



HLP 5UV Water Purification System

Code PDB014

Automatic equipment to produce I-II type demineralized water from tap water, provided with a microprocessor-based measurement and control system that supervises the purification process. It is supplied with all the components required for immediate use.

The obtained purified water has a conductivity of less than $0.06 \mu\text{S}/\text{cm}$ and meets the requirements of ISO 3696: 1999 (Water for use in laboratory analysis. Specification and test methods). It is suitable for instrumental analysis techniques (AAS, ICP/MS, IC, HPLC, GC), bacterial cultures and biochemical analysis.

The system has two independent water intake points; it also has a pump that increases the pressure of the feed water and comes equipped with a 10 L tank for storing II type purified water; when the tank is full, the equipment automatically stops water production. Microprocessor measurement and control system



- LCD screen
- Conductivity and temperature measurement of purified water
- Temperature compensation
- Clock displaying date and time
- Information on system operating status
- Alarm for replacement of integrated module
- Alarm for UV lamp replacement
- Alarm for replacement of ion exchange cartridges
- Alarm for replacement of microfiltration capsule
- Indication of maintenance deadlines
- RS 232 connector for communication with a computer. Possibility to set maintenance frequency and alarm levels.
- Pressure gauge for feed water

Technical specifications

Code	PDB014
Fed by	Tap water
Housing material	Stainless steel
Dimensions (width x depth x height)	235x440x510 mm
Type of purified water (ISO 3696: 1999)	Types I and II
Production capacity	5-7 L/h
Conductivity	< $0,06 \mu\text{S}/\text{cm}$
Bacteria	< 1 ufc/mL
Particles > $0,2 \mu\text{m}$	< 1/mL
Notifications	Graphic and sound alarms
Modules	Interchangeable and easy to replace



Requirements and process

Feed water requirements

- Conductivity < 1200 $\mu\text{S}/\text{cm}$
- Pressure > 3.0 bar
- Temperature: 5-40 °C
- Hardness < 250 mg CaCO_3/L
- Fe < 0.2 mg/L

Purification process stages

- Sediment pre-filter, 5 μm
- Integrated module (sediment-carbon-softening)
- Reverse osmosis
- Double demineralization on a mixed ion-exchange bed
- UV lamp 254 nm
- Microfiltration cascade capsule 0.45/0.2 μm

Requirements in the installation place

- Tap water connection 1/2" or 3/4"
- Drainage
- Power supply 230V/50Hz

Compatible spare parts

Code PDD007
A2 integrated module



Code PDD011
Cartucho H7 TOC de intercambio iónico



Code PDD008
Pre-filter cartridge 5 μm 10"



Code PDD013
UV lamp 254 nm



Code PDD012
Microfiltration capsule 0.45/0.2 μm



Code	PDD007	PDD008	PDD011	PDD012	PDD013
Description	A2 integrated module	Pre-filter cartridge 5 μm 10"	H7 TOC ion exchange cartridge	Microfiltration capsule 0.45/0.2 μm	UV lamp 254 nm
Estimated duration	6 months*	6 months*	4000 L** (2 cartridges x 2000 L)	6 months*	8500 hours

* The duration can be affected by the flow, its characteristics as well as by the level and type of contamination.

** The volume of purified water depends on the quality of the feed water. The maximum concentration of dissolved salts in the feed water 1200 mg/L.