

AEROLITH

NANOBUBBLE IN-LINE MODULE

Applications

- Agriculture & Hydroponics
- Aquaculture Hatcheries
- Industrial ETP/STP Systems
- Greenhouses and Polyhouses

Distinct Features

- In-line module
- Customizable gas input
- ~80 nm mean size nanobubble diameter
- 75-80% Oxygen Transfer Efficiency (OTE)
- $>1 \times 10^8$ Nanobubbles / ml
- Plug-and-play installation
- Easy maintenance and cost effective

Benefits:

- Increases dissolved oxygen (DO) for a healthier ecosystem
- Enhances root health, plant vigor, and nutrient uptake
- Suppresses algae, pathogens, and biofilm formation
- Improves irrigation efficiency
- Minimizes the buildup of toxic gases



Advanced In-Line Nanobubble Technology for Real-Time Oxygenation

The Aerolith Series is an advanced in-line nanobubble generator developed by Nanokriti Technologies Pvt. Ltd. It is engineered to create ultra-fine nanobubbles directly within flowing water lines using ambient air or pure oxygen, without the need for storage tanks, holding systems, or chemical additives.

By seamlessly integrating into existing pipelines, Aerolith delivers oxygen-rich water in real-time, enabling sustainable water enhancement for agriculture, aquaculture, wastewater treatment, and more. Its energy-efficient and chemical-free operation makes it ideal for decentralized systems and modern irrigation networks.

The Aerolith Nanobubble in-line module offers the following key benefits:

- Direct In-line Operation Installs seamlessly in any pipeline—delivers nanobubbles during normal water flow.
- High Oxygen Transfer Efficiency improving aerobic biological activity.
- Zero Chemical Requirement, Pure physical infusion of air or oxygen—completely eco-friendly.
- Compact & Modular Design, Small footprint, no external tanks or chambers needed.
- Minimal Maintenance
- Robust and clean internal construction for continuous use

With its high efficiency and versatility, the Aerolith In-line module is an ideal solution for agriculture, aquaculture, wastewater treatment, and environmental restoration.

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Parameter	Value
Flow Rate	50 – 1000 m ³ /hr (model-specific)
Inlet/Outlet Size	2" / 3" / 4" (custom options)
Nanobubble Size	~ 80nm
Gas Input	Built-in / External (10–500 LPM)
Gas Pressure (Bar)	3 - 8
Material of Construction	SS304 / SS316 / PVC / HDPE
Height, ft	1
Width, ft	1
Length, ft	1.75
Monitoring system	Rotameter, Pressure gauge

**Specifications may change due to constant improvements