

# 3700

## Portable Full-size Sampler

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

### *Accurate, repeatable sample delivery*

Our patented LD90 Liquid Presence Detector and exclusive pump revolution counting system deliver accurate, repeatable sample volumes time after time.

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

With thick, foamed-in-place insulation and twin-wall design, your samples are protected, even in hot or cold temperatures. The 3700 provides maximum thermal preservation for a portable sampler.

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



*The 3700 sampler collects sequential or composite samples based on time or flow rate.*



### Applications:

- Wastewater effluent
- Stormwater monitoring
- CSO monitoring
- Permit compliance
- Pretreatment compliance

### Standard Features:

- Exclusive LD90 Liquid Presence Detector and pump revolution counting system ensure accurate, repeatable sample volumes
- Basic and extended programming modes for:
  - Uniform time intervals
  - Non-uniform time intervals
  - Stormwater runoff sampling
  - Multiple bottle compositing
  - Split sampling
- Thick, foamed-in-place insulation and twin-wall design provide maximum performance in sample preservation.
- 3700 Controller is housed in a NEMA 4X and 6 (IP67) environmentally sealed enclosure, and is fully interchangeable between portable and refrigerated samplers

## 3700 Full-size Portable Sampler

<b>Height:</b>	25 in (63.5cm)
<b>Diameter:</b>	19 in (48.3 cm)
<b>Weight (dry):</b>	37 lbs (16.8 kg)
<b>Cooling Capacity (w/20 lbs of ice and 4-gal container full of 65° F water):</b>	-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: 2.5 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
<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 25.4 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>	
-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

<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

3700 Portable Sampler .....	68-3700-063
24 1-liter wedge shaped polypropylene bottles .....	68-3700-064
24 350-ml round glass bottles .....	68-3700-065
1 2.5-gallon round polyethylene bottle .....	68-3700-067
1 4-gallon round polyethylene bottle .....	68-3700-074 (requires Jumbo base)

*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

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*Teledyne ISCO is continually improving its products and reserves the right to change product specifications, replacement parts, schematics, and instructions without notice.*

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