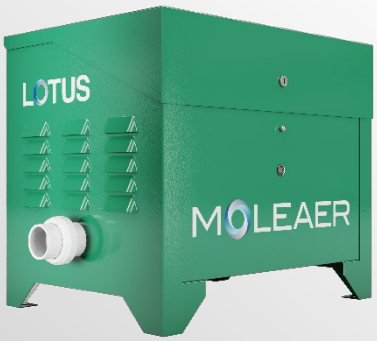
MOLEAER
ADVANCING NANOBUBBLE TECHNOLOGY

LOTUS™

NANOBUBBLE GENERATOR SERIES



APPLICATIONS

Designed for controlled environment growing facilities:

- Small Greenhouses
- Hydroponics
- Deep Water Culture (DWC)
- Aquaponics
- Nutrient Film Technique (NFT)

Improve Crop Health, Resilience & Yields

Optimize irrigation water to promote improved plant growth and reduced inputs with Moleaer's Lotus™ patented nanobubble generator, a highly efficient gas-injection technology that converts bulk oxygen into nanobubbles and supersaturates irrigation water with high levels of dissolved oxygen (DO).

The Lotus platform is designed for micro-growers, hydroponic and aquaponic facilities growing leafy greens, vegetables and flowers, cannabis growers and others looking to enhance irrigation water quality and plant health in operations treating less than 4 cubic meters of water per day or water bodies with volume less than 85 cubic meters.

Benefits:

- **Boost plant vigor and performance from early growth to flushing**
- **Promote beneficial bacteria and increase nutrient uptake efficiency**
- **Reduce root pathogens**
- **Reduce biofilm and improve irrigation system hygiene**
- **Reduce chemical and pesticide applications**
- **Reduce water use through increased water uptake efficiency**
- **Improve plant resilience to environmental stress**

Features:

- **Assembled in the USA and Spain**
- **Corrosion-resistant**
- **Self-priming, energy-efficient pump**
- **Easy installation & maintenance**
- **Robust design with only two moving parts**

Lotus with Conversion Kit and oxygen generator. Sold separately.

LOTUS - 50 HZ

TECHNICAL SPECIFICATIONS	Lotus	Lotus PLUS
LIQUID FLOW CAPACITY		
Flow Rate (m^3/hr) nominal at 15.2m TDH	2.3 – 5.0	8.0 – 11.4
Maximum Liquid Pressure, (Bar)[1]	1.4	
ENVIRONMENTAL PARAMETERS		
Temperature Tolerance, (°C)	5 – 60	
Solids, (mm)	3	
GAS SUPPLY		
Gas Source	Off-board O_2 Gas or Optional O_2 Generator	
Gas Feed Pressure, (Bar)	Max 3.5; must be greater than water pressure	
Gas Flow Range, (SCFH; SLPM)[2]	0 – 3.2; 0 –1.5	0 – 10.6; 0 – 5.0
Max Applied Oxygen (kg/hr)	0.12	0.40
OPTIONAL Oxygen Generator (SCFH; SLPM)[3]	Match to Gas Flow Range; See Manual	
Gas Flow Control	Needle Valve on Rotameter	
ELECTRICAL POWER[4]		
Voltage (V), Phase (F), Frequency (Hz)	230, 1, 50	
Total Amp Draw (A), nominal	5.0; (8.5 with O_2 Generator)	
Total Power Consumption (kW)	0.7; (1.3 with O_2 Generator)	
PUMP		
Pump Type	IPX5/TEFC, Self-Priming	
Wetted Parts Materials	Polypropylene/Buna	
Motor Starter Switch	Rocker Switch (Latching)	
CUSTOMER CONNECTIONS		
Inlet Union Fitting, (mm)	63 Female Slip Fitting	
Outlet Union Fitting, (mm)	50 Female Slip Fitting	
MATERIALS, DIMENSIONS AND WEIGHT		
Piping	PVC	
Enclosure Material	Powder Coated Steel (Outdoor Rated)	
Envelope Dimensions, (cm)	69 L x 43 W x 49 H	
Weight, (kg)	25	

Standard Package Includes: Lotus nanobubble generator, oxygen regulator, gas hose (fittings built-in), unions, clamps, and CIP tool.

[1] Regulate liquid pressure to 1.38bar or less when using O_2 Generator**.** Gas pressure must be greater than water pressure for nanobubble generation.

[2] S (standard) is gas measured at 1 bar and 21°C. Volumetric flow rate can change based on environmental factors and system maintenance.

[3] Oxygen Generator sold separately. Lotus 'Conversion Kit' Accessory required for electrical switching. The associated oxygen generator must be covered and not be exposed to moisture.

[4] Typical household circuit breaker is 13A-16A in EU.

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