



WaterPro® BT™

WATER PURIFICATION SYSTEMS



Protecting your
laboratory environment

LABCONCO®

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Labequip

ask@labequip.com



WaterPro® BT System produces both RO-purified and Type I water packaged in a compact all-in-one benchtop design

For laboratories needing 1-10 liters per day, the WaterPro BT System, delivers ultrapure Type I*, up to 18.2 megohm-cm at a typical rate of >0.5 liter per minute** at inlet water temperature of 25° C. Type I water is ideal for many applications including instrumental trace element analysis, mixing standardized acid/base solutions, and media solutions. An optional UV lamp further reduces the bacteria and TOC levels necessary for life science applications.

Attractive and durable thermoplastic housing.

Integral 6 liter storage tank holds RO-purified water.

The rear-mounted tank outlet valve releases RO-purified Type III from the storage tank.



Optional accessory final filter. Two final filters are offered and attach to the dispensing valve. Select from a Hollow Fiber Filter that removes all particles and bacteria larger than 0.22 micron or an Ultrafilter Cartridge that removes pyrogens.



Dispensing button. Press once and release. Type I water dispenses continuously until the button is pressed again. Or, press and hold. Release to stop dispensing.

User-friendly color LCD. Shows water quality, system status, and maintenance or alarm messages. The screen can be rotated up or down for easy viewing from the user's location.

Easy do-it-yourself installation. From connecting to tap water and drain to installing the Filter Pack, the WaterPro BT may be set up in minutes.

Full one year warranty

Visual alarms alert the user when filter change is required, resistivity is below setpoint, and other important status reports.

Keypad. Provides access to change display settings such as water quality unit of measure, resistivity setpoint, and temperature values. It also provides a means to set functions such as volume dispensed, dispensing time, flowrate calibration and tank level calibration.

Fixed volume delivery. In the Auto-Dispense mode, a pre-set volume of Type I water may be dispensed. From 0.25 L to 9.75 L in 0.25 L increments may be selected.

Removable front cover provides easy access to the Filter Pack.

Quiet operation at 50 dB or less at a distance of 3 1/4 feet (1 meter).

Optional UV lamp. Some models include a 185/254 nm UV lamp to remove bacteria and certain organics.



Optional remote dispenser. Some models include a remote dispense module and stand to allow the WaterPro BT to be placed up to 6.5 feet (2 meters) away from the dispensing location. An optional Wall Mounting Bracket allows you to optimize bench space, while having the dispenser within easy reach.

* Meets ASTM Type I water standard.

**Until storage tank is within 10% of empty.

† Meets ASTM Type III water standard with feedwater purity of 100 µs or better.



Specifications

All Models Feature:

- Thermoplastic housing with removable thermoplastic cover.
- Dispensing valve that dispenses >0.5 liter per minute Type I water by pressing the dispense button.
- 6 liter capacity RO-purified water storage tank.
- Feedwater inlet tubing, 7' long, with 1/2" OD Male NPTM, BSPM or GAZ fitting and pre-filter screen.
- RO reject tubing, 80" long.
- 50 dB maximum noise level at a distance of 3 1/4 feet (1 m).
- Distribution pump.
- Continuous/intermittent recirculation.
- Color LCD for display of operating modes, operating parameters, maintenance or alarm messages and tank level. Alarms include filter cartridge change after set time has expired or amount of water has been reached, resistivity less than setpoint, incorrect filter installation, and water detected in tank while in Flush mode.
- Keypad for accessing display settings, function settings, and calibrations.
- One year warranty.
- Power cord and plug.
- Miscellaneous accessories: 10' (3 m) clear tubing and 3/8" ID hose barb for the Type I dispensing valve; 8 x 8 mm elbow connector and 3' (1 m) of 8 mm tubing with ball valve for the tank outlet; and two each 1 micron Air Vent Filters.
- UL* listing.
- CE Conformity marking.
- Overall dimensions: 11.4" w x 16.6" d x 21.2" h (29.0 x 42.2 x 53.8 cm)

UV Models also Feature:

- UV Lamp, 185 and 254 nanometers.

Remote Dispense Models also Feature:

- Remote Dispenser with 6.5' (2 m) tether.
- White powder-coated steel dispenser stand, 14.0" w x 8.0" d x 23.0" high (35.6 x 20.3 x 58.4 cm). Overall height with remote dispenser: 25.0" (63.5 cm).
- Overall dimensions of housing: 11.4" w x 13.1" d x 23.8" h (29.0 x 33.4 x 60.5 cm)

All Models Conform to:

- UL* 61010-1
- CAN/CSA C22.2 No. 61010.1
- CE electrical safety and electromagnetic compatibility

All Models Require:

- WaterPro BT Filter Pack 9019200. See back cover.

Optional Accessories Include:

- Hollow Fiber Final Filter 9037700. See back cover.
- Ultrafilter Cartridge 9037800. See back cover.
- Wall Mounting Bracket 9037900. See back cover

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Ordering Information

Catalog Number	Electrical Specifications	Plug Type	UV Lamp	Remote Dispense	Shipping Weight
9015020	115 volts, 60 Hz, 2 amps	115 volts, 15 amps	—	—	38.8 lbs. (17.6 kg)
9015120	115 volts, 60 Hz, 2 amps	115 volts, 15 amp	•	—	40.2 lbs. (18.2 kg)
9015030	230 volts, 50/60 Hz, 2 amps	Schuko (EU)	—	—	38.8 lbs. (17.6 kg)
9015130	230 volts, 50/60 Hz, 2 amps	Schuko (EU)	•	—	40.2 lbs. (18.2 kg)
9015040	230 volts, 50/60 Hz, 2 amps	North America, 230 volts	—	—	38.8 lbs. (17.6 kg)
9015140	230 volts, 50/60 Hz, 2 amps	North America, 230 volts	•	—	40.2 lbs. (18.2 kg)
9015060	230 volts, 50/60 Hz, 2 amps	British (UK)	—	—	38.8 lbs. (17.6 kg)
9015160	230 volts, 50/60 Hz, 2 amps	British (UK)	•	—	40.2 lbs. (18.2 kg)
9015070	230 volts, 50/60 Hz, 2 amps	Australia	—	—	38.8 lbs. (17.6 kg)
9015170	230 volts, 50/60 Hz, 2 amps	Australia	•	—	40.2 lbs. (18.2 kg)
9015080	230 volts, 50/60 Hz, 2 amps	India	—	—	38.8 lbs. (17.6 kg)
9015180	230 volts, 50/60 Hz, 2 amps	India	•	—	40.2 lbs. (18.2 kg)
9015220	115 volts, 60 Hz, 2 amps	115 volts, 15 amps	—	•	44.7 lbs. (20.3 kg)
9015320	115 volts, 60 Hz, 2 amps	115 volts, 15 amps	•	•	46.1 lbs. (20.9 kg)
9015230	230 volts, 50/60 Hz, 2 amps	Schuko (EU)	—	•	44.7 lbs. (20.3 kg)
9015330	230 volts, 50/60 Hz, 2 amps	Schuko (EU)	•	•	46.1 lbs. (20.9 kg)
9015240	230 volts, 50/60 Hz, 2 amps	North America, 230 volts	—	•	44.7 lbs. (20.3 kg)
9015340	230 volts, 50/60 Hz, 2 amps	North America, 230 volts	•	•	46.1 lbs. (20.9 kg)
9015260	230 volts, 50/60 Hz, 2 amps	British (UK)	—	•	44.7 lbs. (20.3 kg)
9015360	230 volts, 50/60 Hz, 2 amps	British (UK)	•	•	46.1 lbs. (20.9 kg)
9015270	230 volts, 50/60 Hz, 2 amps	Australia	—	•	44.7 lbs. (20.3 kg)
9015370	230 volts, 50/60 Hz, 2 amps	Australia	•	•	46.1 lbs. (20.9 kg)
9015280	230 volts, 50/60 Hz, 2 amps	India	—	•	44.7 lbs. (20.3 kg)
9015380	230 volts, 50/60 Hz, 2 amps	India	•	•	46.1 lbs. (20.9 kg)

Plug Types

115 volts,
15 amps



9015020, 9015120,
9015220, 9015320

Schuko



9015030, 9015130,
9015230, 9015330

North America,
230 volts



9015040, 9015140,
9015240, 9015340

British (UK)



9015060, 9015160,
9015260, 9015360

Australia



9015070, 9015170,
9015270, 9015370

India



9015080, 9015180,
9015280, 9015380



How it Works

First, tap water enters the Filter Pack and passes through the pre-treatment media, which removes large particles to protect the RO membrane. Second, the water passes through the RO membrane, which removes inorganics, remaining organics and colloids. The purified water (Type III permeate), is temporarily stored in the tank. The ions, particles, organic molecules and bacteria rejected by the RO membrane are sent to drain. When the dispensing mode is active, the Type III water is pumped from the tank and passes by the UV lamp (on some models). The UV irradiation reduces levels of bacteria and other total organic carbons in the water. Next the water passes through the activated carbon media, which removes dissolved organics and chlorine. The water then enters the deionization cartridge, which exchanges hydrogen ions for cationic contaminants and hydroxyl ions for anionic contaminants to produce Type I water. Lastly, the ultra-pure water passes through an optional Hollow Fiber Final Filter to remove all particles and bacteria greater than 0.22 micron or optional Ultrafilter Cartridge to remove pyrogens, RNases and DNases. To maintain water quality, the water throughout the system is intermittently recirculated during periods of non-use.

Technical Specifications–Type I Water

Inlet Feedwater Requirements

Maximum inlet pressure	87.0 psi (6 bar)
Minimum inlet pressure	7.3 psi (0.5 bar)
Minimum Inlet Flow rate	10.6 gallons/hour (40 liters/hour)
Temperature	5-35° C (41-95° F)
pH	4-10
Conductivity	< 2000 microseimens/cm
Fouling Index	< 10
Langelier Saturation Index	< +0.2
TOC	< 2000 ppb

Maximum Ion Concentrations

Iron (total)	< 0.1 ppm as CaCO ₃
Aluminum	< 0.05 ppm as CaCO ₃
Manganese	< 0.05 ppm as CaCO ₃
Free Chlorine	< 1 ppm

Typical Dispensing Rates*

Type I from dispensing valve	>11.1 GPH (>0.5 liters/minute) at 25° C
Type III from storage tank	Up to 0.8 GPH (3 Liters/hour)
Drain Capacity	7.9 gallons/hour (30 liters/hour)

Type I Water Quality

TOC (without UV Lamp)	<10 ppb
TOC (with UV lamp)	<5 ppb
Particulates (> 0.22 micron)**	<1 particulate/ml
Bacteria**	< 01 cfu/ml
Pyrogens**	<0.001 EU/ml
RNases**	<0.01 ng/ml
DNases**	<4 pg/μl

Type III Water Quality

Ion rejection	>96%
Organic rejection for MW > 200	>99%
Bacteria and particulates	>99%

* Depending on feedwater flow rate and pressure and water level in the tank.
Storage tank must be at least 10% full in order for water to be dispensed.

** With Ultrafiltration Cartridge in place.

Expendables



9019200 WaterPro BT Filter Pack required for operation. Includes twin cartridges with pre-treatment, reverse osmosis, activated carbon and deionization filtration. Shipping weight 6.6 lbs. (3 kg)

9041400 Replacement Vent Filters, 1 micron. Package of 2 each filters. Shipping weight 0.5 lb. (0.2 kg)



9037700 Hollow Fiber Final Filter, 0.22 micron. For attachment to the dispensing valve. Non-sterile. Includes filling bell. 1 each. May not be used with the 9037800 Ultrafiltration Cartridge. Shipping weight 0.5 lb. (0.2 kg)

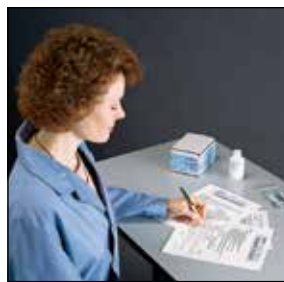
9037800 Ultrafiltration Cartridge. 1 each. For attachment to the dispensing valve. May not be used with the 9037700 Hollow Fiber Final Filter. Shipping weight 0.5 lb. (0.2 kg)

9041300 UV Lamp. 185 and 254 nm. 1 each. Shipping weight 0.5 lb. (0.2 kg)

Accessory

9037900 Wall Mounting Bracket. Powder-coated steel. Provides a means to attach the WaterPro BT to a wall or other vertical surface. Hardware not included. Shipping weight 4.0 lbs. (2 kg)

Let Us Help You Choose A Water Purification System To Meet Your Needs



The free **WaterProfile water analysis kit** is a good first step. To request this service, go to www.labconco.com/services/waterprofile-test-kit. The WaterProfile Kit includes a questionnaire to help pinpoint your application needs, a bottle to fill with your feedwater (tap or pre-treated) and a label and packaging for returning the kit to Labconco. After we conduct a series of diagnostic tests, you receive a report detailing your tap water quality and recommendations on the appropriate WaterPro Water Purification System for your laboratory.



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