SWS-300
Wastewater Sampler

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It is the policy of OMEGA to comply with all worldwide safety and EMC/EMI regulations that apply. OMEGA is constantly pursuing certification of its products to the European New Approach Directives. OMEGA will add the CE mark to every appropriate device upon certification.

The information contained in this document is believed to be correct, but OMEGA Engineering, Inc. accepts no liability for any errors it contains, and reserves the right to alter specifications without notice.

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

OMEGA is pleased to offer suggestions on the use of its various products. However, OMEGA neither assumes responsibility for any omissions or errors nor assumes liability for any damages that result from the use of its products in accordance with information provided by OMEGA, either verbal or written. OMEGA warrants only that the parts manufactured by it will be as specified and free of defects. OMEGA MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESS OR IMPLIED, EXCEPT THAT OF TITLE, AND ALL IMPLIED WARRANTIES INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. LIMITATION OF LIABILITY: The remedies of purchaser set forth herein are exclusive, and the total liability of OMEGA with respect to this order, whether based on contract, warranty, negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the component upon which liability is based. In no event shall OMEGA be liable for consequential, incidental or special damages.

CONDITIONS: Equipment sold by OMEGA is not intended to be used, nor shall it be used: (1) as a “Basic Component” under 10 CFR 21 (NRC), used in or with any nuclear installation or activity; or (2) in medical applications or used on humans. Should any Product(s) be used in or with any nuclear installation or activity, medical application, used on humans, or misused in any way, OMEGA assumes no responsibility as set forth in our basic WARRANTY/DISCLAIMER language, and, additionally, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the Product(s) in such a manner.

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.

FOR NON-WARRANTY REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:
1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

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