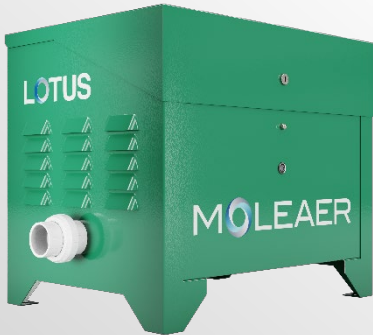


## LOTUS™

### 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.

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# LOTUS - 50 HZ

TECHNICAL SPECIFICATIONS	Lotus	Lotus PLUS
<b>LIQUID FLOW CAPACITY</b>		
Flow Rate (m <sup>3</sup> /hr) nominal at 15.2m TDH	2.3 – 5.0	8.0 – 11.4
Maximum Liquid Pressure, (Bar) <sup>1</sup>	1.4	
<b>ENVIRONMENTAL PARAMETERS</b>		
Temperature Tolerance, (°C)	5 – 60	
Solids, (mm)	3	
<b>GAS SUPPLY</b>		
Gas Source	Off-board O <sub>2</sub> Gas or Optional O <sub>2</sub> Generator	
Gas Feed Pressure, (Bar)	Max 3.5; must be greater than water pressure	
Gas Flow Range, (SCFH; SLPM) <sup>2</sup>	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) <sup>3</sup>	Match to Gas Flow Range; See Manual	
Gas Flow Control	Needle Valve on Rotameter	
<b>ELECTRICAL POWER<sup>4</sup></b>		
Voltage (V), Phase (F), Frequency (Hz)	230, 1, 50	
Total Amp Draw (A), nominal	5.0; (8.5 with O <sub>2</sub> Generator)	
Total Power Consumption (kW)	0.7; (1.3 with O <sub>2</sub> Generator)	
<b>PUMP</b>		
Pump Type	IPX5/TEFC, Self-Priming	
Wetted Parts Materials	Polypropylene/Buna	
Motor Starter Switch	Rocker Switch (Latching)	
<b>CUSTOMER CONNECTIONS</b>		
Inlet Union Fitting, (mm)	63 Female Slip Fitting	
Outlet Union Fitting, (mm)	50 Female Slip Fitting	
<b>MATERIALS, DIMENSIONS AND WEIGHT</b>		
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.

<sup>1</sup> Regulate liquid pressure to 1.38bar or less when using O<sub>2</sub> Generator. Gas pressure must be greater than water pressure for nanobubble generation.

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

<sup>3</sup> 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.

<sup>4</sup> Typical household circuit breaker is 13A-16A in EU.

**LOTUS™**

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