

# Isco 3700 Portable Full-size Sampler

## *Full-size performance and flexibility*

The full-featured 3700 Sampler collects sequential or composite samples based on time, flow rate, or storm conditions.

## *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 an exclusive twin-wall design, your samples are protected. Even in hot or cold temperatures, the 3700 provides the maximum performance in thermal preservation for a portable sampler.

## *Durable, reliable controller*

The 3700 Sampler controller components are protected in a tough environmentally sealed enclosure. The enclosure meets NEMA 4X and 6 (IP67) requirements for submersible, water-tight, dust-tight, and corrosion resistant operation.

\*Patent #5,125,801

## Isco 3700 Portable Full-size Sampler Specifications

### Sampler

<b>Height:</b>	25 in (64 cm)
<b>Diameter:</b>	19 in (50.5 cm)
<b>Weight (dry):</b>	37 lbs (16.8 kg)
<b>Cooling Capacity</b> ( <i>w/20 lbs of ice and 4-gal container full of 65° F water</i> ):	
	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)
<b>Power Required:</b>	12 VDC

### Pump

<b>Intake Purge:</b>	Adjustable air purge before and after each sample
<b>Suction Tubing:</b>	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
<b>Pump Tubing:</b>	Recommended life: 500,000 pump counts (Note: A tubing life warning indicator is provided)
<b>Liquid Presence Detector:</b>	Non-wetted, nonconductive sensor detects when liquid sample reaches the pump to automatically compensate for changes in head heights.

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### Controller

<b>Dimensions (HxWxD):</b>	6.75 x 13.0 x 10.0 in (17.0 x 33.0 x 25.0 cm)
<b>Weight (dry):</b>	11.0 lbs (5.9 kg)
<b>Operating Temperature:</b>	32° to 120° F (0° to 49° C)
<b>Enclosure Rating:</b>	NEMA 4X, 6 (IP67)
<b>Program Memory:</b>	Non-volatile ROM
<b>Flow Meter Signal Requirements:</b>	5 to 15 VDC pulse or 25 ms isolated contact closure
<b>Interface Port:</b>	8-pin connector; data output at 2400 baud in ASCII RS-232 format with handshake
<b>Real Time Clock Accuracy:</b>	1 minute per month, typical

### Software

<b>Sample Frequency Selection:</b>	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.
<b>Sampling Modes:</b>	
<b>Sample Pacing:</b>	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.
<b>Multiplexing:</b>	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
<b>Programmable Sample Volumes:</b>	10 to 9,999 ml, in 1 ml increments
<b>Sample Retries:</b>	If no sample is detected, up to 3 attempts (user selectable)
<b>Rinse Cycles:</b>	Automatic rinsing of suction line up to 3 rinses for each sample collection
<b>Program Storage:</b>	3 sampling programs
<b>Programming Modes:</b>	Basic, extended, and STORM
<b>Sampling Stop/Resume:</b>	Up to 24 real time/date stop/resume commands
<b>Controller Diagnostics:</b>	Tests for RAM, ROM, pump display, and distributor

### Ordering Information

#### Isco 3700 Portable Sampler with:

24 1-liter wedge shaped polypropylene bottles .....	68-3700-001
24 350-ml round glass bottles .....	68-3700-002
1 2.5-gallon round polyethylene bottle .....	68-3700-014
1 2.5-gallon round glass bottle .....	68-3700-015
1 4-gallon round polyethylene bottle .....	68-3700-016
<i>(Includes composite base)</i>	

Suction line and strainer not included; order separately.  
Contact the factory or your Isco representative for complete ordering information.



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