



## NANOpure<sup>®</sup> Diamond<sup>™</sup> UF and UV/UF Systems



*NANOpure Diamond with  
removable control*

### Product Description

- Choose from four application specific models—then customize your system with the best cartridge pack for your needs.
- Multi-language display.
- Bring your water to your work—with the optional remote dispenser. Water can be dispensed up to 8 feet from your system.
- One model accounts for worldwide voltages and fluctuations.
- Universal design allows for wall or bench mounting.
- Feed water pressure fluctuations are no problem with the DIamond. Every system comes complete with a pressure-regulating valve.
- TOC (Total Organic Carbon) analyzer models available.
- Volumetric and timed dispense features allow you to fill carboys without monitoring
- Feed water and application specific cartridge packs provide for optimum removal capabilities of unwanted contaminants
- Delivers up to 1.5 Liters Per Minute of purified water
- All components are constructed of extremely inert materials ensuring maximum ionic and organic purity
- System Diagnostics allows you to evaluate important system and alerts you if a problem exists
- The system can be programmed to alert you if the water quality drops below your desired set point.
- RS232 output enables you to print or save to a computer or an optional printer

### Operation

- Purity up to 18.2 megohms-cm—exceeds ASTM, CAP and NCCLS Type I water requirements.
- Complies with USP XXIII guidelines with compensated and uncompensated resistivity measurements.
- Whisper quiet operation with the newest pump technologies.
- Automatic sanitization cycle helps keep your system clean.

### The Premier Ultrapure Water System on the Market

- Dispense water without monitoring your carboys with volumetric or timed dispensing
- Save on bench space without reducing product output with the smaller footprint
- Calibrate your system electronics in the field with the NIST Traceable Calibration Module
- Monitor TOC and resistivity with the new Diamond TOC Models
  
- Maintain your water quality during periods of non-use with the standby mode of operation recirculating water for 10 minutes every hour.
- Maintain bacterial and particle free water with a 0.2 micron absolute final filter.
- Trust your purity reading with automatic calibration verification of the electronics and optional NIST traceable calibration module.

### NANOpure Diamond UF

When it is essential that your ultrapure water contain undetectable levels of Pyrogens, the DIamond UF is the right choice. The ultrafilter incorporated within the system produces water with less than 0.001 Eu/ml and log reduction values (LRV) over 6. To prevent the build up of contaminants on the surface of the membrane, the DIamond will periodically automatically flush water to drain. The automatic sanitization cycle enables you to routinely sanitize the system quickly and effectively. The ideal system for any application requiring pyrogen free water including cell and tissue culture.

### Unique Features – NANOpure Diamond UF

- The NANOpure DIamond UF uses a hollow fiber ultrafilter that ensures product water with less than 0.001 Eu/ml pyrogens (bacterial endotoxins)
- Provides low cost biologically pure water with less than 10 ppb TOC (total organic carbon) and up to 18.2 megohm-cm resistivity
- An automatic or manual intermittent flush cleans the ultrafilter without wasting valuable high purity water
- Ideal for critical application including cell and tissue culture and monoclonal antibody production
- Deliver water up to 8 feet away with the optional remote dispenser
- Water exiting the system has < 1 CFU/ml bacteria levels
- Deliver water up to 8 feet away with the optional remote dispenser
- Comes complete with a wall mounting bracket

### NANOpure Diamond Life Science (UV/UF)

The most complete water system on the market today. Includes the latest advances in ion exchange and filtration technologies as well as a dual

## Barnstead Deionization



wavelength UV lamp and ultrafilter. This system has demonstrated the ability to remove nucleases such as RNase and DNase as well as DNA from challenged feed water. The water exiting the system is ideal for your most demanding molecular biology applications including: PCR, electrophoresis, as well as cell and tissue culture. The system includes automatic sanitization as well as automatic and manual ultrafilter flushing. The system produces ultrapure water containing < 0.005 Eu/ml of pyrogens, TOC values < 3 ppb, resistivities up to 18.2 megohm-cm and no detectable RNase, DNase and DNA.

### Unique Features – NANOpure Diamond Life Science (UV/UF)

- Product water will not degrade RNA...ideal for DNA amplification (PCR) and electrophoresis
- Removes RNase, DNase and DNA from concentrated feed sources
- An automatic or manual intermittent flush cleans the ultrafilter without wasting valuable high purity water
- Produces low cost pyrogen-free (< 0.001 Eu/ml) water for tissue and cell culture and monoclonal antibody production
- Water exiting the system has < 1 CFU/ml bacteria levels
- Deliver water up to 8 feet away with the optional remote dispenser
- Comes complete with a wall mounting bracket

### PRODUCT SPECIFICATIONS

Overall Dimensions Inches (cm)			Maximum Inlet Pressure psig	Inlet Connection	Inlet Water Temperature °F (°C)	Voltages 47 - 63 Hz	Maximum Flow Rates	
W	H	D					Gravity Feed	Pressurized Feed
13.4 (34)	19.5 (49.5)	16.9 (42.9)	100	3/8" Inlet Tubing (supplied)	40°-120° (4°-49°)	90-240 VAC	1.5 LPM	1.6 LPM

### ORDERING INFORMATION

Model #	Description	Shipping Weight Lb. (kg)	US List Price
D11921	NANOpure Diamond UF	40 (18.2)	\$5,114.00
D11931	NANOpure Diamond UV/UF	45 (20.4)	\$5,457.00
D11961	NANOpure Diamond UF TOC	40 (18.2)	\$6,252.00
D11971	NANOpure Diamond Life Science TOC	45 (20.4)	\$8,143.00

Patents issued

### ACCESSORIES

Model #	Description	US List Price
D11981	Remote Dispenser—easily attaches to the NANOpure Diamond allowing you to deliver water up to 8 feet away from the unit. Unique design virtually eliminates any dead volume and coiled tube allows for easy use while taking up a minimal amount of space	\$512.00
AY1137X1	Printer, 120 or 240V—provides you a paper document of the unit being used in addition to time, temperature and resistivity or conductivity of the product water at regular intervals	\$502.00
E896X5	NIST Calibration module	\$94.00
CMX25	Sanitization Syringe	\$22.00

### DIAMOND CARTRIDGE PACKS

#### Diamond Cartridge Packs

Each NANOpure Diamond utilizes a unique cartridge pack that provides for simple installation. Only one connection is required to install or remove the cartridge pack. Select the cartridge pack that meets your feed water and application. Each pack includes one 0.2 micron absolute final filter.

*NOTE: NANOpure Diamond must be fed with pretreated water.*

#### Cartridge Packs and Filters

Model #	Description	Application	Capacity	US List Price
D50280	Diamond Kit Organic Free R/O and Distilled Feed	Ultra-Low Organics Type I Water Reverse Osmosis or Distilled Water Feed	1107 grains* (1434 meq)	\$473.00
D50281	Diamond Kit Organic Free Deionized Feed	Ultra-Low Organics Type I Water Deionized Water Feed	1107 grains* (1434 meq)	\$493.00
D50282	Diamond Kit Type I R/O and Distilled Feed	Low Organics Type I Water Reverse Osmosis or Distilled Water Feed	1224 grains* (1586 meq)	\$464.00
D50283	Diamond Kit Type I Deionized Feed	Low Organics Type I Water Deionized Water Feed	1224 grains* (1586 meq)	\$480.00
D3750	Filter, 0.2 micron			\$75.00

\* as CaCO<sub>3</sub>