



Ion exchange systems

Water demineralizers, specifically for the preparation of small amounts of water, direct connection to water outlet and continuous flow.

Mixed-bed resins filtration of ion exchange.

Applications:

- Analysis laboratories, microbiology, biochemical, histopathology to realize different analytical and diagnostic analytical technicals.
- Production of high quality water for autoclaves, ultra pure water systems....

Characteristics:

- Production of type II water analytical grade.
- Analog conductivity meter that show us the right water values (0,1 –20 µS/cm). When this value is in red zone (from 20 µS/cm) resin must be changed.
- Water production, according to tables, depending of feeding water quality.
- Water production tables, according to hardness of feeding water in °F (1°F= 10 mg/L Ca CO₃)
- Wall mounting included for MINI model.
- Included in all models: cartridge, resins, analog conductivity meter and hose set.

● 61004

● 61020



Water production table according to hardness of feeding water in °F

	5°	10°	20°	30°
Mini-425	1500	765	375	250
CQL.10	3000	1500	750	500
CQL.20	6000	3000	1500	1000
CQL.50	18000	9200	4600	2900

Equivalences: 1°d=1,8°f=1,25°e=17,8 mg CaCO₃

Reference	Model	Volume L/Hour	Production L. at 10° F	Cartridge material	Cartridge dimensions cm
61004	Mini-425	50	765	Polyethylene	60x10
61010	CQL.10	100	1500	Polyamide	47x20
61020	CQL.20	200	3000	Polyamide	63x27
61050	CQL.50	400	9000	Polyamide	141x27

Accessories:

- 61104 Resins cartridge for Mini-425
- 61110 Resins cartridge CQL.10 without conductivity meter
- 61120 Resins cartridge CQL.20 without conductivity meter
- 61150 Resins cartridge CQL.50 without conductivity meter
- 61144 Conductivity meter analog with hose
- 60199 Deionizer resin Bag with 10



Deionizers-water demineralizers



- Water purification systems, DI series, made of stainless steel.
- V4A with a pressure Resistance up to 10 bar.
- Conductivity meter analog for quality control of the purified water included. Conductivity meter digital as option.
- Measuring range of conductivity meter: 0-50 $\mu\text{S}/\text{cm}$.
- Including water hoses R 3/4".
- 230V-50/60Hz.

Reference	Model	Max. Volume L/hour	Production at 10° TDS	Water quality $\mu\text{S}/\text{cm}$	Ø mm x Height mm	Weight
82020	DI 2000	300	2.000	0,1-20	240 x 490	18
82028	DI 2800	950	2.800	0,1-20	240 x 600	24
82024	DI 4000	1.000	4.000	0,1-20	240 x 700	27
82026	DI 6000	1.000	6.000	0,1-20	240 x 1155	45
82031	DI 11000	1.900	11.000	0,1-20	363 x 850	70
82035	DI 15000	2.200	15.000	0,1-20	363 X 1100	90

Resins:

82120 1 resins of 7 litres of
 82124 1 resins of 20 litres of
 82131 1 resins of 50 litres of

82128 1 resins of 22 litres of
 82126 1 resins of 60 litres of
 82135 1 resins of 100 litres of



Digital conductivity meter

- Contro conductivity meter with digital 3 μ -digit LCD measured value display in $\mu\text{S}/\text{cm}$, manual temperature compensation, limiting value switch up to 30 $\mu\text{S}/\text{cm}$, acoustic and optical signals when the limiting value is exceeded.
- Included: Feedwater and deionized water hose with R3/4" connectors.
- Optionally supplied with solenoid valve or with potential-free contact.

82065 Conductivity meter Digital Control
 82066 Conductivity meter Digital Control 300 with potential – free contact
 82067 Conductivity meter Digital Control 300 d



Ultrapure water systems for laboratory use

System designed for the production of high purity water for laboratory use, higher purity than distilled or bidistilled water.

15-10 M Ω – TOC < 30 ppb

For laboratory dialy high purity water requirements from 10 to 150 Litres.

Characteristics:

- Microprocessor controlled with LCD display for the following functions:
 - Digital menu control.
 - Temperature in °C.
 - Temperature-compensated conductivity of the water issuing from the ion-exchange cartridge and/or of the ultrapure water produced.
 - Need to change the ion exchange cartridge.
 - Total operating hours of the UV-lamp (Only in UPW models)
 - Status of the operating modes such as, production, stand-by, flushing, disinfection.
 - RS 232 interface.
 - Error messages.
 - Self-cleaning of ion-exchange filter.
 - Button for start/stop of high purity water production.
 - Possibility of check or change of settings of the limiting conductivity value, recirculation intervals....
 - Button for Start/ stop UV lamp (only in UPW models).
- Recirculation pump control.
- Cleaning and disinfection menu.
- Solenoid valves for feedwater and discharge water.
- Production: From 3 L/Hour up to 40 L/Hour (for higher production consult, Industrial models up to 12.000 L/Hour).

Treated water characteristics:

- Conductivity: 0,067 – 0,10 μ S/cm.
- TOC value < 30 ppb.
- Retention of bacteria: 99%.
- Retention of particles: 99%.

Standard equipment:

- PACIFIC equipment for bench-top or wall mounting use.
- Reverse osmosis filter, with service life up to 3 years, 98% of salts retention.
- Ion-exchange membrane for residual salts retention and activated carbon for organic substances adsorption, to assure a resistivity of 15 M Ω /cm.
- UV lamp for photo-oxidation (only for UPW models), with germicidal purposes to destroy bacteria in the high purity water that have survived despite its high osmotic pressure. 185/254nm.



- Weight: 24/25 kg
- Dimensions: 372x330x603 mm.
- Consumption: 100 w.
- 230V/50 Hz.

	UP /UPW 3	UP/UPW 6	UP/UPW 12	UP/UPW 20	UP/UPW 40
Reference UP	884003	884006	884012	884020	884040
Reference UPW	884004	884007	884013	884021	884041
Production L/Hora	3	6	12	20	40
Price UP					
Price UPW					



Water storage tanks

- Easy cleaning with a large upper opening.
- Sterile venting filters to protect and CO₂ absorption (as option).
- Polyethylene tank ultrapure water resistant.
- Outlet tap with 24 cm dispensing height.
- Bench-top or wall mounting use.
- Connectors for a pressure pump or for a washing machine.

Accessories:

865030 30 Litres tank with sterile overflow

865035 30 Litres tank with sterile overflow and recirculation pump

865060 60 Litres tank with sterile overflow

865065 60 Litres tank with sterile overflow and recirculation pump

865002 Sterile venting filter and CO₂ absorption

865003 Sterile venting

865004 UV immersion lamp for 30 litres tank

865005 UV immersion lamp for 60 litres tank

895021 Disinfection tablets pack of

894011 Reverse osmosis (ion-exchange and adsorption)

220046 Reverse osmosis

894000 Pretreatment system
2 cartridge housings, plastic, 10".
Prefilter 5 µm/activated carbon and hardness-stabilizer cartridge

Ultrapure water systems

ASTM type 1 water production, for applications in biology, pharmacy, analytical,...: (HPLC, ICP, GC, AOX, TOC), cell culture, molecular biology...

18,2 MΩ – TOC < 10 ppb (Sin UV) TOC < 1-5 ppb (UV).

TOC monitoring and UV intensity control.

Characteristics:

- Microprocessor controlled with LCD display for the following functions:
 - Digital menu control.
 - Temperature in °C, PID sensor, accuracy 0,1°C.
 - Conductivity in μS/cm or MΩ, with Automátic Temperature Compensation for feed water and produced water.
 - Total operating hours for UV lamp (only for UV models).
 - RS 232 interface, for documentation and validation through a PC or printer connection (G.L.P.).
 - Error message.
 - Button START/STOP ultrapure water production.
- Recirculation pump control.
- Cleaning and disinfection menu.
- Solenoid valve for feedwater and discharge water.
- Production: 1,2 or 1,5 Litres/Hour.
- TOC and UV intensity monitoring (TOC models).

Treated water characteristics:

- Conductivity: 0,055 μS/cm
- Resistivity: **18,2 MΩ**
- TOC value < 2-5 ppb or < 10ppb (depends of models, see table).
- Bacteria content as CFU/ml: < 1.
- Endotoxins EU/ml: 0,005 (UF models)

Standard features:

- ULTRAPURE WATER SYSTEM GEN.PURE.
- FILTERSET, mixed cartridge activated carbon and adsorption resins, this combination effectively removes traces of organic substances and reduces the TOC value to 2-10 ppb.
- Ion exchange resins to remove remaining traces of inorganic substances.
- FINAL FILTER to remove bacteria and particles > 0,2 μm.

Optional:

- UV photo-oxidation: destroys bacteria and oxidises organic compounds. (included in UV and UV/UF models)
- Ultrafiltration: reduce el contenido de pirógenos a muy bajos niveles. (incluido en modelo UF y UF/UV).
- TOC monitoring and UV intensity in real time (included in UV-TOC and UV/UF-TOC models).

Feedwater:

- GENPURE prefers feedwater better than ASTM Type 2. This quality is provided by reverse osmosis, ion exchange or distillation equipments.
- Applications: AAS, IC, ICP, Molecular biology, PCR, IVF, monoclonal antibodies, trace analysis, HPLC, TOC analysis, cell culture.



Reference	Equipment	TOC value	Production	UV	TOC/UV control
882202	GENPURE	< 10 ppb	1,5 L/min.	NO	NO
882203	GENPURE UF	< 2 ppb	1,2 L/min	NO	NO
882205	GENPURE UV	< 10 ppb	1,5 L/min	YES	NO
882204	GENPURE UF/UV	< 2 ppb	1,2 L/min	YES	NO
882206	GENPURE UV-TOC	< 10 ppb	1,5 L/min	YES	YES
882207	GENPURE UV/UF-TOC	< 2 ppb	1,2 L/min	YES	YES

Accessories:

- 092000 Pretreatment system
- 092001 UV lamp
- 092005 Filter Set for GenPure
- 091003 0,2 micras sterile
- 092201 Disinfection
- 092202 Disinfection tablets pack
- 092207 Printer for GENPURE



Ultrapure water systems - Lab. micro

Reagent grade, type 1, fulfils the requirements for the most demanding laboratory uses. Ultrapure water systems for applications in biology, pharmacy, analysis ... (AAS, ICP, HPLC, GC, TOC, AOX), cell culture and in-vitro fertilization. Developed specifically for laboratories who need small volumes of high purity water.

Feedwater:

- Recommended conductivity: 0,055 $\mu\text{S}/\text{cm}$ (18,2 $\text{M}\Omega\text{cm}$).
- Micro-organisms: 1 CFU/ml.
- TOC: up to 3 ppb (81115) and up to 10 ppb (81112).
- Production: up to 0,5 L/minute.
- Particles: (0,2 micras) less than 1/1000.

Standard features:

- FILTERSET with cartridge made of natural PP material containing:
Activated carbon to remove organic substances. Ion-exchange resins (nuclear grade) to remove inorganic ions, and adsorber resins to remove traces of dissolved organic substances.
- Flexible removal dispenser with recirculation and 0,2 μm sterilizing filter.
- Microprocessor controlled.
- Wall mount or table top.
- Recirculation pump.

Optional components:

- UV photo-oxidation, irradiation wavelengths 185 and 254 nm.

Feedwater requirements:

- Water pretreated by ion-exchange, reverse osmosis or distillation. Recommended conductivity, 0,1-5 $\mu\text{S}/\text{cm}$. Feedwater temperature: 1-25°C. Feedwater pressure, 2-6 bar.

Digital menu control for the following parameters:

Digital LCD display to control and to inform about the following functions:

- LC-Display, with input keypad, for the display of all operating functions and measured values as well as error messages. Equipped with the following functions:
- Digital conductivity meter with automatic temperature compensation for monitoring feedwater and purified water.
- Individually adjustable limiting conductivity for feedwater and purified water.
- Timer program for intermittent switching of recirculating pump (interval-permanent operation)
- Display of temperature (in °C), conductivity of feedwater and purified water (in $\mu\text{S}/\text{cm}$), limiting conductivity and error messages.
- Disinfection menu.

Dimensions: 30x27x46 cm.

Weight: 15 Kg.

Voltage: 230V/50 Hz.



81112 MICRO.LAB

81115 MICROLAB-UV

Accessories:

91006 FILTERSET

91003 0,2 micras sterile

91102 Disinfection