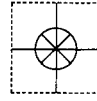


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# User's Guide

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## **SWS-300** **Wastewater Sampler**





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**WARNING:** These products are not designed for use in, and should not be used for, patient-connected applications.



# Omega Wastewater Sampler Instruction Manual

## Description

The Omega Wastewater Sampler is designed specifically to meet the sampling requirements for industrial discharges, sewers, rivers and streams. The Omega Sampler takes a "time weighted" composite sample in a 2 gallon bottle, to meet the wastewater sampling guidelines. The Omega Wastewater Sampler is easily set up near industrial discharges or streams. It can also be suspended in a manhole for sewer flow sampling.

The Omega Wastewater Sampler consists of a rugged, rainproof lockable carrying enclosure. Inside the enclosure is one 2-gallon polyethylene sample bottle for composite samples, a peristaltic sampling pump, the logic timer/controller and a rechargeable gel cell battery. Also provided is a sample pick-up hose and a battery charger. Everything you need is provided for a successful sampling program.

*Low Power:* The internal rechargeable battery will power the sampler for several months and/or for several sampling events.

*Overflow Protection:* The sample bottle is equipped with a float switch which automatically turns off the sampler pump if the bottle becomes full. Be sure the electrical lead from the bottle cap is plugged into the jack on the bottom of the controller housing.

*Environmental:* The Sampler is not damaged by water or moisture or severe environmental conditions. All parts may be washed with soap and water.

*Operating Temperature:* 0 to 70 degrees C

## Specifications

### *Sample Size:*

Composite: 50 ml to 600 ml samples as set by user. 2 gallon composite sample maximum.

*Size:* 9" L X 17" W X 22" H

*Weight:* 22 # (Shipping Weight 24#)

### *Materials:*

Enclosure: Expanded UV protected PVC

Bottle: 2 gallon polyethylene

Sample Tubing: Polyethylene

### *Sample Pump:*

Flow Rate: 1000 ml per minute at 4 ft. head

Type: Peristaltic

Maximum Lift: 22'

*Logic Timer/Controller:* CMOS Solid State (fully potted in epoxy).

*Backflush:* After each sample is taken the pump reverses direction and backflushes the line.

*Sample Hose:* One 15' nylon reinforced 1/4" ID polyethylene flexible tubing section with intake strainer. Hoses may be extended, as required, using standard 1/4" tubing and fittings.

*Battery:* Rechargeable 3 AH Gel Cell

*Battery Life:* The battery will power the sampler for a minimum of four months including five sampling events before recharging is required.

### **Sampler Operation**

The Omega Wastewater Sampler is shipped fully assembled and tested. Remove everything from the box and straighten out the hose.

Open the Sampler enclosure and remove the battery charger. The battery is installed in the controller enclosure. On the right side of the controller enclosure, find the on-off toggle switch. Push the switch up, for ON.

This turns on the battery power to the Sampler. When the switch is turned ON, the Sampler will go through a sample cycle to assure that everything is functional. Push the "push button" on the right side to activate the sampler pump. Use this button to verify system operation, to take manual samples, and to check sample size.

If the pumps grind slowly, this is an indication that it is time to recharge the battery. Also, before any extended use, it is a good idea to recharge the battery. Plug the charger into the charger socket, on the left side. *Then* plug the charger into the wall socket. Charge for 12 hours for a full recharge.

Normally, the composite sampler is set to take a 200 ml sample every 10 minutes until the composite sample bottle is full. The sample size and sampler interval are fully adjustable by using the knobs on the upper right side of the control panel.

The sample size is approximate and varies with vertical distance between the water and the Sampler. For precise sample size, you may want to verify sample size by pressing the push button and adjusting for your specific installation.

After the sampling event, remove the sample bottle and take the samples to your lab for analysis. Then install a clean empty bottle. Be sure to plug the lead from the bottle cap into the socket on the bottom of the controller housing. The battery is good for several sampling events between recharging.

### **Flow Proportional Sampling**

The SWS300 will produce flow proportional samples when paced by an external flow monitor. The flow monitor must provide a momentary switch closure (100MS or longer) whenever a sample is to be taken. The output of the flow monitor must be wired to a 1/4" phone plug (mono, 2-wire). The phone plug is then inserted into the Sampler "sensor" input jack. The Sampler "interval" is then set to "4 hrs." Set the sample size required. Now a sample will be taken, flow proportionally, as directed by the flow meter.

### **Maintenance**

The Omega Wastewater Sampler should require no maintenance for several years except routine cleaning with soap and water, and battery recharging.

## WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **13 months** from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal **one (1) year product warranty** to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components which wear are not warranted, including but not limited to contact points, fuses, and triacs.

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## RETURN REQUESTS/INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:

1. Purchase Order number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

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1. Purchase Order number to cover the COST of the repair,
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