

Pico™ Type 2 Deionized Water System



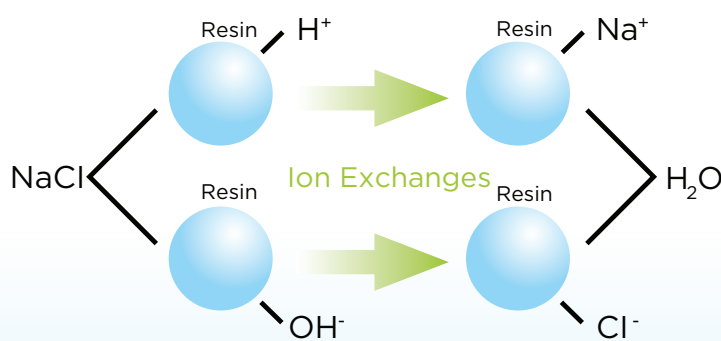
Overview

Pico™ is a complete all-in-one water system which provides Type 2 water with many unique features. It has low energy consumption, creates minimal water waste and maximizes the use of your laboratory space.

Features & Benefits

- Tap to Type 2 Water.
- Production Rate of 10 L/hr or 20 L/hr.
- Low cost, one box solution.
- Small footprint.
- Energy consumption <60w.
- Touchscreen interface.
- Automatic flushing cycle to ensure longer life of reverse osmosis membranes.
- Unique disposable RO module and pretreatment cartridge.
- Benchtop or wall mounting options available.
- Built in 35 liter reservoir.
- Minimal water waste
- Simple cartridge replacement.
- First maintenance kit included with unit.
- Mercury-free UV lamp available.
- Built-in automatic self-cleaning/sanitization.

Deionization / Ion-exchange



Pico™ Type 2 Deionized Water System

Specifications

UNIT SPECIFICATIONS

Part Number:

- 7120-3000-210 10L / Hour
- 7120-3000-215 UV 10L / Hour
- 7120-3000-220 20L / Hour
- 7120-3000-225 UV 20L / Hour

Unit Dimensions:

Overall Size

- 18.90 in. W x 13.00 in. D x 19.50 in. H
480 mm W x 330 mm D x 495 mm H
- Operating Weight: 132 lb (60 kg)

Power Supply

- 100-240 VAC; 50/60 Hz

Water Quality

- Organics and Particulate Rejection: >99%

Feed Water Requirements

- Water Quality: Potable Tap Water
- Water Needs: 60l/hr
- Flow Rate at Pressure: 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)
- Free Chlorine: <0.1 mg/l
- Minimum Feed Water Pressure: 1.5 psi (0.1 bar)
- Maximum Feed Water Pressure: 87 psi (6 bar)
- pH: 3.0-9.0
- Total Dissolved Solids: 800 ppm maximum
- Conductivity: <1400µS
- Chlorine concentration tolerance: <0.1 ppm max

Waste Water Drain Requirements

- 1/4 in. tube and 3/8 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

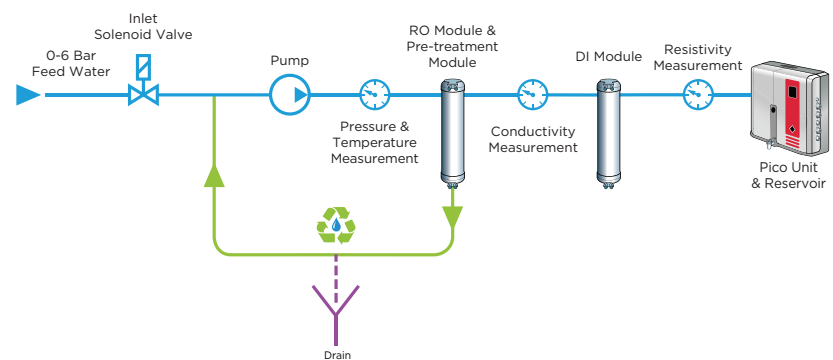
The Pico utilizes well established water purification technologies which you can trust to provide you with the quality of water you require, on demand.

Water can be drawn from the dispensing tap on the front of the machine to obtain the precise water quantity needed.

The unique Reverse Osmosis (RO) cartridges have built-in pre-treatment which only requires changing once per year. This means the water is always in optimum condition as there is no deterioration of quality from an RO which is several years old. The high recovery rate of 50% means the cost of waste water is also kept to a minimum.

Pico will take potable water to Type 2 at a rate of 10 or 20 liters per hour which can be dispensed from the 35 liter reservoir. The optional UV photo-oxidation cell provides bacterial control for more sensitive applications.

PICO FLOWCHART: T2 unit



Application

The Pico is able to create general laboratory grade, Type 2 water for several different applications including buffer make up, media production, sample dilution and reagent preparation. Deionization is a process that removes ions from RO water with the use of synthetic resins. The ions are removed from the water through a series of chemical reactions. These reactions occur as the water passes through the ion exchange resin beads. Gradually, all unwanted ions are replaced by hydrogen and hydroxyl ions which combine to form pure water.

Deionization is the only process that can produce the quality required for Type 2 water.

Pico Model	RO Make-up Rate (@15°C)	Inorganics Rejection Rate	Organics Rejection Rate	Bacteria Rejection Rate	Daily Usage (Maximum)
PICO10T2	10 lph	1-15 MΩ-cm	>99%	99%	60 lpd
PICO20T2	20 lph	1-15 MΩ-cm	>99%	99%	120 lpd