



ZE5 External House DI Upgrade Kit

Catalog # 12009651

For research purposes only.

Intended Use

ZE5 Cell Analyzer users interested in increasing the length of time the system can run unattended, can have their system equipped with ports enabling external water and waste connections.

The ZE5 External House DI Upgrade Kit enables connection of the ZE5 Cell Analyzer to the laboratory's source of pressurized house DI water. Customers interested in extending the run times by also connecting the ZE5 Cell Analyzer to an external waste option can use the ZE5 External Waste Carboy Upgrade Kit (cat # 12009734).

Note: Only Bio-Rad Service personnel are qualified and trained to connect a ZE5 Cell Analyzer to external house DI water.

Directions for Use

House DI Water Quality

The house DI water quality should be Type II pure deionized water with >10 M Ω resistivity or better.

To help improve water quality, Bio-Rad recommends following items:

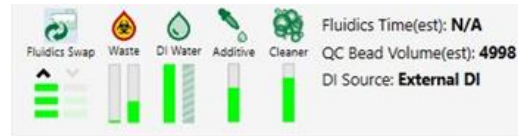
- W3T184483 Evoqua Cartridge Adsorber II
- W3T185125 Evoqua Cartridge Research II
- W3T184340 Evoqua Duplex IWT Wall Bracket with Fitting

Water Pressure

Incoming water pressure from the laboratory's DI water system into the ZE5 Cell Analyzer must be between 20–50 PSI (138 kPa–345 kPa).

Internal Bulk Fluidics Chamber

A ZE5 Cell Analyzer that is connected to a house DI water source must have four large (4 L) and two small (450 ml) bottles in the bulk fluidics chamber. The fluidics status in the Everest Software will indicate External DI as the source of water.



Waste bottles - both 4 L waste bottles must be in place and connected to the quick connect ports (similar to a ZE5 Cell Analyzer that is not connected to external source of water).

DI Water bottles - both 4 L DI water bottles should be in place and connected inside the bulk fluidics chamber.

Tip: Only the upper DI water bottle is used when the ZE5 Cell Analyzer is in DI water mode.

Important: At the start of the run, make sure the **upper** DI water bottle is filled with 2.5–3 L of DI water (the bottom DI bottle does not need to be filled). Use the circular depression on the bottle as a fill guide; fill the bottle to the top edge of the circle, as indicated in the following image.



Important: If the upper DI water bottle is filled with more than 4 L of DI water, the system might report an “Overfill” error and go into Safe Mode. If the bottle is filled with less than 2 L of DI water, the low level sensor can trigger a timeout and an “Unable to fill” warning.

Hot Swapping Liquids

A ZE5 Cell Analyzer connected to a source of house DI water allows the user to perform “hot swap” emptying of the waste containers.



Decontaminating the System

Note: Bio-Rad strongly recommends that your preventive maintenance program include decontamination of the entire ZE5 Cell Analyzer fluidics system.

When using the external source of DI water, the system begins decontamination using the Decontamination wizard, as described in the ZE5 Cell Analyzer and Everest Software User Guide (Chapter 12 Maintenance). During this process, the Everest Software displays internal bulk water and waste bottles as fluidics sources. After the decontamination is complete, the software automatically re-enables the external water source and standard operation using external source of DI water can continue.

Replacement Parts

Ordering Information

Catalog #	Description	Image
12009675	Replacement wrench spanner for 10" filter housing	
12009682	Replacement filter, 4" x 10", pleated cellulose, 1 µm	

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