


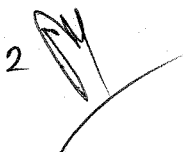
Technical Specifications of Water Purification System


1. The system should be dual stage system- produce endotoxin and bacteria free ultrapure water directly from potable water supply.
2. It should be capable of providing ASTM Type I (minimum 18 Mega ohm resistivity) water from potable tap water.
3. The system should have feed water acceptance level of Conductivity upto 2000 $\mu\text{S}/\text{cm}$, Fouling Index (SDI) up to 10 and total Chlorine less than 3 ppm.
4. It should have pre-treatment kit. Pre-filter for removal of particulates and activated carbon for the removal of free chlorine & tap water Organics.
5. System should have Separate independent RO and Polishing cartridge.
6. It should have constant RO flow rate minimum 8L/hour.
7. System should have Reverse Osmosis module made up of thin film composite polyamide RO membrane with rejection rate of 94 - 99% and recirculation loop for optimum utilization of feed water.
8. System should have low pressure mercury vapor lamp made of quartz with dual wavelength (185 and 254 nm).The lamp should have an electro polished 316L SS housing, ensures reduction of TOC as well as destruction of bacteria.
9. The system should have constant flow rate, continuous monitoring of the quality of water at various stages of water purification as well as temperature feedback mechanism.
10. System's Cartridge should have appropriate tag to enable traceability of Mfg. Date, Lot No., Life of Cartridge, no. of day's usage etc. and facilitate estimation of volumetric life of the cartridges.
11. System should have built in resistivity and TOC monitor to design to comply most demanding norms and system should able to self-calibrate with TOC Curve check.
12. It should have minimum 50 L storage tank with auto cutoff level sensors.
13. Final filter should provide either biological grade or pharmaceutical grade water equivalent to DEPC treated water.
14. The system should have final water quality as below:

Resistivity	18 to 20 Mega Ohm cm (at 25 °C) or better
TOC	≤ 5 ppb or better
Particulates (size $> 0.22 \mu\text{m}^3$)	< 1 particulate/mL or better
Bacteria	< 0.01 CFU/mL or better
Particulates (0.22 micron)	$< 1/\text{mL}$ or better
Pyrogens	< 0.001 EU/mL or better
RNases	< 0.01 ng/mL or better
DNases	< 4 pg/mL or better

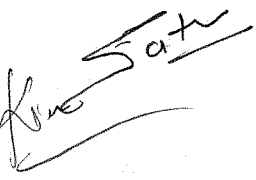
15. UPS – 1 KVA
16. A valid User list with details should be provide.
17. Any consumables, cartridges, and other parts to be changed during serving for the next three years must be provided along with the system.
18. Warranty: One year against manufacturing defect.
19. Note: Vendor should clearly mention make and model, also enclose Catalogue/Data sheet of the Model quoted in support of the above mentioned Specifications otherwise their bids will be rejected.

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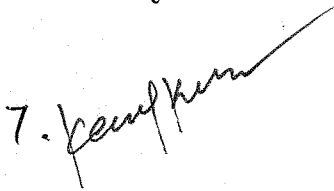
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