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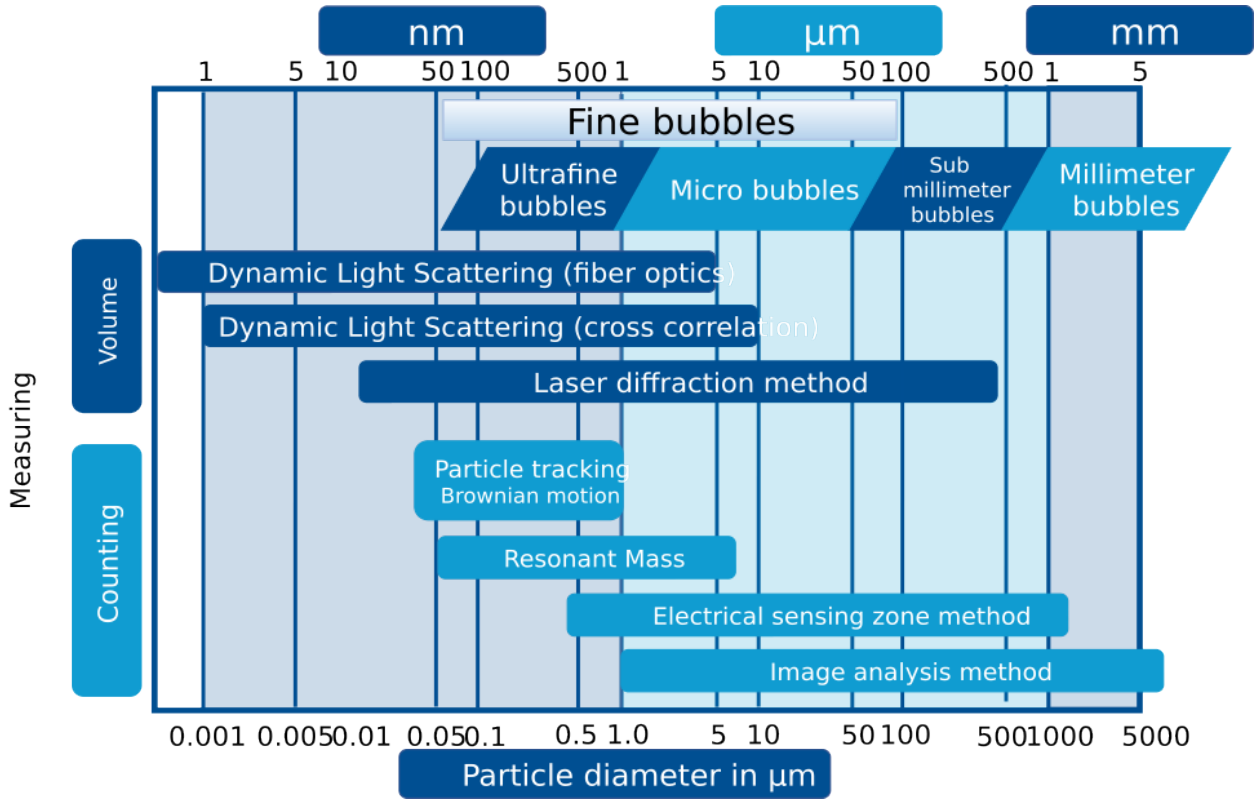
ultrafine bubble monitoring alt-9f17

Low cost Ultrafine Bubble Monitoring ALT-9F17 system, to measure reliably the concentration of ultrafine bubbles (nanobubbles) in your water.



ultrafine bubble monitoring alt-9f17

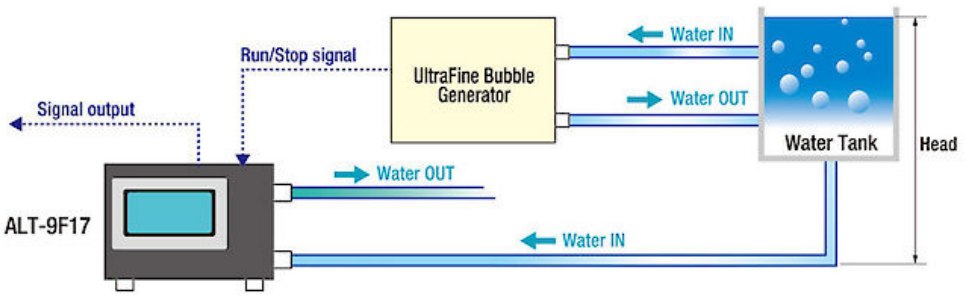
nanobubble sensor alt-9f17

- To confirm ultrafine bubbles are continuously produced in the production process.
- To have a reference of nanobubbles concentration levels in the laboratory.
- To have alerts of too high or too low bubble concentrations to start or stop the ultrafine bubble generator.
- Operating display in English or Japanese

description

When it comes to water monitoring, we have a few sensors available for measuring water quality. The most popular are EC, pH and DO. To measure ultrafine bubbles, there is laboratory equipment available which can do a very fine and precise job. NanoSight with the particle tracking analysis method is probably the most widely used measurement instrument for ultrafine bubbles. But also, Shimadzu with the Sald7100HH and the Helos from Sympatec can measure ultrafine bubbles. The downside of this equipment is that it's relatively expensive and not suitable for process monitoring. Many clients are looking for a more economical solution to get an indication if their ultrafine bubble generator is working perfectly and to save costs and energy when high levels of ultrafine bubbles are reached, the equipment should stop automatically.

The ALT-9F17 is an ultrafine bubble monitoring system based on the scattered laser principle. The unit can be fed constantly with sample water, either by gravity or with a small pump. The laser signal gives a value between 0 - 1000, this value can be translated to the approximate bubble concentration. Optional items available with this unit, clear tubing 6 mm, filter to filter impurities, 60 ml / minute pump to feed the monitoring system.



The unit can be operated with a touch panel interface in either English or Japanese. The unit comes with an English manual.

Note: The ultrafine bubble monitoring device was made in collaboration between ALT and IDEC manufactured by ALT. Sold exclusively by IDEC and its dealers. The signal level of laser scattered light is dependent on number concentration and size of bubbles. Both higher concentration and larger sized bubbles give higher levels of signal. Particles also give signal to the sensor as the laser is not able to distinguish a bubble from a particle. Water color and turbidity will interfere proper measurement with high turbidity the laser will give a too strong signal to see a signal from the bubble.

instruction movies

- Instruction movie hardware
- Instruction movie software

ultrafine bubble monitoring specifications

Part No.	ALT-9F17
Measurement type	Laser scattered light measurement (90 degrees)
Measuring object	Ultrafine bubbles (diameter max 1 µm)
Accuracy	± 1.0 E8/ml
Low-limit detection	1.0 to 2.0 E8/ml (depends on size of the bubbles)
Water quality	Fresh Water
Rated power	100 to 240-volt AC (50/60Hz) ac adapter
Power consumption	65-watt max.
Operating Temperature	0 to +40 °C
Water Temperature	0 to +45 °C
Storage Temperature	0 to +60 °C (no freezing)
Material (wet parts)	PTFE, PFA Quartz Glass
Tube size (in - out)	O.D. 6 mm
External Output	Relay contact (DRY): Error x 1 Pump, 1 (for water flow to this equipment) Preset signal level limit x1 Analog signal (4-10 mA): signal level x1
External Input	Source input: for Run / Stop this equipment x1
Dimensions (mm)	150Wx335Dx136H (no projections)
Weight (approx.)	6 Kg

alt-9f17

	Description	Metric	Imperial
1	Model name	ALT-9F17	ALT-9F17
2	Model number	ALT-9F17	ALT-9F17
	Liquid	**Metric**	**Imperial**
3	Strainer availability and size	No strainer on the unit. Recommended a filter of 2-7 micron to remove micro bubbles	No strainer on the unit. Recommended a filter of 2-7 micron to remove micro bubbles
	Ambient	**Metric**	**Imperial**
4	Ambient temperature maximum	40 °C	104 °F
	Dimensions & weight	**Metric**	**Imperial**
5	Dim. (w) x (d) x (h)	150 x 335 x 136 mm	5.9 x 13.2 x 5.4 inch
6	weight	6 Kg	13.2 lbs.
7	Shipping dim. (w)x(d)x(h)	41 x 31 x 33 cm	16 x 12 x 13 inch
8	Shipping weight	7 Kg	15 lbs.

video nanobubble sensor alt hardware explanation

	Description	Metric	Imperial
1	Model name	Videosensor ALT hardware explanation	Videosensor ALT hardware explanation

video nanobubble sensor alt software demonstration

	Description	Metric	Imperial
1	Model name	Videosensor ALT software demonstration	Videosensor ALT software demonstration