



NANOpure® Diamond™ Analytical and UV Systems



NANOpure Diamond

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 Diamond TOC Models

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



The display and controls can be mounted up to ten feet away from your system providing you flexibility in choosing a mounting location.



New—easy cartridge replacement with "one connection" cartridge pack.



Maintain permanent water purity documentation with an RS232 output.



With the TOC models, you can monitor TOC levels along with resistivity, conductivity and temperature.

Operation

- Purity up to 18.2 megohms-cm—exceeds ASTM, CAP and NCCIS 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.
- 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.

Barnstead Deionization



NANOpure Diamond Analytical

The perfect system for your most sensitive analytical procedures including: Atomic Absorption (AA), ICP and ICP/MS and Ion Chromatography (IC). Customize your Diamond with the Diamond cartridge pack that is designed specifically for your feed water and application.

NANOpure Diamond UV

The ideal system for your critical applications requiring 18.2 megohm water with less than 1 ppb Total Organic Carbon. The water produced is perfect for applications requiring low organics including: High Performance Liquid Chromatography (HPLC), Ion Chromatography (IC), Gas Chromatography/ Mass Spec. (GC/MS) and TOC Determinations. A dual wavelength UV lamp oxidizes organics down to virtually undetectable levels and also maintains minimal bacterial levels within the system. The system alerts you when it is time to change the UV Lamp.

Unique Features – NANOpure Diamond UV

- Ideal for applications such as low wavelength HPLC, IC, GC/MS where organic removal is essential
- The dual wavelength quartz UV lamp (185 & 254nm) oxidizes organics to virtually undetectable levels while controlling bacterial growth within the system.
- Reminder lets you know when it is time to change the lamp
- Provides superior low cost quality water to meet or exceed your most critical organic determinant analysis
- Provides 1-5 parts per billion (ppb) TOC (total organic carbon) and up to 18.2 megohm-cm resistivity water
- 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
D11901	NANOpure Diamond Analytical	35 (15.9)	\$3,865.00
D11911	NANOpure Diamond UV	40 (18.2)	\$5,114.00
D11941	NANOpure Diamond Analytical TOC	35(15.9)	\$5,569.00
D11951	NANOpure Diamond UV TOC	40 (18.2)	\$7,060.00

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.

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 CaCO₃