Type II and Type III* Reagent Grade DI Systems



Water purification, pure and simple™

Features & Benefits

Better quality water:

We always use new (virgin) ion exchange (DI) resin.

Higher capacity:

New ion exchange resin can have 40% more capacity than regenerated resin.

No monthly rental charges:

You purchase and own the system hardware at a reasonable cost.

No installation charges:

The system is so easy to install, you can do it yourself.

No service charges:

You can install the spare DI tank yourself, whenever you need it - even on weekends!

• It puts you in control:

If the DI tank exhausts in the middle of an experiment, or during a weekend, you can install the spare tank.

Competitively priced:

See for yourself - compare the total cost of our Type II DI system with the competition.

AQUA SOLUTIONS, INC.

8 Old Burnt Mountain Road Jasper, GA 30143 USA

Phones: 706-692-9200

800-458-2021

Fax: 706-692-9203
E-mail: mail@aqua-sol.com
Internet: www.agua-sol.com

General Description

AQUA **SOLUTIONS**' Type II DI systems are available in six configurations to handle a wide variety of laboratory applications. The criteria for selecting the appropriate system is based on three factors:

- 1. Daily water usage.
- 2. Incoming water quality.
- 3. Maximum required flow rate.

System Availability

Model 2618S1 is a single tank 3 LPM system designed for applications that require up 40 liters of water/day, when fed tap water containing up to 85 ppm of total dissolved solids.

Model 2618S2 is a dual tank 3 LPM system designed for applications that require up 80 liters of water/day, when fed tap water containing up to 170 ppm of total dissolved solids.

Model 2635S1 is a single tank 6 LPM system designed for applications that require up 80 liters of water/day, when fed tap water containing up to 170 ppm of total dissolved solids.

Model 2635S2 is a dual tank 6 LPM system designed for applications that require up 160 liters of water/day, when fed tap water containing up to 340 ppm of total dissolved solids.

Model 2635S2DW11 is a dual tank 20 LPM system designed for applications requiring up 80 liters of water/day, when fed tap water containing up to 340 ppm of total dissolved solids. The system includes a 42 liter pressurized storage tank.

Model 2635S2DW is a dual tank 40 LPM system designed for applications that require up 160 liters of water per day, when fed tap water containing up to 340 ppm of total dissolved solids. The system includes a 130 liter pressurized storage tank.

Since many options can be used to dispense purified water, the basic system price does not include a dispenser or faucet. Refer to page 2 for dispensing options.

Note: The capacities (in liters of water/day) for these systems can be increased ten-fold, when the feed water is pretreated via reverse osmosis (RO). RO may be required when the feed water contains more then 150 PPM TDS.

* These systems produce purified water that meets or exceeds Type II and/or Type III reagent grade water specifications. See page 2 for details.

Type II and Type III Reagent Grade DI Systems Specifications & Ordering Information



Water purification, pure and simple™

| Model Number | 2618S1 | 2618S2 | 2635S1 | 2635S2 | 2635S2DW11 | 2635S2DW |
|--|----------|----------|----------|----------|------------|------------|
| Maximum System Flow Rate (Liters/Minute) | 3 | 3 | 6 | 6 | 20 | 40 |
| Number of Installed DI Tanks Included with System | 1 | 2 | 1 | 2 | 2 | 2 |
| Number of Spare DI Tanks Included with System | 1 | 1 | 1 | 1 | 1 | 1 |
| Capacity per DI Tank (Grains as CaCO ₃) | 3,000 | 3,000 | 6,000 | 6,000 | 6,000 | 6,000 |
| Total Installed DI Capacity (Grains as CaCO ₃) | 3,000 | 6,000 | 6,000 | 12,000 | 12,000 | 12,000 |
| Pressurized Storage Tank | Optional | Optional | Optional | Optional | 42 Liters | 130 Liters |
| Storage Tank Dimensions (diameter x height) | | | | | 15" X 25" | 22" X 40" |
| Resin Refills and Replacement Cartridges: | | | | | | |
| 2618DIR - 1/4 Cubic Foot Resin Refill * | 1 | 1 | N/A | N/A | N/A | N/A |
| 2635DIR - 1/2 Cubic Foot Resin Refill * | N/A | N/A | 1 | 1 | 1 | 1 |
| CC1050 - 10" Activated Carbon Prefilter Cartridge | 1 | 1 | 1 | 1 | 1 | 1 |
| DC2002 - 0.1 µm Final Filter Capsule ** | Optional | Optional | Optional | Optional | Optional | Optional |
| RA1002A - 10" 0.2 μm Final Filter Cartridge *** | Optional | Optional | Optional | Optional | Optional | Optional |
| * Exchange - based on return of exhausted DI | tank | | | | | |

- Exchange based on return of exhausted DI tank
- ** Used with optional 2700N Remote Dispenser
- *** Used with optional CH1004FF Final Filter Assembly

Accessories, Options and Parts:

2618DI - 1/4 Cu. Ft. Complete DI Tank Assembly (Filled)

2635DI - 1/2 Cu. Ft. Complete DI Tank Assembly (Filled)

2615F - Polypropylene Gooseneck Bench Mount Faucet

2615FL - Polypropylene Faucet with Monitor Light

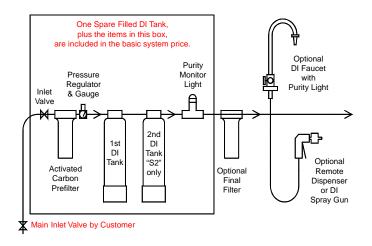
2700N - Remote Dispenser Gun with Filter Capsule

2701 - DI Spray Gun

CH1004FF - 10" Final Filter Housing (No Cartridge)

CH1004PF - 10" Sediment Prefilter Assembly with Cart

2000MA - Precision Resistivity Monitor 0-20 Megohm



Type II Laboratory Applications: ASTM defines Type II water as having >1 megohm-cm resistivity, which equals about 1/2 part per million of total dissolved solids (TDS). CAP and NCCLS define Type II water as having >2 megohm-cm resistivity. Type II water costs considerably less to produce than Type I water, making it a viable alternative for many laboratory and clinical applications. Note that ASTM defines Type III water as having 4.0 megohm-cm resistivity, while CAP and NCCLS define Type III water as having >1 megohm-cm a resistivity.

Laboratories can use Type II water for analytical and clinical procedures that do not specifically require Type I water. Type II water is also routinely used to wash and rinse glassware, either manually or in the final rinse cycle of an automatic glassware washer.

Pretreatment Applications: Type II water can be used as feed to a Type I water purification system. This is a cost savings measure that can be used when the incoming tap water contains more than 170 ppm total dissolved solids, and/or the Type I water usage is high. It saves money, because Type II DI modules cost less than Type I DI modules.

Type II DI vs Reverse Osmosis Pretreatment: While a Type II DI pretreatment system costs considerably less to purchase than a reverse osmosis pretreatment system, it costs considerably more to operate. Thus, the decision to pretreat via Type II DI or RO should be made based on comparing both the capital and the operating costs of both systems. In particular, reverse osmosis should be considered when the incoming tap water contains much more than 170 parts per million of total dissolved solids, and/or water usage on the Type I or Type II DI system exceeds 40 liters per day.