



## Dolphin 1 Specification

Date: September 3, 2009

### Dolphin 1 Features

Water Filtration system

4 filters and 2 x UV lights.

Water Flow from the collection tank: Sediment filter, Carbon filter 1, Reverse Osmosis, Carbon filter 2, then the 1st UV Light.

Additional UV light for cold water

All cold water is additionally sanitized by passing the water through a 2nd UV light.

Recycle Mode

Sanitizes water in top storage tank on power up and every 12 hours during normal operation by passing the water through the cold water UV Light and then back into the storage tank for 2 minutes.

2 speed fan

A 2 speed fan is used to allow the dealer or end user to select between maximum water production, or quieter operation. Switch is on the back of the unit.

Quiet Operation

The sample units measure less than 55dB maximum sound level (measured 1ft from the unit, when generating water). Our goal is to drop the sound level to 50dB or less in the production units.

Municipal Water Mode

Municipal water mode is designed to provide an additional water source if Atmospheric water generation can not keep up with demand. Municipal water requires an external pre-filter kit to maintain water quality vs. Atmospheric water. Note: Without a pre-filter, all of the standard filters, especially the Reverse Osmosis filter life will be much shorter.

If an external water source is present, and the Relative Humidity is above 40%.

Any time the collection tank is empty, the unit will fill the collection tank from the external water source (takes about 1 min), and then shut off the external water source, and resume Atmospheric water production.

If an external water source is present, and the Relative Humidity is below 40%.

Any time the collection tank is empty, the unit will fill the collection tank from the external water source (takes about 1 min), and then shut off the external water source. Atmospheric water production will resume if the R/H goes above 40%.

Hot Water Child Lock

Hot Water will only be dispensed if the Child Lock button is pressed before the Hot Water Button.

The system resets after each use, or if no Hot water is dispensed for 30 seconds.

The unit sounds a long warning tone if the Hot Water button is pressed without first pressing the Child Lock button. This can remind an adult to engage the Child Lock, or warn that a child is playing with the machine.

Filter Replacement Warning

The unit will remind the end user to replace each filter as required.

Filter replacement timers can be reset at any time, if the filters are replaced early.

The Sediment, and 2x Carbon filters should be replaced every 6 months, and the Reverse Osmosis filter every 12 months.

The filters are accessible from the front of the machine, have quick disconnect connectors, and the front panel is easily removed to facilitate filter replacement.



Dolphin1 User Interface Liquid Crystal Display

The unit displays the current status of the machine with full animation on the front panel color LCD. Displays include Atmospheric water generation, filtering the water, dispensing Hot or Cold Water, Hot and Cold water tank temp, Heater and Cooler Status, UV Light Status / Failure, filter replacement, leak sensor, defrost sensor, the level of water in the collection tank and storage tank, etc.  
All button presses respond with an acknowledgement tone and where appropriate, mode change on the LCD, or a long warning tone if the requested operation cannot be performed.

Water System Priming

The collection tank is easily accessible to prime the unit with water, and includes a pre-filter.

Hot and Cold Water drains

The unit has drain ports on the back of the machine to remove water from the Hot, Cold and Storage tanks.

Multiple Colors

The unit is available in White, Black with Silver Accents and Titanium Grey / Silver. Custom colors upon request.

**Size and Weight**

	<i>Height</i>	<i>Width</i>	<i>Depth</i>
Machine Size - Metric (mm)	1145	418	418
Machine Size - English (in)	45.08	16.46	16.46
Shipping Package Size - Metric (mm)	1185	430	430
Shipping Package Size - English (in)	46.65	16.93	16.93
	<i>Kilograms</i>	<i>Pounds</i>	
Machine Weight - Net	46.0	101.4	
Machine Weight - Gross	48.5	106.9	

**Water Storage / Availability**

	<i>Total Capacity (Liters)</i>	<i>Usable Capacity (Liters)</i>	<i>Total Capacity (US Gal)</i>	<i>Useable Capacity (US Gal)</i>	<i>Notes</i>
Storage Tank (Stainless Steel, top storage tank)	8.5	8.5	2.25	2.25	
Cold Water Tank	1.2	1.2	0.32	0.32	
Hot Water Tank	1.3	0.7	0.34	0.18	Hot water tank maintains a minimum internal level of .6 liters to ensure the heating element is always submerged, and will not operate if the level is too low.
Collection Tank	5	5	1.32	1.32	
Total Capacity	16	15.4	4.23	4.07	
Immediate Available Capacity		10.4		2.75	As soon as the Storage tank water level starts to drop, water will start to be filtered / transferred from the collection tank. See filtration speed below.

Water Dispensing Speed	Liters / Min	US Gal / Min			
	1.5	0.40			
Filtration speed (time to filter water from the collection tank to the storage tank)	Liters / Hour	US Gal / Hour	Time to filter entire collection tank (mins)		
Filter Pak with Standard Reverse Osmosis filter and standard pump.	7.88	2.08	38		With municipal water connected, at least 5 Lt (1.32 US Gal) will be available every 39 mins.
Filter Pak with higher flow rate Reverse Osmosis filter and Upgraded filter pump.	15.75	4.16	19		With municipal water connected, at least 5 Lt (1.32 US Gal) will be available every 20 mins.
<b>Atmospheric Water Generation</b>	Liters / Hour	Liters / Day	US Gal / Hour	US Gal / Day	
30°C (86°F) and 70%-80% RH with high fan speed	1.15	27.60	0.30	7.29	These figures are preliminary, and will be tested at a lab capable of variable temperature and humidity.
30°C (86°F) and 70%-80% RH with low fan speed	0.95	22.80	0.25	6.02	
<b>Power Consumption</b>	Watts	Notes			These figures are preliminary, and will be re-tested with production units, and 220V compressor.
Generating Water	500				
Heating water	500	Heats Water from 25°C (77°F) to 88°C (190°F) in 12 minutes, then maintains 88°C (190°F).			
Cooling water	72	Cools Water from 25°C (77°F) to 13°C (55°F) in 60 minutes, then maintains 13°C (55°F).			
Filtration/Circulation	25	Recycle Mode			

