

 **ION EXCHANGE**
Refreshing the Planet

LAB-Q
SPECTRA

**INSTANT PURE AND
ULTRA PURE WATER**
FOR MULTIPLE LAB APPLICATIONS



Ranges of Lab Water Purification System Type I, II & III equipped with latest features

PURE AND ULTRA PURE WATER FOR LABS

Ion Exchange is a pioneer of water treatment in India with a legacy spanning almost six decades. With sales, production and service footprints across the world, Ion Exchange is a premier company in total water and environment management. Our comprehensive technologies, products and services, enable our multidisciplinary teams of experts to cater not just to industries and municipalities but also to communities, institutions and homes.

Backed by state-of-the-art application laboratory, R&D centre, customer support service centers, and ISO certified manufacturing facilities we offer a wide range of technologies, processes and products that only a few companies in the world can provide.

Our close association with the pharmaceutical industry along with our technological expertise and R&D capabilities has enabled us to develop customized solutions to meet the industry's stringent requirement for high purity water treatment and distribution.

We introduce to you our INDION LAB-Q series of products which provide high purity water for multiple laboratory applications!

OUR STRENGTHS ARE



Expertise in
Water
Treatment



In House Manufacturing
Purification
Consumables like
Membranes and Resins



Wide
Service
Network

Lab Q range of products are developed in house by our R&D team which has more than 90% of components sourced from within India.

LAB-Q SPECTRA

LAB-Q ULTRA

Advanced Lab Water System

Lab-Q Spectra integrates multiple purification technologies to deliver pure and ultrapure water for various laboratory applications.

With its advanced monitoring & control scientist are assured of a consistent and continuous supply of laboratory-grade water.

Auto diagnostic feature helps customer to get prompt & timely service. It also estimates the efficiency of purification pack & records the daily usage.



UNIQUE FEATURES

INTEGRATED UNIT

Delivers Type 2 & Type 1 water from a single unit

Benefits:

Save cost on service
Save space

Tap to ultra pure

Benefits:

Total water solution

INTERACTIVE USER INTERFACE

Advanced touch screen display

Benefits:

Helps in easy menu navigation, data viewing, system control and action

SMART MONITORING

Continuous monitoring of water quality at different stages

Benefits:

Monitors the performance of purification packs
Avoids breakdown
Estimate cost of operation

AUTOMATION

Enables display and record of alarms

Benefits:

To ensure proper control & maintenance of the equipment.

ESS

Auto Sanitization

Benefits:

No chemical cleaning needed for Pre-RO components.

ON SITE VALIDATION

Meets good laboratory practices

Benefits:

Compliance to national and international norms

INSITU WATER BASED SANITIZATION

Avoids manual sanitization

Benefits:

Uninterrupted water supply

AUTO SANITIZATION MODULE

Periodic UV illumination

Benefits:

Maintains purity of the stored water in the tank

INNOVATIVE DISPENSING OPTIONS

Multiple dispensing options like remote, continus, volumetric or hands free

Benefits:

Flexibility to meet the user need

PATENTED CO₂ REMOVAL PROCESS

Enhances life of purification cartridges & addresses varied field conditions

With Electro De Ionization (EDI) Module

Lab Q Ultra EDI produces Type I and Type II pure water, which has very low total organic carbon (TOC) content, meeting the requirements of liquid chromatography and all spectroscopy methods, besides microbiological and molecular biology applications. It also meets ISO 3696, Type I standard.

Dispensing of ultra pure water is configured on the front panel whereas pure water is dispenses from the storage tank.



UNIQUE FEATURES

TEN STEP PURIFICATION PROCESS

Self generating EDI based

AUTOMATIC FLUSH DEVICE (AFD)

Ensures periodic cleaning of the system

ONLINE RESISTIVITY MONITORING

For product water quality

INTEGRATED UV SANITIZATION

UV module for reservoir

DRY RUN PROTECTION

With feed pressure switch

ESS

In built electrolytic auto sanitizer avoids chemical sanitization of pre-RO components

30 & 60 LITER RESERVOIR

With air vent filter

EASY DISPENSING

With one touch user interface

ELECTROPURE EDI BENEFITS

THIN-CELL TECHNOLOGY

Allows quality and higher efficiency

THIN-CONCENTRATE TECHNOLOGY

This design keeps the membrane surface clean and prevents fouling and scaling

NON-FOULING ELECTRODE TECHNOLOGY

A proprietary design prevents scaling in the electrodes. It also uses a special anode technology to limit the production of chlorine, which lengthens the life of the EDI module.

PURIFICATION PROCESS

- Depth Filtration
- Activated Carbon
- CO2 Removal
- Electrostatic Sanitization
- Reverse Osmosis
- Electro De Ionization (optional)
- 254 nm UV
- 185 & 254 nm UV
- Automatic Sanitization
- Deionization
- Ultra Filtration
- ACF, Soda lime based Air Vent

Delivers ASTM Type 2 & Type 1 Water

Keeping in mind the requirement of laboratories across various industries, Lab-Q Ultra delivers different grades of water for routine and critical lab applications.

Compact & ergonomic design saves laboratory table space and gels well with lab environment.

Automatic sanitization module, ESS, Insite sanitization & periodic recirculation eliminate the need for chemical sanitization and shut down.



UNIQUE FEATURES

ONLINE RESISTIVITY METRE

Displays product water quality for continuous monitoring

AUTOMATIC FLUSH DEVICE (AFD)

Ensures periodic cleaning of the system

INTEGRATED RECIRCULATION SYSTEM

Ensures consistent quality of water and reduces TOC to low levels (2-5 ppb)

DRY RUN PROTECTION

ensures protection of the pump when the inlet water is unavailable

INSTANT WATER DISPENSING

With single touch user interface

30 & 60 LITER CAPACITY

Meets variable volumetric requirement

ASM MODULE AIR VENT FILTER

A built-in UV, protective air filter filter and high grade tank material ensures sustained purity while in storage

OPTIONAL FLEXIBLE DISPENSING

Remote water dispenser offers dispensing at various angles & height

ELECTROLYTIC AUTO SANITISER

Ensures periodic sanitisation of upstream purifying filters

All our Lab-Q range of product can be validated at the site by our certificated service engineers



TECHNICAL SPECIFICATIONS

Lab-Q Range of Products comply with ASTM, ISO, NCCLS and US Pharmacopeia Water Quality Standards

	LAB-Q SPECTRA	LAB-Q ULTRA (EDI)	LAB-Q ULTRA
FEED WATER SPECIFICATIONS			
TDS	500 ppm max.	500 ppm max.	500 ppm max.
Fe, Mn	NIL	NIL	NIL
Free Chlorine	NIL	NIL	NIL
Silica	< 20 ppm	< 20 ppm	< 20 ppm
Inlet Pressure	0.1-2.0 Kg/cm ²	0.1-2.0 Kg/cm ²	0.1-2.0 Kg/cm ²
PRODUCT DIMENSIONS			
Unit Dimensions (WxHxD)mm	630x280x590	450x250x500	450x250x500
30/60 Ltr Storage Tank Dimensions	380x380x885	300x250x500	300x250x500
Weight	20 Kgs	15 Kgs	15 Kgs
Power Requirement	230V AC ± 10%	230V AC ± 10%	230V AC ± 10%
Power Consumption	80 Watts	80 Watts	80 Watts
Alkalinity / Hardness	200 ppm max	200 ppm max	200 ppm max

PERFORMANCE PARAMETERS		
	ASTM TYPE 2 WATER	ASTM TYPE 1 WATER
Flow Rate	10 LPH	1 - 1.5 l/min
Conductivity	< 0.1 µS/cm	0.054 µS/cm
Resistivity	10 MΩ.cm	18.2 MΩ.cm
Total Organic Level (TOC)	< 30 ppb	< 5 ppb*
Endotoxin Level	NA	< 0.01 Eu/ml
Particle > 0.22 µm	NA	< 1 per ml
Bacteria	NA	< 0.01 cfu/ml
Dnase/Rnase	NA	Nil

APPLICATION GUIDE		
ASTM Type 2/3	ASTM TYPE 2 WATER	ASTM TYPE 1 WATER
Lab Ware Rinsing	Buffers & pH solutions	HPLC mobile phase preparation
Autoclave	Microbiological culture media preparation	Blanks and sample dilution in GC, HPLC, AA or ICP-MS
Water Bath	Dissolution & dilution media preparation	Buffer & culture media preparation of cell culture
Cooling /Heat Exchange	In place of USP grade purified water	Reagent preparation for molecular biology applications
Feed For Type 1 Unit	Feed for Type 1 unit	-
Alternate to Distilled Water	Alternate to double distilled water	-

* TOC values achieved with feed water of less than 50 ppb.

To the best of our knowledge the information contained in this publication is accurate. Ion Exchange (India) Ltd. maintains a policy of continuous development and reserves the right to amend the information given herein without notice. Please contact our regional / branch offices for current product specifications.

INDION is the registered trademark of Ion Exchange (India) Ltd.



Commercial Water Solutions: Ion Exchange (India) Ltd. Ion House, Dr. E. Moses Road, Mahalaxmi, Mumbai 400011.
 Vashi Off: Ion Exchange (India) Ltd., Ion House, Plot No.2, Sector 18, Vashi, Navi Mumbai 400 705.
 Zero B Customer Care No.: 022 2788 1234 / 68486848 / 88791 42511 | Email: labq@ionexchange.co.in
 Websites: www.labwater.in | www.zerobonline.com