

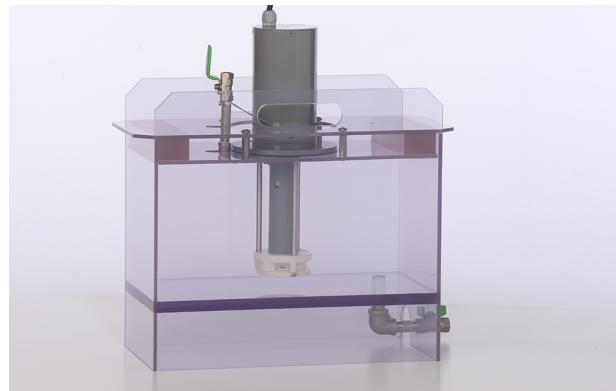


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microstar ozone

The hammermill-rotation concept of the microStar uses the least amount of energy in the industry to generate nanobubbles.



microStar research setup



microstar ozone

microstar ozone nanobubble generator

- ✓ Strong in dissolving high concentrations of ozone
- ✓ Optimized for the creation of ozone nanobubbles
- ✓ Excellent research ultrafine bubble tool
- ✓ creating no turbulence in the water
- ✓ Proven track record in the oyster shell industry
- ✓ Suitable for removing external infections with norovirus, legionella, lysteria and salmonella in live animals.
- ✓ Motor life expectancy 80.000 hours

hammer-rotation

The microStar uses a unique concept for the generation of nanobubbles, which is called magnetic hammer-rotation. The hammer-rotation concept of the microStar uses the least amount of energy in the industry to generate nanobubbles. The microStar releases gas in a tube under a magnetic field and has rotating hammers inside the tube which crushes the gas into nanobubbles.

no turbulence

Another unique feature of this unit is that it does not generate any turbulence or strong movement in the water, compared to nanobubble generators that use a pump. This makes the microStar the perfect nanobubble generator for projects where high concentrations of gas and nanobubbles are needed and turbulence or strong flows in the water should be avoided. Think of projects like washing eggs to remove bacteria or bacteria bed filters which should not be disturbed but require adequate amounts of gas.

Contact us for more details about this unique product. Currently, we have 3 sizes available. The smallest unit is ideally suited for research purposes, the two larger units can be used for production purposes.

models & specs

FS	30	2	AC	-	S	W	1	-	Sp
1	2	3			4	5	6		7

1. Nanobubble generator

indicationname

FS microStar

2. Motor nominal input

indication motor nominal input

- 30 30 Watt
- 40 400 Watt
- 75 750 Watt

3. Motor voltage

indication motor voltage

- 1 100V~110V (AC models only)
- 2 200V~220V (AC and DC models)

Motor Power

indication power type

- AC AC powered motor
- DC DC powered motor, high-spec higher nanobubble concentration.

4. microStar model

indication nozzle

- "S" short type
- "L" long type

5. Nanobubbles discharge

indication # directions

- "W" 2 directions
- "S" 1 direction

6. microStar discharge rate

indication discharge rate

- "1" Standard 1µm peak
- "2" Medium 2-3µm peak
- "3" Large 10µm peak

7. microStar special specs, special sign for customized model

indication specifications

- "Sp" special

microstar fs302ac-sw1 spec sheet.

Description	Metric	Imperial
1 Model name	microStar FS302AC-SW1 spec sheet.	microStar FS302AC-SW1 spec sheet.
2 Model number	FS302AC-SW1	FS302AC-SW1
Liquid	Metric	Imperial
3 water temperature minimum	0 °C	32 °F
4 water temperature maximum	40 °C	104 °F
Ambient	Metric	Imperial
5 Ambient temperature minimum	-20 °C	-4 °F
6 Ambient temperature maximum	40 °C	104 °F
Gas	Metric	Imperial
7 Minimum flow / minute	0.5 Liter	0.1 Gallon
8 Maximum flow / minute	1.0 Liter	0.3 Gallon
9 Minimum flow / hour	30 Liter	7.9 Gallon
10 Maximum flow / hour	60 Liter	16 Gallon
11 Pressure minimum	50 kPa	7 PSI
12 Pressure maximum	200 kPa	29 PSI
13 Gas quality	O2, O3, CO2, Air, N2	O2, O3, CO2, Air, N2
Electrical	Metric	Imperial
14 Unit phase Ø voltage	3 Ø 200/220 or 3 Ø 100 / 115	3 Ø 200/220 or 3 Ø 100 / 115
15 Unit power consumption	30 watts	30 watts
16 Control	Frequency Drive	Frequency Drive
Dimensions & weight	Metric	Imperial

	Dimensions & weight	Metric	Imperial
17	Dim. (w) x (d) x (h)	152 x 152 x 380 mm	6.0 x 6.0 x 15.0 inch
18	weight	6.3 Kg	13.9 lbs.
19	Shipping dim. (w)x(d)x(h)	54 x 48 x 28 cm	21 x 19 x 11 inch
20	Shipping weight	19 Kg	42 lbs.
	Remarks		
21	Other remarks	<ul style="list-style-type: none">✓ Acniti provides a presetup frequency drive and transformer to convert to the local electricity network. The units are a plug and plays.✓ Seawater use possible	

microstar fs400ac-1 specs

Description	Metric	Imperial
1 Model name	microStar FS400AC-1	microStar FS400AC-1
2 Model number	FS400AC-1	FS400AC-1
Liquid	Metric	Imperial
3 Flow / minute	56 Liter	15 Gallon
4 Flow / hour	3.4 M3	118.7 CF
5 water temperature minimum	0 °C	32 °F
6 water temperature maximum	40 °C	104 °F
Ambient	Metric	Imperial
7 Ambient temperature minimum	-20 °C	-4 °F
8 Ambient temperature maximum	40 °C	104 °F
Gas	Metric	Imperial
9 Minimum flow / minute	0.0 M3	0.6 CF
10 Maximum flow / minute	0 M3	3.5 CF
11 Minimum flow / hour	1.1 M3	38 CF
12 Maximum flow / hour	6.0 M3	212 CF
13 Gas quality	O2, O3, CO2, Air, N2	O2, O3, CO2, Air, N2
Electrical	Metric	Imperial
14 Unit phase Ø voltage	3 Ø 200/220 VAC	3 Ø 200/220 VAC
15 Unit power consumption	400 watts	400 watts
16 Control	Frequency Drive	Frequency Drive
Dimensions & weight	Metric	Imperial
17 Dim. (w) x (d) x (h)	270 x 270 x 672 mm	10.6 x 10.6 x 26.5 inch

Dimensions & weight	Metric	Imperial
18 weight	17 Kg	37.5 lbs.
19 Shipping dim. (w)x(d)x(h)	40 x 40 x 90 cm	16 x 16 x 35 inch
20 Shipping weight	20 Kg	44 lbs.

microstar fs752dc specs

Description			Metric	Imperial
1	Model name	microstar FS752DC		
2	Model number	FS752DC		
Liquid			Metric	Imperial
3	Flow / minute	280 Liter		
4	Flow / hour	16,800 Liter		
5	water temperature minimum	0 °C		
6	water temperature maximum	40 °C		
Ambient			Metric	Imperial
7	Ambient temperature minimum	-20 °C		
8	Ambient temperature maximum	40 °C		
Gas			Metric	Imperial
9	Minimum flow / minute	0.0 Liter		
10	Maximum flow / minute	100 Liter		
11	Minimum flow / hour	0.0 Liter		
12	Maximum flow / hour	6,000.0 Liter		
13	Gas quality	Air, O2, O3, N2, CO2		
Electrical			Metric	Imperial
14	Unit phase Ø voltage	Input: 3 Ø 200 VAC => Output: 3 Ø 200VDC		
15	Unit power consumption	750 watts		
16	Wetted parts	Ethylene propylene, FKM, Fluor, PVC, SUS316L, SUS316, POM		
		Ethylene propylene, FKM, Fluor, PVC, SUS316L, SUS316, POM		

	Electrical	Metric	Imperial
17	Pump model	Motor model: 4 poles SPM type brushless DC motor	Motor model: 4 poles SPM type brushless DC motor
18	Control	Frequency Drive	Frequency Drive
	Connections	Metric	Imperial
19	Gas inlet	22mm	22mm
	Dimensions & weight	Metric	Imperial
20	Dim. (w) x (d) x (h)	230 x 230 x 620 mm	9.1 x 9.1 x 24.4 inch
21	weight	35 Kg	77.2 lbs.
22	Shipping dim. (w)x(d)x(h)	40 x 40 x 80 cm	16 x 16 x 31 inch
23	Shipping weight	40 Kg	88 lbs.
	Remarks		
24	Other remarks	<ul style="list-style-type: none"> ✓ It's recommended to use an inverter to control the motor speed from 0 ~ 3500 RMP ✓ The microstar 752 series generates effectively nanobubbles in a 10 meter diameter circel with a depth of 2 meter for short model (SS / SW). ✓ The micorstart 752 series are available with a 2-way or 1-way outlet. ✓ Microstar is not suitable for underwater / submersible use. ✓ Motor failures by using the none specified inverters are not covered by warranty ✓ The microstar DC series requires a cooling fan on top op de motor, which needs a single phase 100 ~115 or 200~240 ac volt input. 10~15 Watt ✓ Regular maintenance: replace packing and oil seal 	