15A	Refrigerated Concentrator with Glass Lid 73100 -50° C Cold Trap with Stainless Steel Lid 78110	1 200 dedicated circuit
7989602	230V, 60 Hz, 8A** 230V, 60 Hz, 3A <sup>†</sup>	North America, 230V	Refrigerated Concentrator with Glass Lid 73100 -50° C Cold Trap with Stainless Steel Lid 78110	•
7989601	230V, 50 Hz, 8A** 230V, 50 Hz, 3A <sup>†</sup>	Schuko	Refrigerated Concentrator with Glass Lid 73100 -50° C Cold Trap with Stainless Steel Lid 78110	
7989635	230V, 50 Hz, 8A** 230V, 50 Hz, 3A <sup>†</sup>	British (UK)	Refrigerated Concentrator with Glass Lid 73100 -50° C Cold Trap with Stainless Steel Lid 78110	
7989637	230V, 50 Hz, 8A** 230V, 50 Hz, 3A <sup>†</sup>	China/Australia	Refrigerated Concentrator with Glass Lid 73100 -50° C Cold Trap with Stainless Steel Lid 78110	•

<sup>\*</sup>System amperage shown includes 8 amp maximum vacuum pump rating. \*\*System amperage shown includes 4.5 amp maximum vacuum pump rating.







#### **Rotors**



7450700



7455000



7455100



7455200



7462900



7553500

Metal Rotors for Tubes. Rotors hold tubes at an angle to maximize surface area. Depending on the rotor, made of anodized aluminum or PTFE-coated metal with polypropylene hub. Easily interchangeable. The 12-13 mm Rotor 7455100 is included with each CentriVap Aqueous, Solvent, and Mobile System. The 12-13 mm Rotor 7455101 is included with each Acid System on page 22. The DNA Rotor 7462900 is included with each CentriVap DNA Concentrator. Sample containers are not included. Shipping weight 2.5 lbs. (1.1 kg)

Rotor Type	Catalog	Number	Number of Holes	Number of Tubes*	Tube Volume**	Tube Description
	Aluminum	PTFE- coated				
Hexagonal	7450700	7450701	132	132	1.5 ml	1.5 ml microcentrifuge tubes
				132	2 ml	2 ml microcentrifuge tubes
12-17 mm	7455000	7455001	52	52	2 ml	12.2 x 46.5 mm
				52	5 ml	13 x 51 mm
				44	3 ml	12 x 55 mm
				36	5-6 ml	12 x 75 mm
				36	5-6 ml	12 x 95 mm
				36	6 ml	13 x 75 mm
				36	10 ml	13 x 100 mm
			24	24	11 -15 ml	16 x 100 mm
				24	5 ml	5 ml microcentrifuge tubes
				18	15-19 ml	16 x 125 mm
				18	14 ml	17 x 95 mm
				18	14 ml	17 x 100 mm
				18	12-15 ml	17 x 120 mm
12-13 mm	7455100	7455101	40	40	1,5 ml	1.5 ml microcentrifuge tubes
				40	2 ml	2 ml microcentrifuge tubes
			108	16	3 ml	12 x 55 mm
				100 <sup>†</sup>	5 ml	12 x 75 mm
				64	5 ml	12 x 95 mm
				100 <sup>†</sup>	6 ml	13 x 75 mm
				64	10 ml	13 x 100 mm
28 mm	7455200	7455201	32	32	1.5 ml	1.5 ml microcentrifuge tubes
				32	2 ml	2 ml microcentrifuge tubes
			12	12	40-50 ml	28 x 115 mm
				12	40-50 ml	28 x 135 mm
				12	50 ml	28 x 140 mm
DNA	7462900	7462901	72	72	0.5 ml	0.5 ml microcentrifuge tubes
			60	60	1.5 ml	1.5 ml microcentrifuge tubes
				60	2 ml	2 ml microcentrifuge tubes
High Capacity Micro	7553500	7553501	148	148	1.5-2 ml	1.5 or 2 ml autosampler vials, approximately 12 mm x 35 mm

 $<sup>^{\</sup>star}\,\textsc{Rotors}$  do not necessarily hold all the tubes described simultaneously.

<sup>\*\*</sup> Tubes should be filled no more than 1/3 to 1/2 of tube volume to prevent loss of sample during rotation.

 $<sup>^\</sup>dagger$  Rotor holds a maximum of 92 each 12 or 13 x 75 mm tubes when 16 each 12 x 55 mm tubes are also loaded.

#### **Rotors**



7461900



Microtiter Plate Rotors. Depending on the rotor, made of anodized aluminum or PTFE-coated metal with polypropylene hub. Easily interchangeable. Microtiter Plates are not included. Shipping weight 2.5 lbs. (1.1 kg)

Rotor Type	Catalog	Catalog Number		Plate Description
	Aluminum	PTFE-coated		
4-Place	7461900	7461901	4	standard microtiter plates
Microtiter Plate			2	deep well microtiter plates
6-Place	7553000	7553001	6	standard microtiter plates
Microtiter Plate			3	deep well microtiter plates



7824700

Acid-Resistant Thermoplastic Rotors. Thermoplastic rotors hold tubes at an angle to maximize surface area. Easily interchangeable. Sample containers are not included. Shipping weight 3.0 lbs. (1.4 kg)

Rotor Type	Catalog Number		Number of Tubes	Container Volume*	Tube Description
0.05 in	7824700	66	66	2 m <b>l</b>	auto sample vials, 12 x 32 mm
15 x 45 mm	7824702	56	56	4 m <b>l</b>	auto sample vials, 15 x 45 mm

 $<sup>^{\</sup>star}$ Containers should be filled no more than 1/3 to 1/2 of total volume to prevent loss of sample during rotation.



Metal Rotors for Pear-Shaped Flasks. Depending on the rotor, made of anodized aluminum or PTFE-coated metal with polypropylene hub. Easily interchangeable. Flasks are not included. Shipping weight 2.5 lbs. (1.1 kg)

Rotor Type	Cataloç	g Number	Number of Holes	Number of Flasks
	Aluminum	PTFE-coated		
Rotor for use with 100 ml* Pear-shaped Flasks	7553100	7553101	8	8

<sup>\*</sup>Containers should be filled no more than 1/3 to 1/2 of total volume to prevent loss of sample during rotation.



#### 7551600-100 ml Pear-Shaped Flask.

Borosilicate glass 100 milliliter flask with 19/22 STJ. Shipping weight 0.5 lb. (0.2 kg)



7464300—CentriZap™ Strobe Light. Enables user to shine a strobe light into the CentriVap's chamber to easily view samples while the rotor is spinning. Includes mounting holster and hardware for attachment to the right side of the CentriVap. Shipping weight 2.0 lbs. (0.9 kg)



Diaphragm Vacuum Pumps. The wetted parts of these pumps are PTFE or other fluoropolymers for corrosion resistance. Vacuum outlet is 1/2" OD.

Solvents used: aqueous and high boiling point, volatile and low boiling point, and combination of solvents

Catalog Number	Electrical Configuration	Vacuum (mBar)	Displacement L/min	Shipping Weight
7393000	115V, 60 Hz, 3.5A	1.5	63	40 lbs. (18 kg)
7393001*	230V, 50/60 Hz, 2A	1.5	117	40 lbs. (18 kg)
7359020	115V, 50/60 Hz, 3.5A	7	33/38**	38 <b>l</b> bs. (17 kg)
7359030*	230V, 50/60 Hz, 2A	7	33/38**	38 <b>l</b> bs. (17 kg)

<sup>\*</sup>International electrical configuration \*\* Displacement at 50/60 Hz



Rotary Vane Direct Drive Vacuum Pumps. These pumps are two-stage and oil-sealed with gas ballast control. Isolation valve seals the inlet to prevent oil and air contamination of the system in the event of power failure. Oil mist exhaust filter, vacuum pump oil and inlet adapters suitable for 1/2" OD and 3/4" OD are provided.

Solvents used: aqueous and high boiling point

Catalog Number	Electrical Configuration	Ultimate Vacuum (Partial Pressure) (mBar)	Displacement at 60 Hz L/min	Shipping Weight
1472100	115V, 50/60 Hz, 4.6A	2 x 10 <sup>-3</sup>	117	62 <b>l</b> bs. (28 kg)
7739402*	230V, 50/60 Hz, 2.4A	2 x 10 <sup>-3</sup>	117	65 lbs. (30 kg)

<sup>\*</sup>International electrical configuration



7991000-Vacuum Controller. Provides manual control and monitoring of vacuum levels. Analog gauge shows vacuum from 0-30" Hg. At the end of concentration, the control valve may be opened to break the vacuum. For use with  $\operatorname{Diaphragm}$  Vacuum  $\operatorname{Pumps}$  only. Shipping weight 3.0 lbs. (1.4 kg)



Chemical Trap. Traps are connected between the cold trap and the accessory vacuum pump to provide additional protection to the vacuum pump.

7460900—Clear Polypropylene Canister with mounting bracket. Attaches to the CentriVap Cold Trap. Includes 17" PVC tubing and two clamps. Accommodates any trap insert listed below. Shipping weight 5.0 lbs. (2.3 kg) △ WARNING: Cancer—P65Warnings.ca.gov (California only)

7815300—Clear Polypropylene Canister with stand. Recommended when more than one chemical trap is required. Accommodates any trap insert listed below. Shipping Weight 5.0 lbs. (2.3 kg)



Trap Inserts. Shipping weight 4.0 lb. (1.8 kg)

7814800—Acid. Contains acid neutralizing desiccant which changes from off-white to purple when exhausted.

7814900 - Moisture. Contains desiccant which changes from blue to pink when exhausted.

7815000-Radioisotope. Contains activated carbon.

7815200-Solvent. Contains molecular sieve.

7995600—Ammonia. Contains impregnated carbon.



7474000—Three-Way Valve. Allows connection of other laboratory equipment to CentriVap System. Polypropylene, 0.5" OD. Shipping weight 0.5 lb. (0.25 kg)



7397700—Two-Port Manifold. Has neoprene rubber valves to allow freeze drying of small volume samples in freeze dry flasks, serum bottles or ampules. Connects to CentriVap Cold Trap, Ultra-Low Cold Trap or Mobile System. Requires use of Rotary Vane Pump. Not compatible with pre-2005 Cold Traps or Mobile Systems. Shipping weight 1.0 lb. (0.5 kg)



**7397605—Glass Trap.** Protects CentriVap Cold Trap reservoir and lid from corrosives. Included with CentriVap Acid Systems. Not compatible with pre-2005 Cold Traps or Mobile Systems. Shipping weight 4.0 lbs. (1.8 kg)



7456600 - Glass Lid. May be installed in place of the acrylic lid on the CentriVap Concentrator when applications involve solvents which attack acrylic. Included on CentriVap Solvent System and selected models of CentriVap Benchtop Concentrators. Shipping weight 8.0 lbs. (3.6 kg)



7386700—Stainless Steel Lid. May be installed in place of the acrylic lid on -50° C CentriVap Cold Trap when applications involve solvents which attack acrylic. Included on CentriVap Solvent and Proteomic Systems and -84° C and -105° C CentriVap Cold Traps. Shipping weight 8.0 lbs. (3.6 kg)

7814300—Bleed Valve. Bleeds vacuum manually when using the Cold Trap with other laboratory equipment. Shipping weight 0.5 lb. (0.25 kg)

7814500—Vacuum Tubing Kit. Two each 1/2" ID vacuum tubing, 48" length, and 4 tubing clamps. Shipping weight 6.0 lbs. (2.7 kg) △ WARNING: Cancer—P65Warnings.ca.gov (California only)

### Benchtop, Acid-Resistant and Mobile System Evaporation Rates







	Tube Size (ml)	Number of Samples	Sample Size (ml)	Heater Temp (° C)	Heat Boost	Vacuum Pump	Time to Dry (min)	Cold Trap
Methylene Chloride	50	12	25	45	No	Diaphragm	88	Yes
boiling point 40° C	15	18	10	45	No	Diaphragm	56	Yes
	50	12	25	45	No	Diaphragm	106	Yes
Toluene	50	12	25	100	No	Diaphragm	53	Yes
boiling point 111° C	15	18	10	45	No	Diaphragm	75	Yes
	15	18	10	100	No	Diaphragm	34	Yes
	50	12	25	45	No	Diaphragm	157	Yes
Acetonitrile	15	18	10	45	No	Diaphragm	105	Yes
boiling point 82° C	15	18	10	100	No	Diaphragm	52	Yes
	1.5	132	1	45	No	Diaphragm	50	Yes
	1.5	132	1	100	No	Diaphragm	24	Yes
	50	12	25	45	No	Diaphragm	210	Yes
	15	18	10	45	No	Diaphragm	150	Yes
	1.5	132	1	35	No	Diaphragm	85	Yes
<b>Methanol</b> boiling point 65° C	1.5	132	1	45	No	Diaphragm	75	Yes
boiling point 05 °C	1.5	132	1	60	No	Diaphragm	63	Yes
	1.5	132	1	75	No	Diaphragm	52	Yes
	1.5	132	1	100	No	Diaphragm	37	Yes
	50	12	25	100	No	Diaphragm	409	Yes
	50	12	25	45	No	Diaphragm	1435	Yes
	15	18	10	45	No	Diaphragm	849	Yes
Water	1.5	132	1	45	No	Diaphragm	402	Yes
boiling point 100° C	1.5	132	1	60	No	Diaphragm	288	Yes
	1.5	132	 1	75	No	Diaphragm	170	Yes
	1.5	132	1	100	No	Diaphragm	123	Yes
Isopropanol	15	18	10	45	No	Diaphragm	117	Yes
boiling point 100° C	15	18	10	100	No	Diaphragm	52	Yes

Diaphragm Pump is rated at 22 mBar ultimate vacuum and 82 liter/minute displacement. Chamber was preheated to set temperature prior to each run.

### **Refrigerated Evaporation Rates**



	Tube Size (ml)	Number of Samples	Sample Size (ml)	Chamber Temp (° C)	Vacuum Pump	Time to Dry (min)	Time to Dry (hr)	Cold Trap
	1.5	132	1	100	Rotary Vane	131	2.18	Yes
	1.5	132	1	75	Rotary Vane	207	3.45	Yes
	1.5	132	1	45	Rotary Vane	299	4.98	Yes
<b>Water</b> boiling point 100° C	1.5	132	1	25	Rotary Vane	627	10.45	Yes
g p	1.5	132	1	15	Rotary Vane	794	13.23	Yes
	1.5	132	1	5	Rotary Vane	1160	19.33	Yes
	1.5	132	1	-4	Rotary Vane	1485	24.75	Yes
	1.5	132	1	100	Rotary Vane	34	0.57	Yes
	1.5	132	1	75	Rotary Vane	45	0.75	Yes
	1.5	132	1	60	Rotary Vane	55	0.92	Yes
Ethanol	1.5	132	1	45	Rotary Vane	70	1.17	Yes
boiling point 40° C	1.5	132	1	25	Rotary Vane	95	1.58	Yes
	1.5	132	1	15	Rotary Vane	120	2.00	Yes
	1.5	132	1	5	Rotary Vane	160	2.67	Yes
	1.5	132	1	-4	Rotary Vane	190	3.17	Yes

Rotary Vane Pump is rated at 2.0 x 10-3 mBar ultimate vacuum and 195 liter/minute displacement. Chamber was preconditioned to set temperature prior to each run.

### **DNA Evaporation Rates**



	Tube Size (ml)	Number of Samples	Sample Size (ml)	Heater Temp (° C)	Time to Dry (min)	Ballas
<b>Acetonitrile</b> boiling point 82° C	1.5	132	1	45	56	Open
	1.5	132	1	60	41	Open
	1.5	132	1	75	34	Open
	1.5	132	1	24	30	Open
<b>Methanol</b> boiling point 65° C	1.5	132	1	35	82	Open
	1.5	132	1	45	60	Open
	1.5	132	1	60	50	Open
	1.5	132	1	75	37	Open
	1.5	132	1	100	28	Open
<b>Water</b> boiling point 100° C	1.5	132	1	45	403	Open
	1.5	132	1	60	260	Open
	1.5	132	1	75	188	Open
	1.5	132	1	100	123	Open
<b>Methylene Chloride</b> boiling point 40° C	1.5	132	1	45	23	Open
	1.5	132	1	60	18	Open
	1.5	132	1	75	14	Open
	1.5	132	1	100	12	Open
<b>Ethanol</b> boiling point 40° C	1.5	132	1	45	70	Open
	1.5	132	1	60	48	Open
	1.5	132	1	75	36	Open
	1.5	132	1	100	25	Open

### CentriVap® micro IR Vacuum Concentrators

#### **Specifications**

#### All models feature:

- ♣ Compact dimensions. Footprint: 8.8" w x 10.4" d x 8.9" h. Overall depth, including glass trap: 2.9"
- \* Built-in PTFE-coated diaphragm pump with ultimate vacuum of 160 mBar and displacement capacity of 5.5 L/min
- · IR-emitting transparent glass lid
- PTFE-coated aluminum chamber
- PTFE-coated Aluminum Rotor 7548500 included for 24 each, 1.5 ml microcentrifuge tubes
- CentriZap<sup>™</sup> micro IR Strobe Light included
- · Analog vacuum gauge
- Microprocessor-controlled programming for run time either continually or in hours and minutes from 0 to 99 hours and 0 to 59 minutes, and heat setting of 35° C to 65° C in 0.1 degree increments
- · Centrifugal motion of 1700 rpm achieved by magnetic induction drive
- · LCD for programming and actual temperature/time display
- 75 ml Glass trap for collecting condensate and pump protection
- 300-watt heater
- "Standby" setting allows chamber to preheat before sample processing
- One year warranty on materials and workmanship
- Actual weight 20 lbs. (9 kg). Shipping weight 22 lbs. (10 kg)

#### Standards conformance & regulations:

- UL Standard 61010-1 (115V, 60 Hz models)
- CAN/CSA C22.2 No. 61010-1 (115V, 60 Hz models)
- CE Conformity marking (230V, 50/60 Hz models)

△ WARNING: Cancer—P65Warnings.ca.gov (California only)

#### **Options include:**

· Region-specific electrical plug configurations

#### All models require (not included):

· Sample tubes. Contact your laboratory supply dealer

#### **Optional accessories:**

· Rotors. See page 7





### CentriVap® Benchtop Vacuum Concentrators

#### **Specifications**

#### All models feature:

- \* Microprocessor-controlled programming for run time from 1 to 999 minutes, heat from OFF to HI (100° C) in one degree increments, heat time from 1 to 999 minutes, and optional Heat Boost ON/OFF. Memory stores 1 to 9 programs
- \* Control panel with RUN/STOP button, PREHEAT button, optional HEAT BOOST button, set point SELECT button, increase/decrease buttons, and 3 Quick-Start™ buttons
- · LCD for display of program number, actual and set point temperature, heater time remaining, run time remaining, and optional Heat Boost activation
- Quick-Stop<sup>™</sup> System stops vacuum pump, opens valve to bleed air into the chamber and stops the rotor within seconds after time expires or RUN/STOP button is pressed
- · Automatic vacuum release valve
- · Built-in vacuum delay allows rotor to achieve speed before applying vacuum
- Audible alarm to signal
- · Acrylic or glass lid, depending on model
- · Lid latch with safety sensor
- Phenol-free lid gasket
- · Powder-coated aluminum chamber
- · Centrifugal motion provided by a brushless motor capable of achieving up to 1725 rpm
- \* 300-watt heater speeds evaporation
- \* Brushed stainless steel and glacier white, powder-coated steel exterior with blue accents
- 1/2" OD polypropylene hose fitting for connection to vacuum tubing. Vacuum pump is not included
- ❖ Vacuum port with quick disconnect fitting for 1/4" ID tubing
- · Electrical receptacle on the back for connection to an accessory vacuum pump
- One year warranty on materials and workmanship
- Overall dimensions: 14.7" w x 19.3" d x 11.7" h
- Actual weight 42 lbs. (19 kg). Shipping weight 48 lbs. (22 kg)

#### Standards conformance & regulations:

- UL Standard 61010-1 (115V, 60 Hz models)
- CAN/CSA C22.2 No. 61010-1 (115V, 60 Hz models)
- CE Conformity marking (230V, 50/60 Hz models)

△ WARNING: Cancer—P65Warnings.ca.gov (California only)

#### **Options include:**

- 300-watt Heat Boost from OFF to HI (100° C) in one degree increments, for 1 to 999 minutes, depending on set points programmed for heater
- Glass lid
- · Region-specific electrical plug configurations

#### All models require (not included):

- · Vacuum Pump. See page 26
- CentriVap Cold Trap (if using Rotary Vane Vacuum Pump). See pages 14-15
- · Rotor. See pages 24-25
- · Sample tubes. Contact your laboratory supply dealer

- CentriZap<sup>™</sup> Strobe Light. See page 26
- · Vacuum Controller. See page 26





### Refrigerated CentriVap® Vacuum Concentrators

#### **Specifications**

#### All models feature:

- \* HCFC/CFC-free refrigeration system to cool chamber to -4° C
- \* Sensor that reads chamber temperature
- \* Microprocessor-controlled programming for "Temperature 1" from -4° C to +100° C, "Temperature 1" time from 1 to 999 minutes or indefinite, "Temperature 2" from -4° C to +100° C, and "Temperature 2" time from 0 to 999 minutes or indefinite. Memory stores 1 to 9 programs
- \* Control panel with RUN/STOP button, PREHEAT/COOL button, set point SELECT button, increase/decrease buttons, and 3 Quick-Start™ buttons
- LCD for display of program number, set point and actual "Temperature 1 and 2," set point and time remaining for "Temperature 1 and 2," and refrigeration activation ("Y" or "N")
- Quick-Stop™ System stops vacuum pump, opens valve to bleed air into the chamber and stops the rotor within seconds after time expires or RUN/STOP button is pressed
- · Automatic vacuum release valve
- · Built-in vacuum delay allows rotor to achieve speed before applying vacuum
- · Audible alarm to signal completion of set point run time
- · Acrylic or glass lid, depending on model
- · Lid latch with safety sensor
- Phenol-free lid gasket
- Powder-coated aluminum chamber or PTFE-coated aluminum chamber with Hastelloy\* shaft, depending on the model
- · Centrifugal motion provided by a brushless motor capable of achieving up to 1725 rpm
- 300-watt heater
- \* Brushed stainless steel and glacier white, powder-coated steel exterior with blue accents
- 1/2" OD polypropylene hose fitting for connection to vacuum tubing. Vacuum pump is not included
- ❖ Vacuum port with quick disconnect fitting for 1/4" ID tubing
- · Electrical receptacle on the back for connection to an accessory vacuum pump
- One year warranty on materials and workmanship
- Overall dimensions: 14.3" w x 21.7" d x 16.6" h
- Actual weight 95 lbs. (43 kg). Shipping weight 108 lbs. (49 kg)

#### Standards conformance & regulations:

- UL Standard 61010-1 (115V, 60 Hz models)
- CAN/CSA C22.2 No. 61010-1 (115V, 60 Hz models)
- CE Conformity marking (230V, 50/60 Hz models)

△ WARNING: Cancer—P65Warnings.ca.gov (California only)

#### **Options include:**

- · Acid-Resistant, PTFE-coated aluminum chamber with Hastelloy\* shaft
- · Region-specific electrical plug configurations

#### All models require (not included):

- Vacuum Pump. See page 26
- CentriVap Cold Trap (if using Rotary Vane Vacuum Pump). See pages 14-15
- Rotor. See pages 24-25
- · Sample tubes. Contact your laboratory supply dealer

- CentriZap™ Strobe Light. See page 26
- · Vacuum Controller. See page 26

<sup>\*</sup>Hastelloy® is a registered trademark of Haynes International, Inc.







### Acid-Resistant CentriVap® Vacuum Concentrators

#### **Specifications**

#### All models feature:

- PTFE-coated aluminum chamber with Hastelloy\* shaft and other acid-resistant components
- Glass lid
- \* Microprocessor-controlled programming for run time from 1 to 999 minutes, heat from OFF to HI (100° C) in one degree increments, and heat time from 1 to 999 minutes. Memory stores 1 to 9 programs
- \* Control panel with RUN/STOP button, PREHEAT button, set point SELECT button, increase/decrease buttons, and 3 Quick-Start™ buttons
- · LCD for display of program number, actual and set point temperature, heater time remaining, and run time remaining
- Quick-Stop<sup>™</sup> System stops vacuum pump, opens valve to bleed air into the chamber and stops the rotor within seconds after time expires or RUN/STOP button is pressed
- · Automatic vacuum release valve
- · Built-in vacuum delay allows rotor to achieve speed before applying vacuum
- · Audible alarm to signal completion of set point run time
- · Lid latch with safety sensor
- · Phenol-free lid gasket
- · Centrifugal motion provided by a brushless motor capable of achieving up to 1725 rpm
- \* 300-watt heater
- \* Brushed stainless steel and glacier white, powder-coated steel exterior with blue accents
- 1/2" OD polypropylene hose fitting for connection to vacuum tubing. Vacuum pump is not included
- \* Vacuum port with quick disconnect fitting for 1/4" ID tubing
- · Electrical receptacle on the back for connection to an accessory vacuum pump
- One year warranty on materials and workmanship
- Overall dimensions: 14.7" w x 19.3" d x 11.7" h
- Actual weight 45 lbs. (20 kg). Shipping weight 65 lbs. (29 kg)

#### Standards conformance & regulations:

- UL Standard 61010-1 (115V, 60 Hz models)
- CAN/CSA C22.2 No. 61010-1 (115V, 60 Hz models)
- CE Conformity marking (230V, 50/60 Hz models)

△ WARNING: Cancer—P65Warnings.ca.gov (California only)

#### **Options include:**

· Region-specific electrical plug configurations

#### All models require (not included):

- · Vacuum Pump. See page 26
- CentriVap Cold Trap (if using Rotary Vane Vacuum Pump). See pages 14-15
- Acid-Resistant Rotor. See page 25
- · Sample tubes. Contact your laboratory supply dealer

- CentriZap<sup>™</sup> Strobe Light. See page 26
- Vacuum Controller. See page 26

<sup>\*</sup>Hastelloy® is a registered trademark of Haynes International, Inc.







### CentriVap® Cold Traps

#### **Specifications**

#### All models feature:

- HCFC/CFC-free refrigeration system
- · 4-liter stainless steel collector
- Lid with two Quick-Disconnect fittings for 1/2" ID hose, rubber gasket and insulating cover
- · Stainless steel drain port with polypropylene valve
- Grounding clip
- \* Brushed stainless steel and glacier white, powder-coated steel exterior with blue accents
- ON/OFF power switch
- · One year warranty on materials and workmanship

#### -50° C Cold Trap models also feature:

- 1/3 hp compressor lowers cold trap to -50° C (-58° F) in less than 30 minutes
- \* Temperature graph that illuminates green when the collector coil reaches operating temperature of -40° C (-40° F)
- · Acrylic or stainless steel lid, depending on model
- Overall dimensions: 14.5" w x 24.2" d x 13.8" h
- Actual weight 70 lbs. (32 kg). Shipping weight 80 lbs. (36 kg)

#### -84° C Cold Trap models also feature:

- Two 1/3 hp compressors lowers cold trap to -84° C (-119° F) in less than 40 minutes
- \* Temperature graph that illuminates green when the collector coil reaches operating temperature of -65° C (-85° F).
- Stainless steel lid
- Overall dimensions: 14.5" w x 22.0" d x 20.9" h
- Actual weight 135 lbs. (61 kg). Shipping weight 142 lbs. (64 kg)

#### -105° C Cold Trap models also feature:

- Two 1/3 hp compressors lowers cold trap to -105° C (-157° F) in less than 40 minutes
- \* Temperature graph that illuminates green when the collector coil reaches operating temperature of -65° C (-85° F)
- Stainless steel lid
- Overall dimensions: 24.1" w x 23.9" d x 17.6" h
- Actual weight 150 lbs. (68 kg). Shipping weight 170 lbs. (77 kg)

#### Standards conformance & regulations:

- UL Standard 61010-1 (115V, 60 Hz models)
- CAN/CSA C22.2 No. 61010-1 (115V, 60 Hz models)
- CE Conformity marking (230V, 50/60 Hz models)

△ WARNING: Cancer—P65Warnings.ca.gov (California only)

#### **Options include:**

· Region-specific electrical plug configurations

- · Clear Canisters and Chemical Trap Inserts. See page 27
- Glass Trap. See page 28
- · Manifold. See page 27





#### **Specifications**

#### All models feature:

- \* Microprocessor-controlled programming for run time from 1 to 999 minutes, heat from OFF to HI (100° C) in one degree increments and heat time from 1 to 999 minutes. Memory stores 1 to 9 programs
- \* Control panel with RUN/STOP button, PREHEAT button, set point SELECT button, increase/decrease buttons, and 3 Quick-Start™ buttons
- · LCD for display of program number, actual and set point temperature, heater time remaining and run time remaining
- Quick-Stop<sup>™</sup> System stops vacuum pump, opens valve to bleed air into the chamber and stops the rotor within seconds after time expires or RUN/STOP button is pressed
- Built-in diaphragm pump achieves vacuum of 7 mBar and has displacement capacity of 38 L/min. All wetted parts are PTFE or other chemical-resistant fluoropolymers
- · Automatic vacuum release valve
- · Built-in vacuum delay allows rotor to achieve speed before applying vacuum
- · Audible alarm to signal completion of set point run time
- · Acrylic lid
- · Lid latch with safety sensor
- · Phenol-free lid gasket
- Powder-coated aluminum chamber
- \* Two 177 milliliter glass traps with 1/2" OD polypropylene hose fitting for connection to vacuum tubing
- · Centrifugal motion provided by a brushless motor capable of achieving up to 1725 rpm
- 300-watt heater speeds evaporation
- \* Brushed stainless steel and glacier white, powder-coated steel exterior with blue accents
- Vacuum port with quick disconnect fitting for 1/4" ID tubing
- Includes DNA Rotor 7462900. Accommodates up to 60 each 1.5 ml and 72 each 0.5 ml microcentrifuge tubes
- One year warranty on materials and workmanship
- Overall dimensions: 15.1" w x 28.5" d x 11.2" h
- Actual weight 80 lbs. (36 kg). Shipping weight 100 lbs. (45 kg)

#### Standards conformance & regulations:

- UL Standard 61010-1 (115V, 60 Hz models)
- CAN/CSA C22.2 No. 61010-1 (115V, 60 Hz models)
- CE Conformity marking (230V, 50/60 Hz models)

△ WARNING: Cancer—P65Warnings.ca.gov (California only)

#### **Options include:**

· Region-specific electrical plug configurations

#### All models require (not included):

· Sample tubes. Contact your laboratory supply dealer

- CentriZap<sup>™</sup> Strobe Light. See page 26
- Rotors. See pages 24-25
- · Vacuum Controller. See page 26
- Glass lid. See page 28





### **CentriVap®** Complete® Vacuum Concentrators

#### **Specifications**

#### All models feature:

- \* Microprocessor-controlled programming for run time from 1 to 999 minutes, heat from OFF to HI (100° C) in one degree increments, heat time from 1 to 999 minutes, cold trap ON/OFF, and optional Heat Boost ON/OFF. Memory stores 1 to 9 programs
- Control panel with RUN/STOP button, PREHEAT button, COLD TRAP button, optional HEAT BOOST button, set point SELECT button, increase/decrease buttons, and 3 Quick-Start™ buttons
- · LCD for display of program number, actual and set point temperature, heater time remaining, run time remaining, cold trap activation and optional Heat Boost activation. When the cold trap is activated, the LCD flashes Y until the collector coil reaches operating temperature of -40° C (-40° F) at which time the Y glows continuously
- Quick-Stop<sup>™</sup> System stops vacuum pump, opens valve to bleed air into the chamber and stops the rotor within seconds after time expires or RUN/STOP button is pressed
- · Built-in diaphragm pump that achieves 7 mBar and has displacement capacity of 38 L/min. All wetted parts are PTFE or other chemical-resistant fluoropolymers
- HCFC/CFC-free refrigeration system with 1/3 hp compressor lowers cold trap to -50° C (-58° F) in less than 30 minutes
- 4-liter stainless steel collector and lid with rubber gasket and insulating cover. Collector and lid are PTFE-coated on Acid-Resistant models
- · Glass lid, lid latch with safety sensor, and phenol-free lid gasket
- Epoxy-coated or PTFE-coated aluminum chamber, depending on model
- · Automatic vacuum release valve
- Built-in vacuum delay allows rotor to achieve speed before applying vacuum
- · Audible alarm to signal completion of set point run time
- Centrifugal motion provided by a brushless motor capable of achieving up to 1725 rpm
- · 300-watt heater
- Brushed stainless steel and glacier white, epoxy-coated steel exterior with blue accents

- Right hand-side mounted 3/8" hose barb drain port with polypropylene valve
- Right hand-side mounted gas ballast access port
- Vacuum port with quick disconnect fitting for 3/8" ID tubing
- 177 milliliter glass trap
- Includes 12-13 mm Aluminum Rotor 7455100 or 12-13 mm PTFE-coated metal Rotor 7455101, depending on model
- Includes CentriZap™ Strobe Light with holster
- · One year warranty on materials and workmanship
- Overall dimensions: 26.1" w x 22.7" d x 16.9"
- Actual weight 145 lbs. (66 kg). Shipping weight 170 lbs. (77 kg)

#### Standards conformance & regulations:

- UL Standard 61010-1 (115V, 60 Hz models)
- CAN/CSA C22.2 No. 61010-1 (115V, 60 Hz models)
- CE Conformity marking (230V, 50/60 Hz models)

△ WARNING: Cancer—P65Warnings.ca.gov (California only)

#### **Options include:**

- 300-watt Heat Boost from OFF to HI (100° C) in one degree increments, for 1 to 999 minutes, depending on set points programmed for heater
- · Acid-Resistant, PTFE-coated chamber and Cold Trap collector and lid
- · Region-specific electrical plug configurations

#### All models require (not included):

Sample containers

#### **Optional accessories:**

· Rotors. See pages 24-25





### CentriVap® Mobile Systems

#### **Specifications**

#### All models feature:

- \* Microprocessor-controlled programming for run time from 1 to 999 minutes, heat from OFF to HI (100° C) in one degree increments, heat time from 1 to 999 minutes, cold trap ON/OFF, and optional Heat Boost ON/OFF. Memory stores 1 to 9 programs
- \* Control panel with RUN/STOP button, PREHEAT button, COLD TRAP button, optional HEAT BOOST button, set point SELECT button, increase/decrease buttons, and 3 Quick-Start™ buttons
- · LCD for display of program number, actual and set point temperature, heater time remaining, run time remaining, cold trap activation and optional Heat Boost activation. When the cold trap is activated the LCD flashes Y until the collector coil reaches operating temperature of -40° C (-40° F) at which time the Y glows continuously
- Quick-Stop<sup>™</sup> System stops vacuum pump, opens valve to bleed air into the chamber and stops the rotor within seconds after time expires or RUN/STOP button is pressed
- HCFC/CFC-free refrigeration system with 1/3 hp compressor lowers cold trap to -50° C (-58° F) in less than 30 minutes
- · 4-liter stainless steel collector with acrylic lid with two Quick-Disconnect fittings for 1/2" ID hose, rubber gasket and insulating cover
- \* Built-in clear canister to accommodate chemical trap insert. Cutout in front panel provides at-a-glance trap monitoring
- · Automatic vacuum release valve
- · Built-in vacuum delay allows rotor to achieve speed before applying vacuum
- · Audible alarm to signal completion of set point run time
- Glass lid
- Lid latch with safety sensor
- Phenol-free lid gasket
- Powder-coated aluminum chamber
- Front-mounted stainless steel collector drain port with poylpropylene valve and grounding clip
- · Centrifugal motion provided by a brushless motor capable of achieving up to 1725 rpm
- \* 300-watt heater speeds evaporation
- \* Brushed stainless steel and glacier white, powder-coated steel exterior with blue accents
- \* Four 2" dia. hard rubber casters

- \* Removable front panel provides access to interior space for vacuum pump (pump sold separately)
- 1/2" OD polypropylene hose fitting for connection to vacuum tubing. Vacuum pump is not included
- ❖ Vacuum port with quick disconnect fitting for 1/4" ID tubing
- · Electrical receptacle on the back for connection to accessory
- Includes one Solvent Trap Insert 7815200 and 12-13 mm Aluminum Rotor 7455100
- One year warranty on materials and workmanship
- Overall dimensions: 14.1" w x 27.9" d x 38.2" h
- Actual weight 155 lbs. (70 kg). Shipping weight 210 lbs. (95 kg)

#### Standards conformance & regulations:

- UL Standard 61010-1 (115V, 60 Hz models)
- CAN/CSA C22.2 No. 61010-1 (115V, 60 Hz models)
- CE Conformity marking (230V, 50/60 Hz models)

△ WARNING: Cancer—P65Warnings.ca.gov (California only)

#### **Options include:**

- 300-watt Heat Boost from OFF to HI (100° C) in one degree increments, for 1 to 999 minutes, depending on set points programmed for heater
- · Region-specific electrical plug configurations

#### All models require (not included):

- Vacuum Pump. See page 26
- Sample tubes. Contact your laboratory supply dealer

- CentriZap™ Strobe Light. See page 26
- Rotors. See pages 24-25
- · Vacuum Controller. See page 26
- · Chemical Traps. See page 27
- · Glass Trap. See page 28







# Visit labconco.com to request information for all Labconco products.

#### **LABCONCO CORPORATION**

8811 Prospect Avenue Kansas City, MO 64132

(800) 821-5525 | (816) 333-8811

labconco.com

©2020 LABCONCO CORPORATION

Printed in the U.S.A.

Product design subject to change without notice.

3-34-3/6/20

