

Duo™ Dual Quality Type 2 and Type 1 Water System



Features & Benefits

- Fast variable dispense of ultrapure water – up to 2 liters per minute.
- Quick-change consumables with realistic costs.
- Novel recirculation loop extends life of membranes and cartridges.
- Easy to use software.
- Dual wavelength 185nm and 254nm UV in a quartz thimble.
- Bench, wall or reservoir top mounting.
- Choice of production rates.
- Choice of storage reservoir: 30, 60 or 100 liters.
- Comprehensive monitoring of water quality including TOC (Total Organic Carbon).
- Integral boost pump.
- Space saving design with 2 water qualities from one unit.

Overview

The Duo™ Water Purification System is a complete pre-engineered system designed to provide Type 2 water that can be dispensed from the storage tank via a dispense tap or provide Type 1 water that can be dispensed from an integral dispenser gun or via a remote dispenser gun.

The innovative and unique Duo provides two water qualities within one easy to use system. Save on space, initial outlay and consumable costs.



Duo™ Dual Quality Type 2 and Type 1 Water System

Specifications

UNIT SPECIFICATIONS

Part Number:

- 7120-4500-010; Duo T1/T2 UF 10 l/hr
- 7120-4500-020; Duo T1/T2 UF 20 l/hr
- 7120-4500-030; Duo T1/T2 UF 10 l/hr w/ Remote Dispenser
- 7120-4500-040; Duo T1/T2 UF 20 l/hr w/ Remote Dispenser
- 7120-4500-110; Duo T1/T2 10 l/hr
- 7120-4500-120; Duo T1/T2 20 l/hr
- 7120-4500-130; Duo T1/T2 10 l/hr w/ Remote Dispenser
- 7120-4500-140; Duo T1/T2 20 l/hr w/ Remote Dispenser

Dimensions

- Unit: 19 in. (W) x 26 in.* (H) x 11 in. (D)
490 mm (W) x 670 mm* (H) x 290 mm (D)
* To the top of Dispense Gun, height to the top of the Dispense tube curve is 29 in. (730 mm).
- Remote Dispensing Stand Dimensions
10 in. (W) x 25 in.* (H) x 10 in. (D)
250 mm (W) x 640 mm* (H) x 255 mm (D)
* To the top of Dispense Gun, height to the top of the Dispense tube curve is 26 in. (670 mm).
- Shipping Weight: 58 lb (26 kg)

Power Supply

- 100-240 VAC; 50/60 Hz

Water Quality

- Type 1 or Type 2

Feed Water Requirements

- Flow Rate at Pressure
 - Duo10 & Duo10-UF: 0.833 lpm @ 10 kPa, 0.1 bar (0.22 gpm @ 1.5 psi) minimum
 - Duo20 & Duo20-UF 1.0 lpm @ 10 kPa, 0.1 bar (0.27 gpm @ 1.5 psi) minimum
- Inlet pressure: 1.5 psi (10 kPa, 0.1 bar) minimum to 87 psi (600 kPa, 6.00 bar) maximum (NOTE: Minimum pressure must be maintained at the flow rate specified above)
- Temperature: 41°F to 95°F (5°C to 35°C)
- Minimum Feed Water Pressure: 1.5 psi (0.1 bar)
- Maximum Feed Water Pressure: 87 psi (6 bar)
- pH: 3.0-9.0

Waste Water Drain Requirements

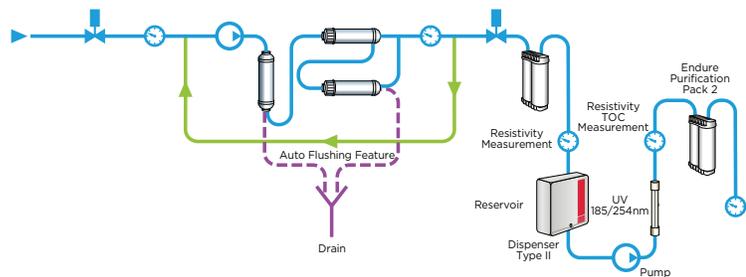
- A. Flush water drain, 5/16 in. tube connection to 1-1/2 in. (38 mm) pipe minimum, with a minimum safety distance of 3/4 in. between tube end and waste water drain.
- Floor level drain not to exceed 6.56 pipe feet (2000 mm) of the RO drain outlet.

All specifications are subject to change without notice.

Operation

The innovative and unique Duo provides two water qualities within one easy to use system. Save on space, initial outlay and consumable costs. Type 2 water is available from the reservoir while Type 1 water is ready to dispense from the unit or the remote dispenser.

DUO FLOWCHART



Application

Duo is suitable for Type 2 water use of 10-150 liters per day. Type 2 water is used for buffer and media production, sample and reagent diluent, general chemistry, protein electrophoresis, histology, cytology and spectrophotometry. Duo is also suitable for Type 1 water use of up to 100 liters per day. Type 1 water is used for molecular biology, electrophoresis, cell and tissue culture, sequencing, HPLC, genomics, pharmacology and any other sensitive applications.

TOC monitoring is critical when organics will affect results so a real time TOC reading will provide absolute confidence in your water quality.

	Duo 20 TOC	Duo 20 TOC UF	Duo 20 TOC	Duo 20 TOC UF
Production (into tank)	20 l/hr	20 l/hr	20 l/hr	20 l/hr
Dispense Rate (Ultrapure)	2 l/min	2 l/min	2 l/min	2 l/min
Resistivity	18.2 MΩ-cm	18.2 MΩ-cm	18.2 MΩ-cm	18.2 MΩ-cm
TOC	1-5 ppb	1-5 ppb	1-5 ppb	1-5 ppb
RNase/DNase	-	free	-	free
Bacteria	<1 cfu/ml	<1 cfu/ml	<1 cfu/ml	<1 cfu/ml
Endotoxins	-	<0.001EU/ml	-	<0.001EU/ml
Feedwater pressure	0.1-6 bar	0.1-6 bar	0.1-6 bar	0.1-6 bar