

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 exclusive LD90 Liquid Presence Detector and patented* 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 collection scheme:

- Uniform time intervals
- Non-uniform time intervals
- Stormwater runoff sampling
- Multiple bottle compositing
- Split sampling



Proven performance and long-term dependability are hallmarks of Isco's 3700 Sampler.

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.

Interchangeable 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. To give you added flexibility, the 3700 Series controllers are fully interchangeable for portable or refrigerated sampling.

Isco 3700 Portable Full-size Sampler Specifications

Contact the factory or your Isco representative for additional specifications.

Sampler			Controller		
Height	25¼ in.	64.1 cm	Weight	11 lbs.	5.9 kg
Diameter	19⅞ in.	50.5 cm	Dimensions	10 x 12.5 x 10 in.	26 x 32 x 25 cm
Weight (dry)	37 lbs.	16.8 kg	Operational Temperature	32° to 120°F	0° to 49°C
Bottle Configurations	24 - 1 liter polypropylene or 350 ml glass 12 - 1 liter polyethylene or glass 4 - 1 gallon polyethylene or glass 1 - 2.5 gal polyethylene or glass 1 - 4 gallon polyethylene (with optional composite base)		Enclosure Rating	NEMA 4X, 6	IP67
Cooling Capacity <i>(with 20 lbs. of ice and 4 gal. container full of 65°F water)</i>	After 24 hours: 32°F (18°C) below ambient After 48 hours: 25°F (14°C) below ambient <i>(Standard thermal resistance factor of R-11)</i>		Program Memory	Non-volatile ROM	
Power Requirements	12 volts DC. <i>(Supplied by battery or AC power converter.)</i>		Flow Meter	5 to 15 volt DC pulse or 25 millisecond isolated contact closure.	
Pump			Signal Requirements	Interface Port	
Intake Purge	Adjustable air purge before and after each sample.		Interface Port	8 pin connector; data output at 2400 baud in ASCII RS-232 format with handshake.	
Tubing Life Indicator	Provides a warning to change pump tubing.		Real Time Clock Accuracy	1 minute per month, typical	
Intake Suction Tubing			Software		
Length	3 to 99 ft.	1 to 30 m	Sample Frequency Selection	1 minute to 99 hours 59 minutes, in 1 minute increments Non-uniform times in minutes or clock times 1 to 9,999 flow pulses	
Material	Vinyl or Teflon® lined		Sampling Modes	Sample pacing	
Inside Dimension	¾ in. or ¼ in.	1 cm or 0.6 cm	Sample pacing	Uniform time, non-uniform time, flow, flow paced/time switched, STORM (time and flow paced sampling during sample collection.) Flow pacing is controlled by external flow pulses.	
Pump Tubing Life	Recommended 500,000 pump counts		Multiplexing	Samples per bottle (1 to 50 with 1000 ml bottles; 1 to 17 with 350 ml bottles), bottles per sample (1 to 24), multiple bottle compositing.	
Maximum Suction Lift	26 ft.	7.9 m	Programmable Sample Volumes	10 to 9,990 ml in 1 ml increments	
Typical Repeatability	±10 ml		Sample Retries	If no sample is detected, up to 3 attempts; user selectable	
Typical Line Transport Velocity at head heights of:			Rinse Cycles	Automatic rinsing of suction line up to 3 rinses for each sample collection	
3 ft. (0.9 m)	2.9 ft./s	0.88 m/s	Program Storage	3 sampling programs	
10 ft. (3.1 m)	2.5 ft./s	0.76 m/s	Programming Modes	Basic, extended and STORM	
15 ft. (4.6 m)	1.9 ft./s	0.58 m/s	Sampling Stop/Resume	Up to 24 real time/date sample stop/resume commands.	
Liquid Presence Detector	Non-wetted, nonconductive sensor detects when liquid sample reaches the pump to automatically compensate for changes in head heights.		Controller Diagnostics	Tests for RAM, ROM, pump display, and distributor	

© DuPont

Ordering Information

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

Description	Part Number	Description	Part Number
3700 Portable Sampler with:			
24 - 1 liter wedge shaped polypropylene bottles	68-3700-001	4 - 1 gallon round glass bottles	68-3700-011
24 - 350 ml round glass bottles	68-3700-002	1 - 2.5 gallon round polyethylene bottle	68-3700-014
12 - 1 liter round polyethylene bottles	68-3700-027	1 - 2.5 gallon round glass bottle	68-3700-015
12 - 1 liter round glass bottles	68-3700-017	1 - 4 gallon round polyethylene bottle <i>(Includes composite base)</i>	68-3700-016
4 - 1 gallon round polyethylene bottles	68-3700-036		



Isco, Inc.
4700 Superior St.
Lincoln, NE 68504 USA
Phone: (402) 464-0231
USA & Canada: (800) 228-4373
Fax: (402) 465-3022
E-Mail: info@isco.com

Isco is continually improving its products and reserves the right to change specifications without notice.

©2000 Isco, Inc. • Printed in U.S.A. • #1577DSSA • Rev. 03/00