



Ref.No.

Date:

## Technical Specifications For Submerged Membrane Bioreactor system

**Description:** A lab-scale submerged membrane bioreactor (SMBR) system is a miniature version of a larger wastewater treatment system that utilizes membranes for separation.

### Benefits of using a lab-scale SMBR system:

- **Research and development:** It allows researchers to evaluate the effectiveness of SMBR technology for treating various types of wastewater streams.
- **Process optimization:** By varying factors like aeration rate, sludge wasting strategy, and membrane characteristics, researchers can optimize the treatment process for specific wastewater.
- **Compact and versatile:** These systems are relatively small and can be easily set up in a laboratory for various research applications.
- **Simulates full-scale systems:** Lab-scale SMBRs mimic the operation of larger treatment plants, allowing for pilot testing and data collection before implementing the technology at a larger scale.

Sr. No.	Technical Description	Quantity
1	<b>Aeration tank &amp; Treated water tank</b> MOC: Transparent Acrylic Sheets	1
2	<b>Diaphragm Blower pump</b> (Power: 18W, Pressure: 0.020MPa, Output: 38L/min Air)	1
3	<b>Peristaltic Pump</b> (Permeate/Backwash) 230VAC Single Phase, Stepper motor, 4 Roller, min flow: 14 ml/min; max flow: 450 mL/min; RPM: 5 to 160; Bidirectional control: Yes	1
4	<b>Control switch board</b> Type: Manual, 3 Switch	1
5	<b>Diffuser</b> <b>(3'-inch Air Oxygen Bubble Disk, (2 Stones))</b>	2-Lot
6	<b>Aeration piping</b> <b>(PP)</b>	1-Lot
7	<b>Permeate/Backwash Piping</b>	1-Lot





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	(PP)	
8	<b>Flat sheet membrane modules</b>	1 Lot
9	<b>Screening Plate</b> (MOC: Derlin, Thickness: 5 mm)	2 Nos.



## MBR System

**Note\*:** Customized dimensions based setup is available

**Contact us:**



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