

**acniti LLC** 1-2-9 Nyoidani Minoh Osaka 562-0011 Japan

# acniti

# minigalf nanobubbles

The miniGaLF is an entry level GaLF model designed for companies, universities, research institutes and individuals that want to learn about ultrafine bubble technology.





### minigalf nanobubbles

#### ultrafine minigalf nanobubble generator

- 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.

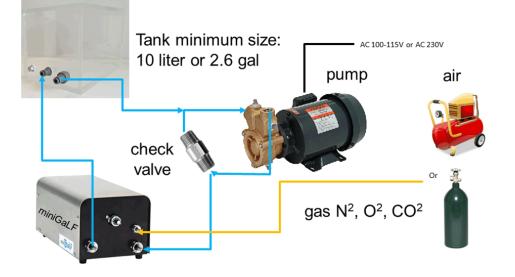
#### research

The miniGaLF is an entry level GaLF model designed for companies, universities, research institutes and individuals that want to learn about ultrafine bubble technology. The miniGaLF provides a lot of possibilities to design your own ultrafine bubble application, as it is easy to fit and retrofit in existing machines and processes. In the simplest 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 call -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 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 you want to connect the miniGaLF to a faucet, check if the water supply is at least 7.5 liters / minute. Test this by running the faucet for 1 minute and collect the water in a bucket and measure the volume.

## acniti miniGaLF -Plus



#### more options

When you require to working with ozone, or don't want turbulence, check out our microStar.

Besides the miniGaLF, Acniti provides other GaLF models such as agriGaLF, highconcentration GaLF, and custom-built units. When larger volumes of liquids are required please 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, that require the highest density of bubbles Acniti provides the highconcentration GaLF, this top model delivers the smallest bubble size with the highest concentration of ultrafine bubbles in the industry.

## minigalf ufb specs

	Description	Metric	Imperial
1	Model name	miniGaLF UFB	miniGaLF UFB
2	Model number	FZ1N-04FB	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 (Remark minimum water pressure miniGaLF 300kPa, or 43.5 psi)	No strainer (Remark minimum water pressure miniGaLF 300kPa, or 43.5 psi)
8	Recommended inlet filter(s)	Small pump inlet filter series	Small pump inlet filter series
	inter (5)	56165	
	Ambient	Metric	Imperial
9			Imperial 32 °F
9 10	Ambient Ambient temperature	Metric	
	AmbientAmbient temperature minimumAmbient temperature	Metric 0 °C	32 °F
10	AmbientAmbient temperature minimumAmbient temperature maximumRelative humidity	Metric0 °C40 °C	32 °F 104 °F
10 11	AmbientAmbient temperature minimumAmbient temperature maximumRelative humidity minimumRelative humidity	Metric   0 °C   40 °C   45 %	32 °F 104 °F 45 %
10 11	AmbientAmbient temperature minimumAmbient temperature maximumRelative humidity minimumRelative humidity maximum	Metric   0 °C   40 °C   45 %   85 %	32 °F 104 °F 45 % 85 %
10 11 12	AmbientAmbient temperature minimumAmbient temperature maximumRelative humidity minimumRelative humidity maximumGas	Metric   0 °C   40 °C   45 %   85 %   Metric	32 °F 104 °F 45 % 85 % Imperial
10 11 12 13	AmbientAmbient temperature minimumAmbient temperature maximumRelative humidity minimumRelative humidity maximumGasMinimum flow / minute	Metric   0 °C   40 °C   45 %   85 %   Metric   0.3 Liter	32 °F 104 °F 45 % 85 % Imperial 0.1 Gallon



	Gas	Metric	Imperial
17	Pressure minimum	100 kPa	15 PSI
18	Pressure maximum	300 kPa	44 PSI
19	Gas quality	Do not use corrosive gases. Use of Oxygen, Carbon Dioxide, Nitrogen or Ambient Air is allowed.	Do not use corrosive gases. Use of Oxygen, Carbon Dioxide, Nitrogen or Ambient Air is allowed.
20	Gas remark	Gas intake time 5 seconds. Produce bubbles time 50 seconds.	Gas intake time 5 seconds. Produce bubbles time 50 seconds.
	Electrical	Metric	Imperial
21	Unit phase Ø voltage	1 Ø 100 ~ 240 VAC	1 Ø 100 ~ 240 VAC
22	Unit power consumption	65 watts	65 watts
23	Wetted parts	SUS304, Nylon, Copper, PVC	SUS304, Nylon, Copper, PVC
24	Pump model		
25	Pump phase Ø voltage		
26	Pump phase Ø voltage 60Hz		
27	Pump pressure setting		
28	Control		
	Pump		
29	@option	miniGaLF pump option Lowara PM21	
30	@option	Ebara PRA 0.50	
31	@option	Aquavar e-ABII	
32	@option	Grundfos CM1-4	
	Connections	Metric	Imperial
33	Water inlet	Rc 1/2"	Rc 1/2"
34	Water outlet	RC 1/2	RC 1/2
35	Gas inlet	RC 1/4	RC 1/4



	Dimensions & weight	Metric	Imperial
36	Dim. (w) x (d) x (h)	175 x 320 x 142 mm	6.9 x 12.6 x 5.6 inch
37	weight	6.9 Kg	15.2 lbs.
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	