

3710

Portable Composite Sampler

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.

Ease of use in single-bottle 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.

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.

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.



Applications:

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

Standard Features:

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

3710 Portable Sampler

Height:	25 in (64 cm)
Diameter:	19 in (50 cm)
Weight (dry):	37 lbs (16.8 kg)

Cooling Capacity

(w/20 lbs of ice and 4-gal bottles full of 65° F water):
-After 24 hrs: 35 °F (20 °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: 2.9 ft/s (0.88 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.

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, flow paced/time switched, or STORM (time- and flow-paced sampling during sample collection).

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

Programming Modes: Basic, extended, and STORM

Sampling Stop/Resume: Up to 24 real time/date stop/resume commands

Controller Diagnostics: Tests for RAM, ROM, pump display, and distributor

Ordering Information

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, strainer, or additional ProPak bags not included; order separately. Contact the factory or your Teledyne ISCO representative for complete ordering information.

Teledyne ISCO

P.O. Box 82531, Lincoln, Nebraska, 68501 USA
Toll-free: (800) 228-4373 • Phone: (402) 464-0231 • Fax: (402) 465-3091

teledyneisco.com



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