Isco 3710 Portable Composite Sampler

Ease of use in single-bottle sampling

The 3710 Sampler is ideal for general purpose or toxic pollutant composite sampling. It collects samples, based on time or flow intervals, into either a 2.5-gallon glass or poly bottle, or a 4-gallon polyethylene bottle.

Up to 24 sampling stop-and-resume times can be preset for unattended sampling.

Accurate, repeatable sample delivery

The patented LD90 Liquid Presence Detector and exclusive pump revolution counting system deliver accurate, repeatable sample volumes time after time. This system gives you:

- Automatic compensation for changes in head heights
- Automatic suction line rinsing to eliminate sample cross contamination.

The LD90's non-contacting design is not affected by conductivity, viscosity, temperature, or liquid composition. There are no internal tubing connections, so cleaning and tubing replacement are fast and easy.

User-friendly programming for all applications

Basic and extended programming modes provide you with the versatility for practically any sample collection scheme:

- Waste water treatment plants
- Water plant sampling
- Stormwater runoff
- ► Industrial waste water



Superior sample preservation

With thick, foamed-in-place insulation and twin-wall design, your samples are protected in hot or cold temperatures. The 3710 provides maximum thermal preservation for a portable sampler.

Durable, reliable controller

Controller components are protected in a tough, environmentally sealed enclosure.

The 3710 enclosure meets NEMA 4X and 6 (IP67) requirements for submersible, watertight, dust-tight, and corrosion resistant operation.

Isco 3710 Portable Composite Sampler Specifications

Sampler

 Height:
 25 in (64 cm)

 Diameter:
 19 in (50.5 cm)

 Weight (dry):
 37 lbs (16.8 kg)

Cooling Capacity (w/20 lbs of ice and 4-gal container full of 65° F water):

After 24 hrs: 32° F (18° C) below ambient After 48 hrs: 25° F (14° C) below ambient (standard thermal resistance factor of R-11)

Power Required: 12 VDC

Pump

Intake Purge: Adjustable air purge before and after each sample

Suction Tubing: Allowable length: 3 to 99 ft (1 to 30 m)

Material: Vinyl or Teflon® lined

Inside dimension: 3/8 or 1/4 in (1.0 or 0.6 cm)

Maximum sample lift: 26 ft (7.9 m) Typical line transport velocity:

@ 3 ft (0.9 m) head height: 2.5 ft/s (0.76 m/s) @10 ft (3.1 m) head height: 2.5 ft/s (0.76 m/s) @15 ft (4.6 m) head height: 1.9 ft/s (0.58 m/s)

Typical repeatability: ± 10 ml

Pump Tubing: Recommended life: 500,000 pump counts

(Note: A tubing life warning indicator is provided)

Liquid Presence Detector: Non-wetted, nonconductive sensor detects when

liquid sample reaches the pump to automatically

compensate for changes in head heights.

® DuPont

Controller

Dimensions (HxWxD): 6.75 x 13.0 x 10.0 in (17.0 x 33.0 x 25.0 cm)

Weight (dry): 11.0 lbs (5.9 kg)

Operating Temperature: 32° to 120° F (0° to 49° C)

Enclosure Rating: NEMA 4X, 6 (IP67)
Program Memory: Non-volatile ROM

Flow Meter Signal Requirements: 5 to 15 VDC pulse or 25 ms isolated

contact closure

Interface Port: 8-pin connector; data output at 2400 baud in ASCII

RS-232 format with handshake

Real Time Clock Accuracy: 1 minute per month, typical

Software

Sample Frequency Selection: 1 minute to 99 hours and 59 minutes, in one-

minute increments. Non-uniform times in minutes or clock times: 1 to 9,999 flow pulses.

Sampling Modes:

Sample Pacing: Uniform time, non-uniform time, flow.

Note: Flow pacing is controlled by external flow pulses.

Multiplexing: Samples per bottle: 1 to 50 with 100 ml bottles

1 to 17 with 350 ml bottles

Bottles per sample: 1 to 24, multiple bottle compositing

Programmable Sample Volumes: 10 to 9,999 ml, in 1 ml increments

Sample Retries: If no sample is detected, up to 3 attempts (user selectable)

Rinse Cycles: Automatic rinsing of suction line up to 3 rinses for each

sample collection

Program Storage: 3 sampling programs

Sampling Stop/Resume: Up to 24 real time/date stop/resume commands Controller Diagnostics: Tests for RAM, ROM, pump display, and distributor

Ordering Information

Isco 3710 Portable Sampler	68-3710-015
1 2.5-gallon round polyethylene bottle	299-0013-04
1 2.5-gallon round glass bottle	68-2700-005
1 4-gallon round polyethylene bottle	299-0013-05

Suction line and strainer not included; order separately.

Contact the factory or your Isco representative for complete ordering information.



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