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minigalf: lab-scale nanobubble generator for r&d | acniti

The miniGaLF is Acniti's entry-level GaLF nanobubble generator, made for universities, research institutes, and companies working with ultrafine bubble technology. Pressurized dissolution drives air, oxygen, nitrogen, or CO2 into water at 450 liters per hour. Connect it to a tap and a gas source and you are running in minutes, or add the -Plus pump option to recirculate and reach higher bubble concentrations.



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compact minigalf nanobubble generator for lab and pilot setups

- compact design, small footprint
- Direct connection to faucet
- miniGaLF Plus: expand the unit with a pump, to recirculate water and generate high concentrated bubble water.
- efficient gas dissolution
- 18 liter Plexiglass water tank available.

research

The miniGaLF is an entry-level GaLF model designed for companies, universities, research institutes, and individuals who want to learn about ultrafine bubble technology. The miniGaLF offers numerous possibilities for creating your ultrafine bubble application, as it is easily fitted and retrofitted into existing machines and processes. In the most straightforward setup, just connect the miniGaLF to your water tap and add a gas source, either from a compressor or a gas cylinder, and you are ready to go. In the more advanced setup, you can add a recirculation system to achieve higher concentrations of ultrafine bubble water, which we refer to as Plus as an option. The "-Plus" version has a check valve and a pump. Read the blog post about the miniGaLF -Plus version for more information on how to integrate the unit with a pump.

easy to install and use

The nanobubble unit is the most popular model. The miniGaLF comes with a power adapter from 115 Volts to 230 Volts, so it always matches the local power in your office or home. When connecting the miniGaLF to a faucet, ensure the water supply is at least 7.5 liters/minute. Test this by running the faucet for 1 minute, collecting the water in a bucket, and measuring the volume.

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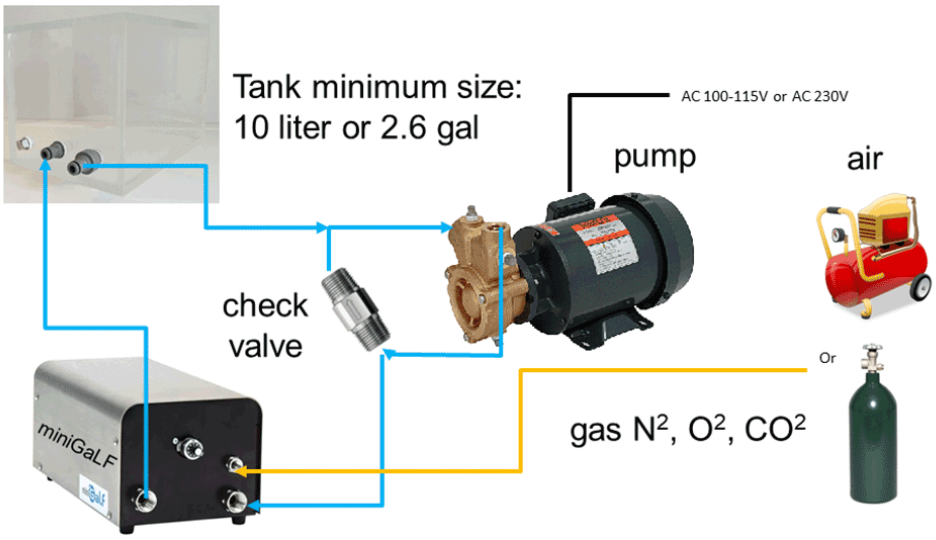
acniti miniGaLF -Plus



more options

When you need to work with ozone or want to avoid turbulence, check out our microStar.

Besides the miniGaLF, Acniti provides other GaLF models such as agriGaLF, high-concentration GaLF, and custom-built units. When larger volumes of liquids are required, consider the agriGaLF as this is our high-volume solution, or the Turbiti UFB Mixers for lake, pond, or seawater treatment. For researchers and product developers who require the highest density of bubbles, Acniti provides the high-concentration GaLF. This top model delivers the smallest bubble size with the highest concentration of ultrafine bubbles in the industry.

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minigalf ufb: nanobubble generator specifications | acniti

	General		
1	Model name	Compact miniGaLF Nanobubble Generator for Lab and Pilot Setups	
2	Model number	UFB_FZ1N-04FB	
	Liquid	**Metric**	**Imperial**
3	Flow / minute	7.5 Liter	2.0 Gallon
4	Flow / hour	450 Liter	119 Gallon
5	water temperature minimum	0 °C	32 °F
6	water temperature maximum	50 °C	122 °F
7	Strainer availability and size	No strainer inside the miniGaLF use a strainer for particles larger than 0.5mm or 500 µm.	
	Ambient	**Metric**	**Imperial**
8	Ambient temperature minimum	0 °C	32 °F
9	Ambient temperature maximum	40 °C	104 °F
10	Relative humidity minimum	45 %	
11	Relative humidity maximum	85 %	
	Gas	**Metric**	**Imperial**
12	Minimum flow / minute	0.3 Liter	0.1 Gallon
13	Maximum flow / minute	0.4 Liter	0.1 Gallon
14	Minimum flow / hour	18 Liter	4.8 Gallon
15	Maximum flow / hour	24 Liter	6.3 Gallon
16	Pressure minimum	100 kPa	15 PSI

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	Gas	Metric	Imperial
17	Pressure maximum	300 kPa	44 PSI
18	Gas quality	Do not use corrosive gases. Use of Oxygen, Carbon Dioxide, Nitrogen or Ambient Air is allowed.	
19	Gas remark	Gas intake time 5 seconds. Produce bubbles time 50 seconds.	
	Electrical	**Metric**	**Imperial**
20	Unit phase Ø voltage	1 Ø 100 ~ 240 VAC	
21	Unit power consumption	65 watts	
22	Wetted parts	SUS304, Nylon, Copper, PVC	
23	Pump model		
24	Pump phase Ø voltage		
25	Pump phase Ø voltage 60Hz		
26	Pump pressure setting		
27	Control		
	Pump		
28	@option	miniGaLF pump option Lowara PM21	
29	@option	Ebara PRA 0.50	
30	@option	Aquavar e-ABII	
31	@option	Grundfos CM1-4	
	Connections		
32	Water inlet	Rc 1/2"	
33	Water outlet	RC 1/2	
34	Gas inlet	RC 1/4	
	Dimensions & weight	**Metric**	**Imperial**
35	Dim. (w) x (d) x (h)	175 x 320 x 142 mm	6.9 x 12.6 x 5.6 inch
36	weight	6.9 Kg	15.2 lbs.
37	HS code	8479.82.0040	

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	Dimensions & weight	Metric	Imperial
38	Shipping dim. (w)x(d)x(h)	32 x 34 x 42 cm	13 x 13 x 17 inch
39	Shipping weight	8.5 Kg	19 lbs.
	Remarks		
40	Other remarks	Remark minimum water pressure miniGaLF 300kPa, or 43.5 psi	

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