

3700C

Portable Compact Sampler

The 3700C is ideal for installation where a full-size sampler won't fit. It will easily pass through 18-inch diameter or offset manholes without disassembly or awkward maneuvering.

Compact size with full-scale durability and features

Although smaller and lighter than our full size 3700 Sampler, the 3700C is designed and built with tough field use in mind. Its high-strength, corrosion-resistant material and NEMA 4X, 6 (IP67) controller assure you of long-term durability.

The 3700C controller has basic and extended programs for a wide variety of applications, including storm water monitoring. Sampling can be triggered based on time, flow, or pH. Built-in diagnostics, program storage, and program security are also included. And the controller is interchangeable on other 3700 Series samplers.

The patented LD90 Liquid Detector and pump revolution counter gives you accurate repeatable sample volumes every time:

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

The LD90's field proven, non-contacting design is not affected by conductivity, viscosity, temperature, or liquid composition.

The 3700C has three different bottle options, including 500 ml poly bottles for sequential sampling (shown at right, with optional carrier) and 2.5-gallon glass or poly bottles for composite use.



Our optional bottle carrier makes for convenient sequential sampling.



Applications:

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

Standard Features:

- Quick-change bottle cartridge system
- 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 Compact Portable Sampler

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| Height: | 27.75 in (70.5 cm) |
| Diameter: | 17.75 in (45 cm) |
| Weight (dry): | 25 lbs (11.3 kg) |
| Cooling Capacity (w/20 lbs of ice and 24 500ml 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

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| 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) |

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| Liquid Presence Detector: | Non-wetted, nonconductive sensor detects when liquid sample reaches the pump to automatically compensate for changes in head heights. |
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Controller

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| Dimensions (HxWxD): | 10 x 12.5 x 10.0 in (25.4 x 31.7 x 25.4 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

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| 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: | Uniform time, non-uniform time, flow, flow paced/time switched, or STORM (time- and flow-paced sampling during sample collection). |
| -Sample Pacing: | 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 |

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| 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

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| 3700C Portable Sampler | 68-3700-069 |
| 24 500-ml wedge shaped polypropylene bottles | 68-3700-070 |
| 1 2.5-gallon round polyethylene bottle | 68-3700-073 |
| 100 2-gallon ProPak bags, 1 holder and cap | 68-3700-072 |

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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