

# Model H-40-C and H-40-C-H Type II RO + DI Systems



Designed for Hydrogen Generators  
and Laboratory Analyzers

## Features & Benefits

- ◆ Meets UL, CSA, and CE Mark Specs.
- ◆ Produces > 2 Megohm-cm DI water from ordinary tap water.
- ◆ Includes purity monitor with flashing red LED alarm.
- ◆ Price includes a spare activated carbon prefilter cartridge and DI module(s).
- ◆ System recirculates water continuously, ensuring maximum quality at all times.
- ◆ Price includes built-in activated carbon & sediment prefilter cartridge.
- ◆ Optional 0.2 micron final filter capsules and UV sterilizers are available.
- ◆ Prefilter and DI cartridge/module can be replaced in less than 5-minutes.
- ◆ Accepts 100-240 VAC, 50/60 Hz input power at < 2 Amps.
- ◆ Safe, quiet, low voltage (12 VDC) internal operation.
- ◆ User installable & serviceable.
- ◆ Made in the USA.



## 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@aquasol.com

Internet: www.aqua-sol.com

## Product Availability

**AQUA SOLUTIONS Model H-40-C Reverse Osmosis plus Type 2 DI (RO + DI) System** is designed to support Hydrogen Generators and Laboratory Analyzers. The H-40-C RO + DI system is a self-contained unit, measuring just 20" wide by 20" high by 12" deep.



**Model H-40-C-H** is a high capacity version of the H-40-C. It includes an external DI module, giving it 2.5 times the total ion exchange capacity of the H-40-C, plus a larger (42-Liter vs 10-Liter) RO storage tank.

Either system requires potable tap water, a drain, and a 100-240 VAC, 50-60 Hz grounded electrical outlet in order to operate. It can be bench, shelf or wall-mounted up to 10-feet away from the hydrogen generator and/or laboratory analyzer.

The systems include built-in reverse osmosis (RO) pretreatment to reduce operating costs by as much as 90%, while allowing them to run on virtually any quality potable tap water. The RO purified water is stored in a 10-Liter or 42-Liter pressurized storage tank. The 42-Liter RO tank is optional on model H-40-C.

A purity monitor provides a continuous readout of the purified water quality on its LCD display. The display can be located anywhere within 6' of the system for user convenience. When the water quality falls below the setpoint, a red LED flashes to signal that it is time to replace the activated carbon prefilter and DI module with the included spares.

During operation, a quiet, 12 VDC pump continuously circulates purified water through the DI module(s) and purity monitor on its way out to the hydrogen generator and/or analyzer and back into the system. The quality of the purified water is maximized by this recirculation process, **which does not diminish the capacity of the DI module.**

**The system price includes one installed plus one spare Purification Kit. The kit includes one prefilter cartridge plus one or two DI modules.** The cartridge and module(s) can be replaced in less than 5-minutes, without disrupting the operation of the hydrogen generator or analyzer.

**After installing the spare prefilter cartridge and DI module(s), a replacement purification kit should immediately be ordered and kept in stock to eliminate down-time.**

# Model H-40-C and H-40-C-H Type II RO + DI Systems



Designed for Hydrogen Generators  
and Laboratory Analyzers



Model Number      General Description

**H-40-C** ..... AQUA SOLUTIONS model **H-40-C Reverse Osmosis plus Type 2 DI (RO+DI) System** for operation on **ordinary tap water** containing up to 1,000 ppm of TDS (total dissolved solids).

The system provides Type II (or better) deionized (DI) water to one or more hydrogen generators and/or laboratory analyzers at up to 2 Liters/min, with a maximum daily output of ~ 50 Liters/day with the standard 10-Liter RO storage tank. Purchase of an optional 42-Liter RO storage tank upgrade increases the daily output to ~ 200 Liters/day. The system runs on 12VDC, supplied by an external 100-240 VAC, 50-60 Hz power supply.

The price of the AQUA SOLUTIONS model H-40-C includes two (2) Purification Kits, Part Number 2613H40. One kit is installed at startup, the other is a spare. The spare kit is installed when a red LED on the purity monitor flashes on and off, indicating that the purification kit is exhausted. The purification kit includes an activated carbon prefilter cartridge and a high purity DI module. The system includes a reverse osmosis (RO) cartridge, that is replaced as required. It has an estimated life of 2-3 years under normal usage, provided the activated carbon prefilter cartridge is replaced whenever the DI module is replaced. Optional 0.2 micron final filter capsules and UV sterilizers are available for both systems.

**H-40-C-H** ..... AQUA SOLUTIONS model **H-40-C-H RO + DI System** is identical to model H-40-C except that it includes a larger (42-Liter) RO storage tank and an additional 2618DI external DI module, which increases its DI capacity by a factor of about 2.5 and its daily output to ~ 200 Liters/day.

H-40-C and H-40-C-H System Specifications

System cabinet dimensions: .....	20" wide by 12" deep by 20" high
System operating/shipping weight: .....	~ 50-75 lbs
Input power to AC Adaptor at 100/240 VAC, 50/60 Hz: .....	< 2.0 Amps
System operating power from AC Adaptor at 12 VDC: .....	< 2.5 A
Minimum/maximum acceptable water inlet pressure: .....	20 to 70 PSI
Maximum allowed total dissolved solids (TDS) in tap water feed: .....	1,000 PPM
Maximum purified water flow rate: .....	up to 2 Liters/min
Minimum water purity: .....	> 2 Megohm-cm (0.5 µS/cm)
Purity monitor: .....	LCD readout in µS/cm with adjustable setpoint and flashing red LED alarm
Ion exchange capacity: H-40-C .....	~ 2,000 grains as CaCO <sub>3</sub>
Ion exchange capacity: H-40-C-H .....	~ 5,000 grains as CaCO <sub>3</sub>
System warranty: .....	One (1) year
RO storage tank: H-40-C .....	10-Liters (~ 7 Liters useable) upgradable to 42-Liters (~ 30-Liters usable)
RO storage tank: H-40-C-H .....	42 Liters (~ 30 Liters useable)
Replacement RO cartridge part number .....	CR1812H1
Replacement pump part number: .....	2000CP-12VDC
Purity monitor part number: .....	M-PRONTO-CON
AC power adaptor part number: .....	TR-12VDC-2.5AMP
Purification kit part number for H-40-C: .....	2613H40
Kit includes CC1050 10" AC prefilter cartridge, plus one 2613DI mixed bed DI module.	
Purification kit part number for H-40-C-H: .....	2613H40-H
Kit includes CC1050 10" AC prefilter cartridge, plus one each 2613DI and 2618DI mixed bed DI modules.	
Optional 0.2 micron (absolute) final filter capsule part number .....	DC2022
Optional 100-240 VAC, 50-60 Hz UV sterilizer part number .....	UV2006S
Placement .....	Indoors or sheltered where the temperature ranges between 10 and 40 degrees Centigrade

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