



**ION EXCHANGE**  
*Refreshing the Planet*



**INDION®**  
**LAB-Q ULTRA**  
WATER MAKER

**Instant pure & ultra pure water  
for multiple lab applications**





# About Ion Exchange

Ion Exchange : Asia's largest water & environment solutions provider

solutions for Home,  
Industries & Communities

Sales , Production & Service foot  
print across the globe & in India

Own Manufacturing capabilities

In house R&D capabilities

Pan India service infrastructure

Legacy spanning over five decades

Manufacturing facilities in India and abroad  
USFDA approved resins manufacturing plant at  
Ankleshwar, Gujarat

India's first state-of-the-art, completely integrated  
and automated Reverse Osmosis membrane  
manufacturing plant at Verna, Goa

In-house R&D since 1965

Recognized by Department of Scientific and  
Industrial Research (DSIR), New Delhi  
For Chemicals at Patancheru, Telangana  
For Engineered Products & Systems at Vashi,  
Maharashtra

Trained and competent service & application team  
Dedicated service team for each segment  
Centralized call center for customer service

 **ION EXCHANGE**  
*Refreshing the Planet*



**INDION®**  
**LAB-Q** **ULTRA**  
WATER MAKER

**INDION®**  
**LAB-Q**

Introducing the  
**INDION® – Lab Q Water Maker Series**  
for Multiple Lab Applications!





## Features

- Online resistivity meter- 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 (5 ppb)
- Dry run protection- ensures protection of the pump when the inlet water is unavailable.
- Instant water dispensing with single touch user interface
- Produces type 2 & type1 water from a single integrated unit to meet varied laboratory application
- Option of 30 & 60 liter reservoir to meet daily usage
- Optional flexible dispensing – remote water dispenser offers dispensing at various angles and height
- Electrolytic auto sanitizer – ensures periodic sanitization of upstream purifying filters
- High purity storage tank – a built- in UV protective air filter, filter and high grade tank material ensures sustained purity while in storage

## Advantages

- Tap water as source
- Compact and portable counter top model
- Low operating cost & requires minimum maintenance.

## Applications

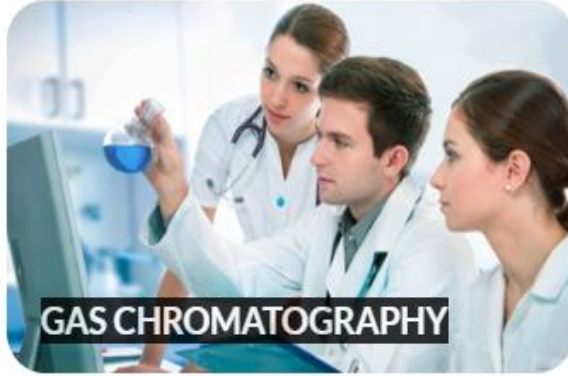
- Gas chromatography
- All spectroscopy methods
- Enzyme immunoassays
- HPLC (High performance liquid chromatography)
- ICP (inductively coupled plasma)
- AAS (Atomic absorption spectrophotometer)
- Clinical Research
- Inorganic trace analysis
- Buffer and media preparation
- Molecular biology
- Microbiological techniques



# APPLICATIONS



**DIAMOND CUTTING MACHINE**



**GAS CHROMATOGRAPHY**



**LASER CUTTING MACHINE**



**MOLECULAR BIOLOGY**



**TISSUE CULTURE LAB**



**WATER BATTERY INVERTOR**

# Ultrapure water production



- Ultrapure water production often has to be done in 2 steps

For example, from tap water or fresh groundwater, the water should first be de-mineralised by membrane filtration or ion exchange to reach the ultimate conductivity of 0.5  $\mu\text{S}/\text{cm}$ .

The de-mineralised water is then processed through a high performance Mixed Bed to get final resistivity of 18.2 M Ohm.



# SPECIFICATIONS



PREFERRED INSTALLATION	COUNTER TOP
PURIFICATION TECHNOLOGY	REVERSE OSMOSIS , UV, ION EXCHANGE RESIN, UF
INLET WATER TDS	500 PPM
TYPE OF PURIFIER	ONLINE
PURIFICATION CAPACITY	10 LITRES/HR
PURIFICATION STAGES	8 STAGES LAB Q SF ,LAB Q ACF LAB Q CLEAR, ,LAB RO ,UV 18, LAB ION, LAB Q UF, POU MICRON FILTER.
CERTIFICATION	FOR CLINICAL GRADE WATER
INDICATIONS /FEATURES	WATER QUALITY INDICATOR, CUSTOMIZED FITRATION
PERCENTAGE RECOVERY	25-30

# LAB Q ULTRA- TYPE I WATER MAKER

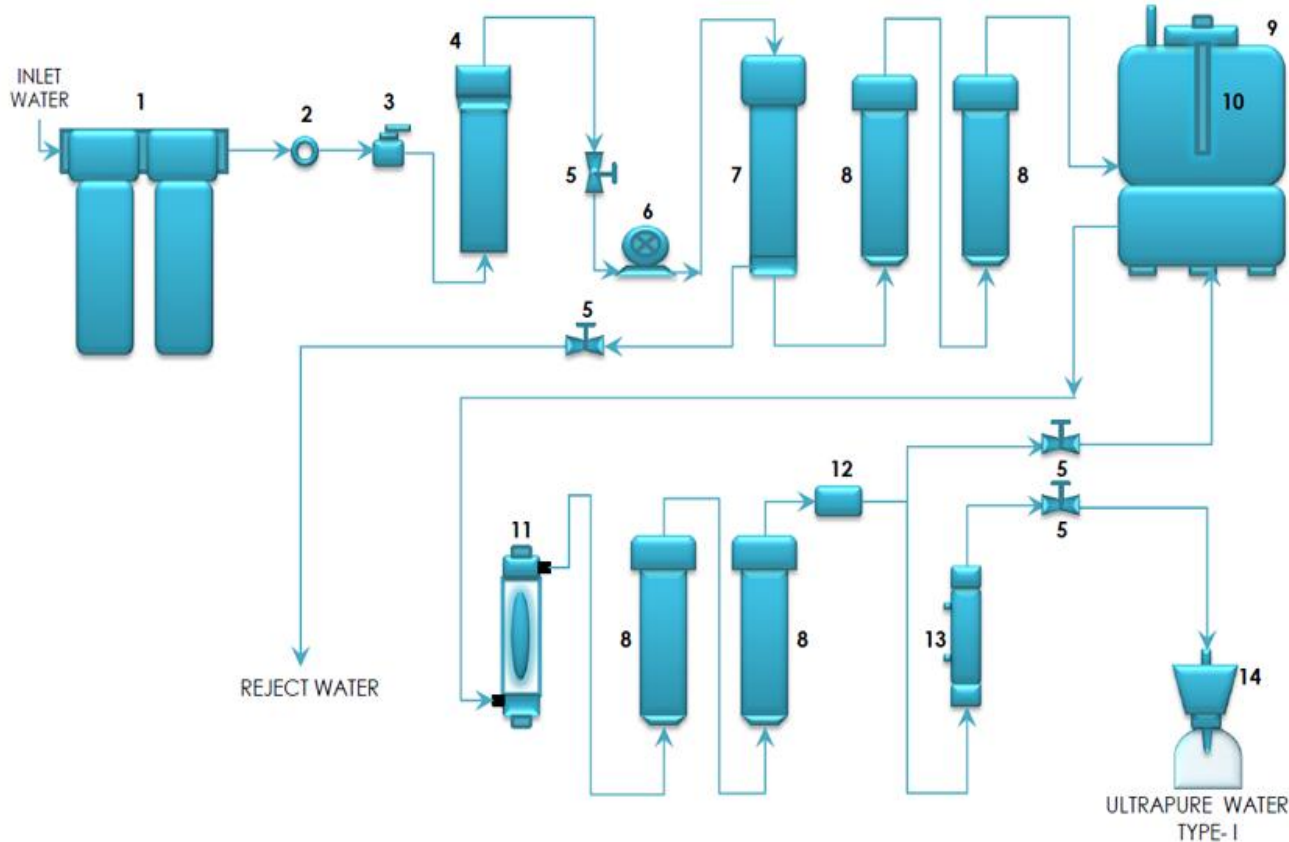


CAPACITY	10 LPH
Nominal flow to storage tank	10 LPH (litre per hour)
Dispensing Flow	1 – 1.5 LPM (litre per minutes)
Pure Water resistivity	18.2 MΩ
Pure Water conductivity	0.055 μS/cm
Endotoxin Level	< 0.001 EU/ml
Particle > 0.22 μm	< 1 per ml
Bacteria	< 1cfu /ml
Total Organic Carbon (TOC)	< 5 ppb
Unit Dimensions W X D X H (in mm)	450 X 250 X 440
Storage Tank Dimensions W X D XH (in mm)	380 X 380 X 595
WEIGHT	15 KG
POWER CONSUMPTION	80 WATTS

PRODUCT PERFORMANCE



# FLOW SCHEMATIC

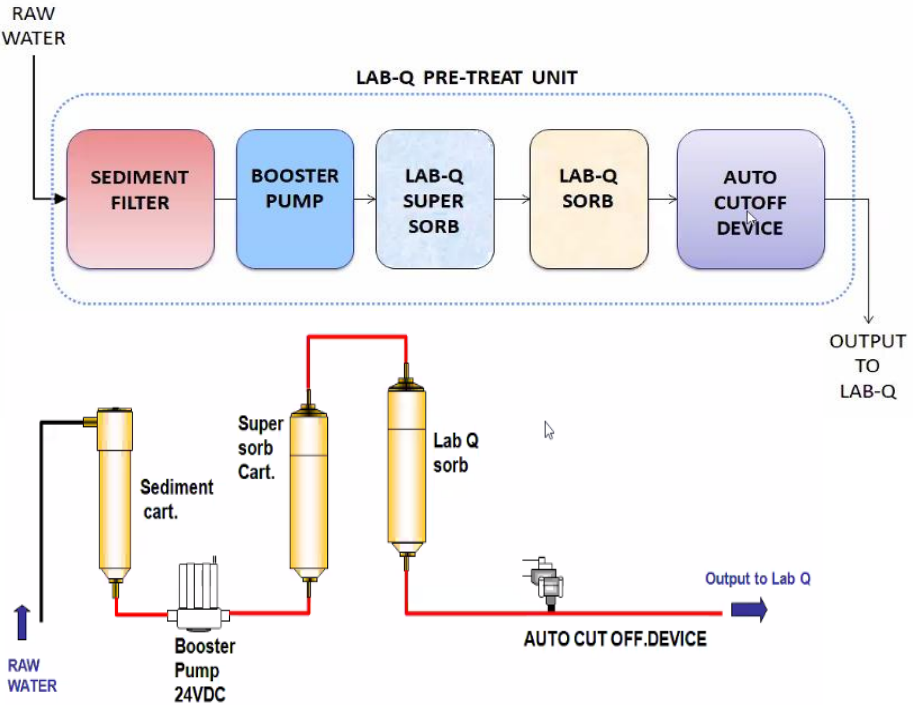


- 1 – PRE-FILTRATION MODULE
- 2 – EPS CELL
- 3 – LOW PRESSURE SWITCH
- 4 – LAB-Q CLEAR FILTER
- 5 – SOLENOID VALVE
- 6 – BOOSTER PUMP
- 7 – LAB-Q RO MEMBRANE
- 8 – LAB-Q SUPER CARTRIDGE
- 9 – WATER TANK
- 10 – UV LAMP-254 NM FOR TANK
- 11 – LAB-Q UV-18
- 12 – RESISTIVITY SENSOR
- 13 – LAB-Q UF FILTER
- 14 – POINT OF USE CAPSULE FILTER

# LABQ PRE – TREATMENT



## BLOCK DIAGRAM OF LAB-Q PRE – TREATMENT UNIT



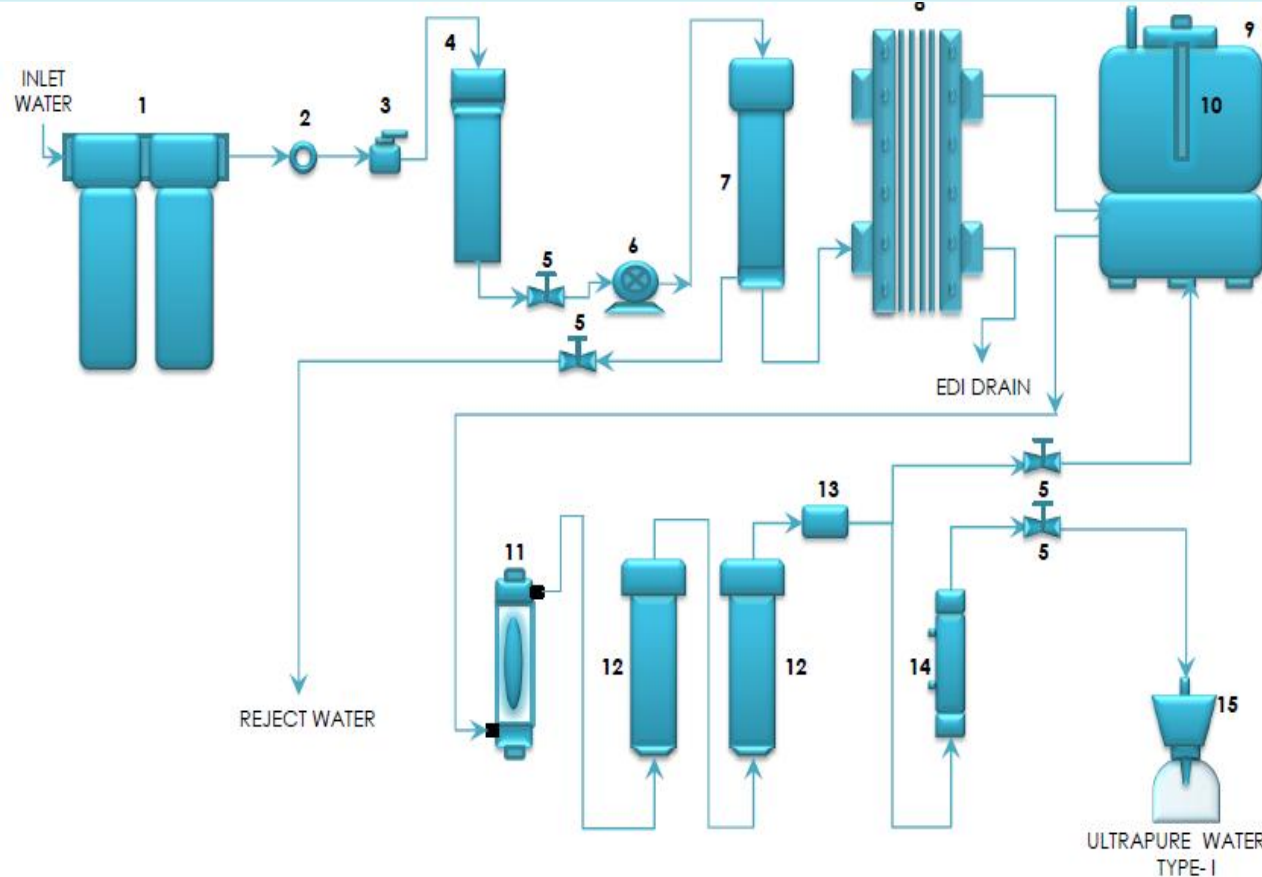
### LAB-Q PRE-TREAT



### INDION® LAB-Q ULTRA WATER MAKER



# FLOW SCHEMATIC (EDI)



- 1 – PRE-FILTRATION MODULE
- 2 - SANITIZING CELL
- 3 - LOW PRESSURE SWITCH
- 4 – LAB-Q CLEAR FILTER
- 5 – SOLENOID VALVE
- 6 – BOOSTER PUMP
- 7 – LAB-Q RO MEMBRANE
- 8 - EDI MODULE
- 9 - WATER TANK
- 10 – UV LAMP-254 NM FOR TANK
- 11 – LAB-Q UV- 18
- 12 – LAB-Q SUPER CARTRIDGE
- 13 - RESISTIVITY SENSOR
- 14 – LAB-Q UF FILTER
- 15 – POINT OF USE CAPSULE FILTER

# SPECIFICATIONS OF LAB Q ULTRA – TYPE I WATER MAKER



No	PARAMETERS	SPECIFICATIONS
1	COMPACT AND TABLE TOP MODEL	YES
2	INTEGRATED SYSTEM OF TYPE I AND II WATER MAKER	YES
3	PRODUCT FLOW	10 LPH
4	DISPENSING FLOW	1 -1.5 LPM
5	IONIC REJECTION	> 99%
6	IN BUILT SANITIZATION FOR PRE RO COMPONENTS	YES
7	DUAL UV LAMP	185 NM AND 254 NM
8	PRODUCT WATER TANK STORAGE	30 L
9	AUTO FLUSH DEVICE	YES
10	DRY RUN PROTECTION	YES
11	PRODUCT WATER CONDUCTIVITY	0.055 MICRO
12	PRODUCT WATER RESISTIVITY	18.2 MEGAOHMS
13	ENDOTOXINS	< 0.25 EU/ML
14	BACTERIA	< 0.1 CFU/ML
15	TOTAL ORGANIC CARBON	< 50 PPB
16	NUCLEASE FREE – DNASE / RNASE FREE WATER	CERTIFIED
17	DSIR APPROVED R & D	YES
18	ISO CERTIFIED COMPANY	YES

# Accessories



60L

30L

## Contamination Free Water Tank

5 different water level sensors ,Recirculation pump  
UV lamp and vent filter to maintain consistent purity  
of stored water Overflow protection tube to eliminate  
the risk of flooding PE material ensures low  
Extractives Tank available in 30 & 60 liters



## Dispensing Gun

Remote water dispensing units are placed  
in recirculation loop and can be located up to 3  
meters from the main unit  
Dispensers are designed to accommodate  
all commonly used glassware



## UV Lamp for Water Tank



## Vent Filter

## UV Lamp & Vent Filter

UV Lamp & Vent Filter for contamination  
free water



# Accessories



## Pre Filter Modules

10" pre treatment module contains sediment filter & activated carbon filter, which removes particulate matter and chlorine thereby enhancing the life of internal components



## Point of Use Capsule Filter

At the point of dispensing a 0.22 micron membrane filter eliminate particles and bacterial contamination which may interfere with specific application.



## Pre Filter RO

In case of higher TDS above 500 PPM, specially customized designed RO can be fitted to make the water more clear & thereby enhancing the life of Internal components

# Authorized Dealer

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