G1 Aqua
R-Tech Systems & Services

2026 edition

Product catalogue

RO plants, water chillers, treatment systems, plant components and chemicals



500 LPH RO Water Treatment Plant (FRP)



2000 LPH RO Water Plant (FRP)



Stainless Steel RO Plant (2000 LPH)



Water Cooler with Hot, Cold and Normal Water

Made in Lucknow since 2004
ISO 9001:2015

+91 94150 22697
g1aqua.com

About G1 Aqua

G1 Aqua is the brand of R-Tech Systems & Services, Lucknow. Since 2004 we have designed, built and serviced water treatment plants for factories, hospitals, hotels, schools, housing societies and homes.

Every plant is sized to the water it will treat. Send us a TDS reading or a lab report and we will tell you what you need, and what you do not.

22
years in business

ISO 9001:2015
certified

28
products

India and Nepal
delivery and service



ISO 9001:2015
Quality management



ISO 13485:2016
Medical devices management

How an order works

1. **Tell us about your water**
   Source, daily need and a TDS reading or lab report, on WhatsApp or by phone.
2. **We size it and quote**
   The right plant for your water, with the price and delivery time.
3. **Built in Lucknow**
   Made and tested in our workshop, then delivered across India and Nepal.
4. **Installed and serviced**
   Installation, commissioning and service on request.

Inside

- Commercial RO plants — 4 products — 3
- Water treatment systems — 3 products — 5
- Chillers, coolers and machines — 5 products — 6
- Domestic RO purifiers — 1 product — 9
- Plant components — 5 products — 9
- Treatment chemicals and media — 5 products — 12
- Water testing devices — 3 products — 14
- Sewage and effluent plants — 2 products — 16

Commercial RO plants

Plants from 500 to 3,000 litres an hour, in FRP or stainless steel.



Stainless Steel RO Plant (2000 LPH)

A 2,000 litre-per-hour reverse osmosis plant with a stainless steel frame, vessels and pipework. Made for food, dairy and pharma units, and anywhere the plant has to stay clean and free of rust.

- Makes 2,000 litres an hour, about 16,000 litres in an 8-hour shift.
- Frame, filter vessels and pipework are SS 304, so the plant can be washed down and does not rust.

Capacity	**2,000 LPH**	Material	**SS 304**
Operation	**Automatic**	Purification	**Reverse osmosis**
Pre-treatment	**Sand filter, carbon filter, anti-scalant, 5-micron cartridge**	Membranes	**4040 or 8040, sized to your water**

Photos and details
Scan with your phone camera



500 LPH RO Water Treatment Plant (FRP)

A 500 litre-per-hour reverse osmosis plant with FRP pre-treatment vessels. It suits factories, hospitals, schools, hotels and housing societies that need drinking-quality water from a borewell or municipal supply.

- Treats 500 litres an hour, which is about 4,000 litres in an 8-hour shift.
- The sand and carbon vessels are FRP, so they do not rust in constant contact with water.

Capacity	**500 LPH**	Purification	**Reverse osmosis**
Vessel material	**FRP**	Membranes	**2 × 4040**
Water recovery	**60–70%, depending on feed water**	Feed water TDS	**Up to 2,000 ppm (designed to your water report)**

Photos and details
Scan with your phone camera



2000 LPH RO Water Plant (FRP)

A 2,000 litre-per-hour RO plant with FRP filter vessels and a panel of gauges and meters, so you can see at a glance that it is running right. Sized for factories, hospitals, colleges and large housing societies.

- Makes 2,000 litres an hour, about 16,000 litres in an 8-hour shift.
- Flow meters, pressure gauges and a TDS meter on the panel show output, pressure and water quality while it runs.

Capacity	**2,000 LPH**	Vessel material	**FRP**
Water recovery	**65–70%**	Purification	**Reverse osmosis**
Pre-treatment	**Sand filter, carbon filter, anti-scalant, 5-micron cartridge**	Membranes	**4040 or 8040, sized to your water**

Photos and details
Scan with your phone camera



Commercial RO Plant (3000 LPH, FRP)

A 3,000 litre-per-hour RO plant with FRP vessels, for places that serve drinking water to hundreds of people a day: hotels, hospitals, malls, schools and apartment blocks.

- Makes 3,000 litres an hour, about 24,000 litres in an 8-hour shift.
- FRP vessels and a simple control panel keep running costs and upkeep low.

Capacity	**3,000 LPH**	Vessel material	**FRP**
Water recovery	**60–65%**	Purification	**Reverse osmosis**
Pre-treatment	**Sand filter, carbon filter, anti-scalant, 5-micron cartridge**	Membranes	**4040 or 8040, sized to your water**

Photos and details
Scan with your phone camera

Water treatment systems

Iron removal filters, softening plants and desalination plants.



Iron Removal Filter

An automatic filter that takes iron and manganese out of borewell water, so it stops leaving yellow stains and a metallic taste. Treats up to 450 litres an hour with up to 10 ppm of iron; bigger sizes are made to order.

- Brings iron from as high as 10 ppm down below the 1 ppm drinking-water limit in IS 10500.
- Air oxidises the iron, and a sand bed with a catalytic MnO2 layer traps it.

Capacity	**450 LPH**	Removes	**Iron and manganese**
Iron in raw water	**Up to 10 ppm**	Operation	**Automatic backwash**
Technology	**Air oxidation, sand bed with MnO2 layer**	Vessel material	**Stainless steel (FRP on request)**

Photos and details
Scan with your phone camera

Seawater Desalination Plant

A seawater reverse osmosis plant that turns sea water, or very salty borewell water, into safe drinking water. Built to order for coastal towns, resorts, ports and industries.

- Treats seawater with 35,000–45,000 ppm of dissolved salts and brings it down to drinking-water levels.
- High-pressure lines are corrosion-resistant stainless steel, made for constant contact with salt water.

Purification	**Seawater RO**	Feed water TDS	**Up to 45,000 ppm**
Operating pressure	**55–70 bar**	Water recovery	**35–45%**
Capacity	**Built to your daily need**	Pre-treatment	**Multimedia filter, chemical dosing, cartridge filter**

Photos and details
Scan with your phone camera

Water Softening Plant



Ion-exchange water softeners that remove the calcium and magnesium in hard water, so pipes, boilers, geysers and fittings stop scaling up. Single and twin automatic models, in FRP, mild steel or stainless steel.

- Brings hardness down to under 5 ppm, which stops white scale on taps, tiles, geysers and boilers.
- Regenerates with ordinary salt. Twin automatic softeners give soft water round the clock and use about 25% less salt.

Technology	**Ion exchange**	Operation	**Manual or automatic**
Output hardness	**Under 5 ppm**	Regeneration	**Common salt (brine)**
Purification	**Cation exchange resin, sodium form**	Design principle	**Co-current or counter-current**

Photos and details
Scan with your phone camera

Chillers, coolers and machines

Water chillers and coolers, a coin-operated water vending machine and a pouch packing machine.

Water Chiller, 2000 Litres (SS)



A 4-ton stainless steel water chiller for 2,000 litres of water. It keeps a steady supply of cold water for packaged water plants, canteens, dairies and factory processes.

- 4 tons of refrigeration (about 14 kW) for 2,000 litres of water.
- Stainless steel tank and body: easy to clean, and does not rust in wet areas.

Cooling capacity	**4 TR**	Storage	**2,000 L**
Material	**Stainless steel**	Refrigerant	**R22**
Controls	**Digital thermostat**	Power supply	**Three phase, 415 V**

Photos and details
Scan with your phone camera



Water Vending Machine (Coin Operated)

A coin-operated water vending machine, often called a water ATM, that fills people's bottles with a set amount of purified water for each coin. The LCD screen shows the amount and status, and the machine runs unattended.

- Coin operated, with a set volume of water for each coin that you can change.
- LCD screen shows the amount dispensed and the machine's status.

Payment	**Coin**	Display	**LCD**
Dispensing	**Set volume per coin**	Operation	**Self-service, unattended**
Material	**Stainless steel body**	Power supply	**230 V, single phase**

Photos and details
Scan with your phone camera



Automatic Water Pouch Packing Machine

An automatic form-fill-seal machine that makes, fills and seals drinking water pouches from a roll of film. It packs 1,500–2,500 pouches an hour, in sizes from 200 to 500 ml.

- Packs 1,500–2,500 pouches an hour, from 200 ml to 500 ml.
- Forms, fills, seals and cuts in one continuous run, with a digital pouch counter.

Output	**1,500–2,500 an hour**	Pouch size	**200–500 ml**
Operation	**Automatic FFS**	Packing film	**Heat-sealable LDPE film**
Contact parts	**Food-grade stainless steel**	Controls	**PLC, temperature controllers, pouch counter**

Photos and details
Scan with your phone camera



Water Cooler with Hot, Cold and Normal Water

A stainless steel water cooler with three taps for hot, cold and normal water. It stores 100 litres and cools 50 litres an hour, enough for busy offices, factory floors, schools and waiting halls.

- Three taps: cold for drinking, hot for tea and soups, and normal for those who want neither.
- Stores 100 litres and cools 50 litres an hour, about 200 glasses.

Storage	**100 L**	Cooling capacity	**50 L an hour**
Taps	**Hot, cold, normal**	Material	**Stainless steel**
Cold water	**About 8–12 °C**	Hot water	**About 80–90 °C**

Photos and details
Scan with your phone camera



Industrial Water Chiller

A stainless steel water chiller for factories, labs and food units that need a steady supply of chilled water. It cools 2,000 litres, runs on a 220 V supply, and has a control panel for setting the exact temperature.

- Chills 2,000 litres of water and holds it at the temperature you set.
- Runs on a normal 220 V supply, so most sites need no new electrical work.

Cooling capacity	**2,000 L**	Power supply	**220 V**
Material	**Stainless steel**	Controls	**Control panel with temperature setting**
Weight	**About 350 kg**	Installation and commissioning	**Available on request**

Photos and details
Scan with your phone camera

Domestic RO purifiers

A home RO purifier with a 7 to 14 litre tank.



Home RO Water Purifier (Mineral+)

A wall-mounted RO purifier for homes, with a 7–14 litre storage tank and a mineral cartridge that adds back calcium and magnesium for better taste. Pumped and non-pumped models are available.

- Stores 7–14 litres of purified water, enough for a family's drinking and cooking.
- The mineral cartridge adds back calcium and magnesium, so RO water does not taste flat.

Storage	**7–14 L**	Purification	**RO + minerals**
Feed water TDS	**Up to 2,000 ppm**	Filtration stages	**Sediment, carbon, RO membrane, post-carbon, mineral**
Purification rate	**About 12–15 litres an hour**	High-pressure pump	**Booster pump on pumped models**

Photos and details
Scan with your phone camera

Plant components

Pressure vessels, multiport valves, flow meters, dosing pumps and membrane housings.



FRP Pressure Vessel

Fibreglass-reinforced (FRP) pressure vessels for sand filters, carbon filters, softeners and iron removal filters. Light, rust-free and quick to install, in sizes from small home filters to large plant vessels.

- A polyethylene liner wound with fibreglass and resin: it cannot rust and weighs a fraction of a steel vessel.
- Rated for 150 psi (about 10 bar) working pressure, the standard for water filter vessels.

Material	**FRP, PE liner**	Working pressure	**150 psi (10 bar)**
Size	**8–48 inch dia.**	Construction	**Polyester or vinylester**
Connection	**2.5 or 4 inch top; top and bottom on large sizes**	Max water temperature	**49 °C**

Photos and details
Scan with your phone camera



Multiport Valve (PVC)

Multiport valves that let one handle run a filter or softener through service, backwash and rinse. Manual and automatic models, top-mount and side-mount, in several sizes.

- One handle replaces a set of separate valves, so backwashing is a simple turn.
- Corrosion-resistant body and tight seals that do not leak under normal filter pressure.

Material	**PVC**	Operation	**Manual or automatic**
Size	**1, 1.5 and 2 inch**	Mounting	**Top mount or side mount**
Valve positions	**Service, backwash, rinse, drain, closed**	Working pressure	**Up to about 6 bar**

Photos and details
Scan with your phone camera



Digital Water Flow Meter (SS, 4-6 inch)

Stainless steel positive displacement flow meters with a digital display, for 4–6 inch lines. They measure flow accurately even when it pulses or changes, which makes them a good fit for batching and plant monitoring.

- Positive displacement measurement: accurate and repeatable across the whole range.
- Handles up to 25 bar and is not thrown off by pulsating flow.

Size	**4–6 inch**	Material	**Stainless steel**
Display	**Digital**	Measuring principle	**Positive displacement**
Working pressure	**Up to 25 bar**	Signal output	**Pulse output on request**

Photos and details
Scan with your phone camera



Electronic Dosing Pump (up to 5 LPH)

Electronic diaphragm dosing pumps that add a small, steady amount of chemical to a water line: anti-scalant before RO membranes, chlorine for disinfection, or acid and alkali for pH correction. Up to 5 litres an hour.

- Doses up to 5 litres an hour, adjustable down to a small fraction of that.
- The same volume with every stroke, so the chemical strength in your water stays steady.

Flow rate	**Up to 5 LPH**	Working pressure	**Up to 7 bar**
Power supply	**230 V**	Technology	**Solenoid diaphragm**
Dose adjustment	**Stroke rate, 0–100%**	Material	**Mild steel body, PP pump head**

Photos and details
Scan with your phone camera



RO Membrane Housing (SS)

Stainless steel housings that hold the RO membrane in small commercial plants up to about 100 litres an hour. Rated for 200 psi working pressure, with separate outlets for clean water and reject.

- Stainless steel body, rated for up to 200 psi working pressure.
- Leak-proof end caps and seals that hold the membrane firmly in place.

Working pressure	**Up to 200 psi**	Material	**Stainless steel**
Capacity	**Up to 100 LPH**	Membrane size	**2.5 or 4 inch (2521, 2540, 4021)**

Photos and details
Scan with your phone camera

Treatment chemicals and media

Anti-scalant, activated carbon, anthracite, activated alumina and manganese dioxide.



Photos and details
Scan with your phone camera

Manganese Dioxide (MnO2) Filter Media

Granular manganese dioxide media for iron removal filters. It speeds up the oxidation of dissolved iron and manganese so they can be filtered out, leaving clear water without yellow stains or a metallic taste.

- Removes dissolved iron and manganese, and helps with the rotten-egg smell of hydrogen sulphide.
- Acts as a catalyst, so it is not used up quickly and lasts for years with regular backwash.

Removes	**Iron, manganese**	Form	**Granules**
Particle size	**0.4–1.2 mm**	Packing	**25 kg bag**
Grade	**Water treatment grade**		



Photos and details
Scan with your phone camera

Activated Alumina Balls (Fluoride Removal)

Activated alumina balls, 2–5 mm, used as a filter media to remove fluoride and arsenic from drinking water. They suit homes, hand pumps and community filters, and can be regenerated and reused.

- Strongly prefers fluoride over other ions, so it removes fluoride even from water with other salts.
- Also removes arsenic, a common problem in some groundwater.

Removes	**Fluoride, arsenic**	Particle size	**2–5 mm**
Form	**Spherical balls**	Contact time	**At least 5 minutes**
Regeneration	**Caustic soda, then dilute acid**	Packing	**25 kg bag**



RO Anti-Scalant (Liquid)

A liquid anti-scalant dosed into RO feed water to stop hardness and silica from forming scale on the membranes. It keeps output steady, cuts cleaning and makes membranes last longer.

- Stops calcium, magnesium and silica scale from building up on RO membranes.
- Keeps output and pressure steady between cleanings.

Form	**Liquid**	Grade	**Technical grade**
Typical dose	**2–5 ppm**	Packing	**25 kg and 50 kg cans**
Made in	**India**		

Photos and details
Scan with your phone camera



Anthracite Filter Media

Graded anthracite coal granules used as the top layer in dual-media filters. They hold more dirt than sand alone, so filters run longer between backwashes and lose less pressure.

- Removes suspended particles, cloudiness and some organic matter.
- Lets a filter run longer between backwashes, with less pressure loss.

Form	**Granules**	Particle size	**0.8–1.6 mm**
Packing	**25 or 50 kg bags**	Removes	**Suspended solids, turbidity**

Photos and details
Scan with your phone camera



Powdered Activated Carbon (PAC)

Fine, black powdered activated carbon that removes colour, odour, taste and organic matter from water and wastewater. Supplied in 25 kg HDPE bags, with moisture below 5%.

- Removes colour, bad taste and odour, and many dissolved organic compounds.
- Fine powder that mixes easily into water as a slurry and works fast.

Form	**Powder**	Packing	**25 kg HDPE bag**
Moisture	**Under 5%**	Iodine value	**About 800 mg/g**
Removes	**Colour, odour, taste, organics**		

Photos and details
Scan with your phone camera

Water testing devices

TDS and pH meters, and a water electrolyzer.



Water Electrolyzer (Water Test Kit)

A simple electrolysis kit that shows the difference between tap water and purified water: dissolved impurities turn the water cloudy and coloured in a minute or two. Popular with RO dealers for demonstrations.

- Plug in, dip the electrodes, and see the water change colour in a minute or two.
- Side-by-side tests make the difference between raw and RO water easy to see.

Material	**PVC**	Operation	**Manual**
Power supply	**230 V, single phase**	Electrodes	**Two metal electrodes**

Photos and details
Scan with your phone camera



Digital TDS Meter (Pen Type)

A pocket TDS meter that shows the total dissolved solids in water within seconds. Use it to check tap or borewell water, see whether a purifier is working, or decide what kind of purifier you need.

- Reads 0–2,000 ppm in steps of 1 ppm, on a clear digital screen.
- Dip, wait a few seconds, read. No strips or charts.

Measuring range	**0–2,000 ppm**	Form	**Pen type**
Resolution	**1 ppm**	Display	**Digital LCD**
Accuracy	**±2%**	Auto power-off	**After 10 minutes**

Photos and details
Scan with your phone camera



Digital pH Meter (Pocket Type)

A pocket digital pH meter with a glass electrode and a large LCD. It tells you how acidic or alkaline water is in seconds, without colour charts or test strips.

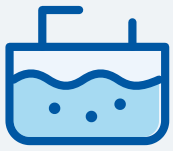
- Covers the full 0–14 pH scale and gives a reading in seconds.
- Sensitive glass electrode and a large, clear LCD.

Measuring range	**0–14 pH**	Form	**Pocket type**
Resolution	**0.01 pH**	Weight	**About 100 g**
Display	**LCD**	Electrodes	**Glass electrode**

Photos and details
Scan with your phone camera

Sewage and effluent plants

Sewage and effluent treatment plants for industrial sites.



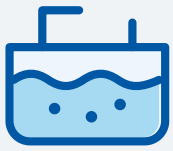
Photos and details
Scan with your phone camera

Sewage Treatment Plant (STP)

Sewage treatment plants for housing societies, hotels, hospitals, schools and factories. They clean wastewater so it can be reused for flushing, gardening and cooling towers, or discharged within the pollution control board's limits.

- MBBR, SBR, FAB, MBR or constructed wetland, chosen to suit your space, load and budget.
- Treated water can go back into use for flushing, gardening, floor washing and cooling tower make-up.

Technology	**MBBR, SBR, FAB, MBR**	Capacity	**From 10 KLD**
Treated water use	**Flushing, gardening**	Construction	**RCC, or packaged steel or FRP units**
Operation	**Automatic control panel**	Sludge handling	**Drying beds or filter press**



Photos and details
Scan with your phone camera

Effluent Treatment Plant (ETP)

Effluent treatment plants that clean industrial wastewater to the discharge limits set by the Central and State Pollution Control Boards. Each plant is designed from your effluent's test report.

- Physical, chemical, biological and filtration stages, combined to suit what your process puts in the water.
- Designed to meet your State Pollution Control Board consent, so your unit can discharge or reuse the water.

Capacity	**From 5 KLD**	Discharge standard	**CPCB / SPCB limits**
Technology	**Chemical and biological**	Pre-treatment	**Screening, oil and grease trap, equalisation**
Treated water use	**Discharge, or reuse with added stages**	Sludge handling	**Drying beds or filter press**

Treatment chemicals and media

Supplied in bags, cans or drums, with help working out the dose. Ask for grade and packing.

Chemical	Form	What it does
Coagulants	Powder, lumps or liquid	Fine dirt in water carries a charge that keeps the particles apart. A coagulant such as alum cancels it, so they stick together and settle.
Poly Aluminium Chloride PAC	Powder or liquid	A stronger, quicker coagulant than alum. It works over a wider pH range and leaves less sludge.
Flocculants Polyelectrolyte	Powder or liquid	Long-chain polymers that pull small clumps into big, heavy flakes that sink fast.
Activated Carbon Powder PAC	Powder, 25 kg bags	A fine black powder full of tiny pores that soak up colour, smell and bad taste.
Anthracite	Granules	Hard coal granules that sit on top of sand in a filter. They catch the bigger dirt first, so the filter runs longer between backwashes.
Manganese Dioxide MnO_2	Granules	Dark granules that turn dissolved iron and manganese into solid specks the filter can hold back.
Activated Alumina Balls	Balls, 2–5 mm	White, porous balls that grab fluoride and arsenic as water flows through. They can be regenerated and used again.
Ion Exchange Resins	Beads	Tiny plastic beads that swap unwanted ions in water for harmless ones. They are the heart of softeners and DM plants.
Cation Exchange Resins	Beads	Beads that pull out calcium and magnesium, the cause of hardness, and give back sodium. Recharged with common salt.
Anion Exchange Resins	Beads	Beads that take out chloride, sulphate, nitrate and silica. Paired with cation resin, they make DM water.
Anti-Scalant	Liquid	Dosed in tiny amounts before RO membranes. It keeps hardness and silica dissolved, so they cannot form scale.
Corrosion Inhibitors	Liquid	They lay a thin film on metal, so the water in boilers, cooling towers and pipes does not eat it away.
Chlorine	Liquid or bleaching powder	The standard way to kill germs in drinking water. A small leftover amount keeps the water safe in the tank.
Hydrogen Peroxide H_2O_2	Liquid	A strong oxidiser that kills germs and clears the rotten-egg smell. It breaks down into just water and oxygen.
Biocides	Liquid	They kill and control bacteria, algae and slime in cooling towers, RO plants and process water.
Antifoams	Liquid	They knock down foam in aeration tanks, cooling towers and process lines, so pumps and tanks work properly.
Enzyme Inhibitors	Liquid	They slow down unwanted biological activity, such as slime build-up, in industrial water and wastewater systems.

G1 Aqua
R-Tech Systems & Services

Tell us about your water

Send your water source and how much you need a day. We will suggest the right plant and send a quote.

Scan to chat on WhatsApp

Scan to see every product

Call	+91 94150 22697, +91 70076 29445
WhatsApp	+91 70076 29445
Email	ramendralko@gmail.com
Website	g1aqua.com
Visit	41B kh, Jankipuram Garden, Sector D, Jankipuram, Lucknow, Uttar Pradesh 226021, India