

# Cloud RO



Cloud is a water company developing connected filtration technology that allows users to track water quality from their smartphone. At Cloud our goal is to provide peace of mind and drinking water that is clean, toxin free, and nutrient rich.

Installed in the counter space under your sink, Cloud RO delivers perfectly clean, perfectly alkaline water in a compact, user friendly design that is chock-full of sensor-tech. It connects to the Cloud app to report real-time water quality and consumption trends. Replacement filters are recommended when you need them, not on some arbitrary monthly cadence.

For those of you who just want to know the overview, we have provided a TL;DR summary below.



## TL;DR Summary

### FILTRATION TECHNOLOGY

Multi-stage reverse osmosis filtration with an integrated alkaline post filter. The post filter adds calcium, magnesium, potassium, sodium and trace minerals. These healthy minerals naturally elevate the pH, leaving the water alkaline.

### FILTER REPLACEMENT

Based on usage. Water quality and gallons filtered determine replacement cadence. Typical replacement cadence for a family of four ~9-12 months.

### COST

Device \$750, Replacement Filters \$100-\$200

Cloud RO recently received NSF 58 certification for complete system performance. Cloud RO posted industry leading results with a 98% TDS reduction rate, and low 1:1 waste ratio.

More information about each filtration stage is below, and please don't hesitate to followup with any additional questions.



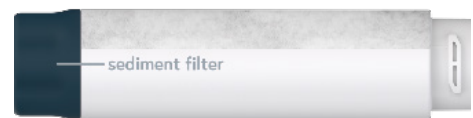
# Filter Specs

Regularly replacing the filter stages ensures perfectly clean water every single time. Cloud RO features a user friendly filter replacement process so you can quickly and easily switch out those spent filters with new ones. Connect your device to the Cloud app and we will auto-ship your filter replacements when your family needs them, not on some arbitrary timeline. For reference, Cloud filters typically need to be changed 1-2 times per year with an average annual cost of \$200.

Curious about what goes into each filter? These handy charts are for you .

## Sediment Filter

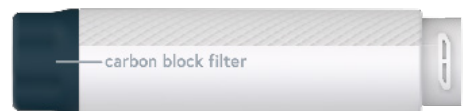
This 5 micron polypropylene filter traps dirt, rust and larger particles suspended in your tap water. Think of this filter stage like a coffee filter, any large particles get caught up and the water passes through to the next filtration stage.



5 Micron Filtration	Advanced Polypropylene	Long Lasting Construction	NSF 42 Standard
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## Carbon Block Filter

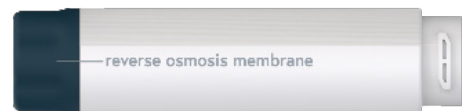
The carbon block removes chlorine, disinfectant byproducts and VOCs. The small 1 micron pore size ensures maximum contact time eliminating disinfectants that can harm the RO membrane. In addition our carbon block has anti-scale properties that reduce the damaging effect of hard minerals clogging up the system.



1 Micron Filtration	Anti-scale properties	Coconut Carbon	NSF 42 Standard
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## Reverse Osmosis Membrane

Cloud RO features an NSF 58 certified RO membrane that eliminates tap water contaminants including PFAs, Lead and Fluoride. The RO membrane strips the water down to its purest form and sends the toxins packing down the drain pipe. Our RO membrane is rated for 80 GPD production with a 1:1 waste ratio.



96% Salt Rejection Rate	1:1 Waste Ratio	Dow Filmtech Technology	NSF 58 Standard
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## Remineralization Post Filter

The RO membrane did a great job leaving us with pure H<sub>2</sub>O, but now it's time to add a bit of flavor and finesse. Our remineralizing post filter features a blend of ceramic beads that add a splash of minerals. These special beads lower the ORP and elevate the pH, leaving your water antioxidant rich, alkaline and delicious.



8-9ph Alkaline Water	Adds Trace Minerals	Reduces ORP	NSF 42 Standard
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## Battery

The long-lasting battery pack powers all of the internal sensor tech that keeps your Cloud humming. This simple battery pack allows you to avoid cords and complex electrical installation under your sink. A replacement battery pack is sent with your replacement filters, alongside a return label for easy recycling.



2+ Year Lifespan	Easy Drop-in Replacement	Non-hazardous Alkaline	
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## Performance Specifications

Standards and Certifications	NSF 58 Certification Third-Party tested to NSF 42 and 53 Standards	Cloud RO has been tested and certified by NSF International against NSF 58 standards for the removal of TDS. It has passed all third-party testing for both NSF 42 and NSF 53 reference standards.
TDS Rejection Rate	98%	RO membrane rated for 98% TDS rejection by NSF testing
Minerals Added	Calcium Magnesium Potassium Sodium Zinc Trace Minerals	Remineralizing post filter adds a proprietary blend of alkaline minerals.
pH	7.5-9.5	Mineral blend naturally raises purified water pH to 7.5-9.5. pH is dependent on contact time, temp and post-filter life.
Outlet Pressure	40-45psi	Cloud RO has an integrated permeate pump that maximizes tank pressure allowing Cloud to be used with ice maker and fridge dispensers.

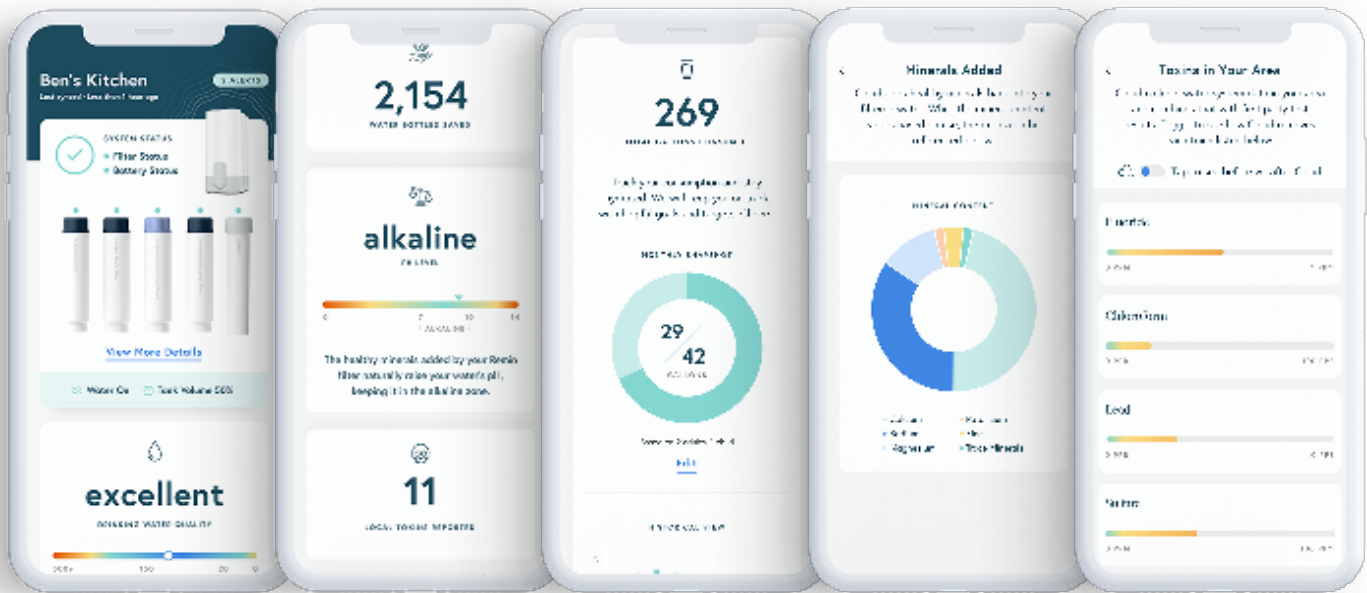
Faucet Flow Rate	0.625 Gallons Per Minute (GPM)	2x faster than tankless systems, and faster than traditional RO systems with low pressure inlet.
RO Production Rate	50 GPD	Actual production rate is up to 400% improved vs a traditional RO due to permeate pump.
RO Production Efficiency (waste ratio)	1:1	Best in class waste ratio. Less than 1 Gallon of waste for each gallon of permeate.
Tank Volume	2.8 Gallons	Small storage tank saves space, while permeate pump maximizes capacity to 90+%

## Additional Features

Installation	30 min install	Easiest system on the market to install. Modular design allows you to install the base separately, giving you more space to work.
Battery Powered	No electrical needed	No need to figure out a power source. Unit is fully powered through non-hazardous replaceable battery.
Maintenance/ Technician App	In App Service Screen	Monitor client water to confirm function.
Remote Monitoring	Cloud Monitored	Database of water quality data with visibility into each device.
Faucet	Stainless Steel Lead Free	Multiple colors and finished available.
Accessories	All Fittings Pre-installed	Pressure regulator included to prevent water hammer. Stainless Steel Supply Valve. All quick connect fittings.
System Life	Long System Life	Tankless systems tend to break down more quickly due to faulty booster pumps. Cloud RO has a 10 year lifespan.

# App Features

With smart sensors, your water is tested at every stage of filtration. Your water quality and filter performance is sent straight to the Cloud app so you can see your water quality and consumption trends in real-time. Track how much your family is drinking and how many plastic bottles you have saved. Keep tabs on your pH to ensure the water you are drinking is perfectly alkaline. Check out the toxins we kick to the curb and the nutrients we add to your glass. Your water, at your fingertips.



System Status	System Status Filter Status	Both full system status and individual filter status reported in app.
Quality Tracking	Inlet TDS Sensor Post RO TDS Sensor Post Remin TDS Sensor	TDS monitors track quality at each stage of filtration to confirm the water is being purified effectively and minerals added.
Tank Volume	Expressed in percent and ounces	Always know how full your tank is
Tank Pressure	Expressed in PSI	Check your tank pressure and max tank pressure at anytime.
Toxin Data	SimpleLab	Toxins in your zip code as reported by SimpleLab. Third party data partner that provides both government and first party testing data.
Battery	Expressed in percent and voltage	Live battery health tracking

Still have questions or want to get in touch? Reach out to us at [support@cloudwaterfilters.com](mailto:support@cloudwaterfilters.com)


# PERFORMANCE DATA SHEET



Cloud RO Version 1 Specifications	
Working Temperature	41-95° F
Working Pressure	40-100 PSI
Flow Rate	0.5-0.75 GPM
Daily Production Rate	50 GPD
Efficiency Rating	54%
Waste Ratio	1:1
pH	7.5-9.5

NSF/ANSI 58 Full System Results							
		Units	Influent Water/ Challenge	Effluent Water/ Filtered	Removal Rate (%)	Maximum Permissible Concentration	Pass/Fail
1	Total Dissolved Solids (TDS)	mg/L	720 ppm	17 ppm	98%	75%	Pass
2	Material Extraction Test	-	-	-	-	-	Pass
3	Structural Integrity Test	-	-	-	-	-	Pass
4	Lead Free Product Test	-	-	-	-	<=0.25%	Pass

This system has been tested and certified by NSF International against NSF/ANSI Standard 58 for RO Systems. The above test results represents data from NSF International performance testing. The below testing results represent third party testing data performed by SGS laboratories. The concentration of the indicated substances in water entering the system was reduced to a concentration less than or equal to the permissible limit for water leaving the system, as specified in NSF/ANSI 42, 53, and 58 standards.



NSF/ANSI 42 <i>Testing Performed by SGS Laboratories</i>							
	Test Items	Units	Influent Water/ Challenge	Effluent Water/ Filtered	Removal Rate (%)	Maximum Permissible Concentration	Pass/Fail
1	Chlorine	mg/L	1.89	<0.01	>99.47%	>50%	Pass
2	Chloramine	mg/L	3.19	<0.01	>99.7%	0.5	Pass
3	Free Particles	units/L	50500	11	100%	>85%	Pass

NSF/ANSI 53 <i>Testing Performed by SGS Laboratories</i>							
	Test Items	Units	Influent Water/ Challenge	Effluent Water/ Filtered	Removal Rate (%)	Maximum Permissible Concentration	Pass/Fail
1	Turbidity	NTU	11.7	0.1	99.10%	0.5 (NTU)	Pass
2	Lead (pH 8.5)	mg/L	0.0608	<0.0002	>99.67%	0.005	Pass
3	Lead (pH 6.5)	mg/L	0.0297	<0.0002	>99.32%	0.005	Pass
4	Mercury (pH 8.5)	mg/L	0.0062	<0.0002	>96.77%	0.002	Pass
5	Mercury (pH 6.5)	mg/L	0.2831	<0.0002	>99.92%	0.002	Pass
6	VOCs (as Chloroform)	mg/L	50500	11	100%	>95%	Pass
7	Perfluorooctane Sulfonate (PFOS)	µg/L	0.6	<0.01	>98.83%	0.07	Pass
8	Perfluorooctanoic Acid (PFOA)	µg/L	0.64	<0.01	>98.43%	0.07	Pass

NSF/ANSI 58 <i>Testing Performed by SGS Laboratories</i>							
	Test Items	Units	Influent Water/ Challenge	Effluent Water/ Filtered	Removal Rate (%)	Maximum Permissible Concentration	Pass/Fail
1	Chromium - VI	mg/L	0.301	<0.004	>98.7%	0.1	Pass
2	Arsenic	mg/L	0.3895	0.0002	99.90%	0.01	Pass
3	Cadmium (Cd)	mg/L	0.0358	<0.0002	>99.4%	0.005	Pass
4	Chromium (Cr)	mg/L	0.312	<0.001	>99.7%	0.1	Pass
5	Lead (Pb)	mg/L	0.1582	<0.0002	>99.9%	0.005	Pass
6	Barium (Ba)	mg/L	10.521	<0.005	>99.9%	2.0	Pass
7	Selenium (Se)	mg/L	0.129	<0.001	>99.2%	0.05	Pass
8	Copper (Cu)	mg/L	3.148	<0.005	>99.8%	1.3	Pass
9	Nitrate (as N)	mg/L	29.409	0.923	96.90%	10.0	Pass
10	Nitrite (as N)	mg/L	2.973	0.038	98.70%	1.0	Pass
11	Fluoride	mg/L	7.92	0.04	100%	1.5	Pass