

WS700-750 Water Samplers

Combined Composite/Discrete Samplers for a Range of Sampling Requirements



The WS700 single bottle sampler allows you to take a time or flow (with optional flow monitor) weighted composite sample or a discrete (grab) sample.

The WS750 dual bottle sampler allows you to take a time or flow (with optional flow monitor) weighted composite sample and a discrete (grab) sample at the same time.

Features

- Ideal for wastewater, industrial, and environmental sampling
- Easy to use, state of the art controller
- Does composite or discrete sampling, or both at the same time (WS750)
- Output provided for use with optional datalogger
- Automatic backflush clears pickup strainer and hose
- Lightweight and easy to carry
- Rugged construction for harsh environments
- Meets federal, state and local wastewater regulations

Description

Global Water's WS700 single-bottle and WS750 dual-bottle samplers combine all of the features you need to meet a wide variety of sampling requirements, including those for stormwater, rivers and streams, industrial discharge, water and wastewater treatment, and wastewater collection.

Powerful Operation

The WS700-750's state of the art controller gives you power over your sampling process. With the sample size control, you can adjust the WS700-750 to take one of 15 individual time-weighted composite sample sizes, from 50 ml to 2 liters. You can also set the size control to the full-bottle discrete setting for full-bottle grab samples. The sample interval control allows you set the time between individual composite samples to one of 15 time settings, from 5 minutes to 12 hours, or you can enable the external trigger mode. A start delay timer allows you to start multiple samplers in the field at the same time, or to delay drawing a sample after a triggering event so that your sample better represents the water source. An automatic 15-second

backflush cycle clears any debris from the strainer and empties the water from the hose so the next sample is not contaminated. The sample bottle is equipped with a float switch that automatically turns off the peristaltic sampling pump if the water bottle becomes full. The sampler's 5 AH rechargeable battery will power the unit for several months or through several sampling events.

Unique Independent Pump Operation

A unique feature of the WS750 model is the ability to set the sampling mode for each pump and bottle individually. This allows you to take a time-weighted composite sample *and* a discrete (grab) sample *at the same time*. Or you can take two individual time-weighted composite samples with different size settings for each pump.

Useful Inputs and Outputs

Both the WS700 and WS750 include trigger inputs for each pump and bottle so you can control sample collection from an external closed contact switch like

a water level sensor, rain gauge sensor, or external process controller. You can use a 4-20 mA sensor to trigger sample collection with a 4-20 mA to Pulse Converters (see the RG750 and RG755 in the Accessories table). Pulse outputs for each bottle are also provided for tracking sample collection information via a GL500 Datalogger (see page 140) or other monitoring device.

Range of Features and Options

The WS700 and WS750 samplers are housed in rugged, weatherproof enclosures with handles on top and one side for easy portability. Both units include 15' of reinforced sampling hose with an intake strainer for each pump, a 1 gallon (WS750) or 2.5 gallon (WS700) polybottle for each pump, and a rechargeable battery and charger. Our optional WS700-IBO Ice Bag Option includes an insulated ice pack for the bottle so you can maintain the integrity of your sample. For stormwater sampling, add the WSSWK Stormwater Kit, which includes our Rain Sensor, Flow Sensor, and Auto-drain Rain Gauge all in one package.



Specifications

Operating Temperature	0° to +70°C
Materials	Enclosure: Expanded UV protected PVC Bottle: 2.5 gallon Polyethylene (WS700), two 1 gallon Polyethylene (WS750) Pickup Hose: 15' reinforced PVC 1/4" ID polyethylene flexible tubing section with intake strainer Pump Tubing: Norprene® 1/4" ID, 7/16" OD
Sample Pump	Flow Rate: 1000 ml per minute at a 4 foot head Type: Peristaltic Maximum Lift: ~20 feet
Battery	Rechargeable 5 AH Gel Cell
Battery Life	WS700: ~1 hour continuous pumping under load WS750: ~½ hour continuous pumping under load Standby: 3 months while still retaining enough power to run the pump to capacity is required

Start Delay	16 time settings from 0 to 12 hours
Composite Interval	15 time settings from 5 min. to 12 hours plus an external trigger mode setting
Sample Size	15 composite sample sizes from 50ml to 2 liters plus a full bottle discrete setting (approximate sizes at 4 foot head)
External Trigger Input(s)	250mS minimum pulse width switch closure or 4 to 24VDC
Pulse Output(s)	5VDC one-second pulse, 1000ohm output impedance
Bottle Switch Input(s)	Switch closure input, float switch in bottle
Rain & Water Sensors	Optional moisture sensors or switch closure inputs
Internal Fuse	10A Slow-Blow
Certificates	CE Compliance
Dimensions	22"H X 17"W X 9"D (56 x 43 x 23 cm)
Weight	WS700: 20 lbs/9 kg (shipping weight 22 lbs/10 kg) WS750: 22 lbs/10 kg (shipping weight 24 lbs/11 kg)

Ordering & Options

Samplers

Order No.	Bottles	Inputs	Outputs
WS750	2	2	2
WS700	1	1	1

Options

Order No.	Description
WS700-IBO	WS700 Sampler with Ice Bag Option
WS700-10G	10 Gallon Composite Sampler

Accessories

Order No.	Description
WSSWK	Stormwater Kit
01-342	Quick Release Pump Head
SMPLAC	AC-Powered Battery Option for Continuous Usage
BC100	Smart Battery Charger, see page 156
GL500-7-2	9-Channel Datalogger
GL500-2-1	3-Channel Datalogger
RG750 ¹	4-20 mA to Pulse Converter Module (one pulse per 15 min at 20mA)
RG755 ¹	4-20 mA to Pulse Converter Module (one pulse per 30 min at 20mA)

1) Specify unit conversion at time of order.

Replacement Parts

Order No.	Description
00-010	Spare 12V Gel Cell Battery
FE0400	Battery Charger
00-418	1-Gallon Plastic Bottle (WS750)
00-419	2.5-Gallon Plastic Bottle (WS700)
00-835 ²	1-Gallon Glass Bottle
CA0200	WS700 Bottle Cap with Float Switch
CB0200	WS750 Bottle Cap with Float Switch
CA0300	Stainless Steel Suction Strainer
00-546	Suction Hose, per foot
00-744	Peristaltic Pump Tubing, per foot

2) Only one glass bottle will fit in the sampler case without removing battery.