SOORefrigerated Sampler

Reliable Stationary Sampling



Superior Pump Performance

The 5800 Refrigerated Sampler is Teledyne Isco's answer to the rigorous demands of waste water sampling. With user-friendly controls and workplace-savvy features, the 5800 offers a unique solution for stationary sampling in both municipal and industrial wastewater applications.

The 5800 sampler uses Isco's proven peristaltic pump for superior performance and volume accuracy. The pump revolution counter and liquid detector deliver samples at USEPA recommended line velocity of at least 2 ft/s (0.6 m/s), even at head heights up to 25 ft (7.6 m).

Pump Tubing Bands

Pump tubing bands keep the tubing in place to ensure pumping performance and sample volume delivery.

Pump Revolution Counter

High sample volume accuracy is achieved with the pump revolution counter.

Liquid Detector

The liquid detector notifies the controller when liquid is present for precise line rinsing and elimination of missed samples.



Pump Tubing Bands



Liquid Detector

All Weather

The 5800's UV protection ensures product longevity and reliability, while the tough double-wall LLDPE construction is designed to withstand the harshest outdoor environments without requiring a protective enclosure. The optional pump housing heater allows for uninterrupted sampling in the winter months.



Service Made Simple

The last thing you need is a product that isn't user-friendly when it comes to service. Maintenance to the 5800 Refrigerated Sampler has been simplified by including built-in alarms when attention is needed. Modular and easy-to-access components simplify servicing while out in the field.

Controls and Alarms

A flashing control panel backlight provides convenient notification if sampling errors occur during a sampling event. Four remote digital alarms come standard, alerting you when the sampling event has started/completed or sampling errors have occurred.

The controller actively regulates and displays sample compartment temperature, and logs a 24-hour summary to confirm proper sample cooling. Tailoring the sample collection to your plant operation is achieved through user programmable time or flow pace modes, program pauses and resumes and automatic re-run mode.

Flow Path and Tubing

Pump tubing can be easily replaced without tools. The safety interlock removes power whenever the pump band is unlocked, keeping fingers from getting pinched. Heat resistors on the control panel keep condensation from developing on the circuit board, eliminating the need for desiccant and desiccator maintenance.

Corrosion Protection

To ensure the long life and reliability of the sampler, corrosion protection is a high priority. The refrigerator's condenser and evaporator coils are made of stainless steel, then electro- and powder-coated. As an additional measure, a powder-coated stainless steel protective grill is installed to limit rain water accumulation and further protect the sampler in corrosoive environments.

Temperature Control

Efficient temperature control is achieved due to insulation from top to bottom inside the samplers walls and the 1/6 HP high efficiency compressor. This combination allows you to keep samples cool in hot, humid conditions. With the help of interior heaters, samples are kept from freezing in cold conditions.



Modular Design

To reduce sampler downtime, the 5800 includes modular components:

- Control Panel
- Refrigeration Assembly
- Pump Assembly
- Power Supply Assembly
- Distributor Assembly



Bottle Options

The 5800 sampler offers different glass and plastic bottle configurations to meet various sampling programs. These options include the following:

- Composite bottles for compliance monitoring
- Discrete sampling for process control



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Programming Options

The continuous sampling program works well for compliance monitoring using 2 or more composite bottles. A composite sample bottle can be retrieved each day and replaced with a clean bottle with no need to restart the programming routine.

Pause & Resume programming allows for scheduled breaks in the sample routine. This can be used for industries who do not run continuously and do not have discharge flow when the industry is closed. The sampler can be programmed to pause at the end of the work day and resume the next morning.

Auto-rerun program is used to restart the program at the same clock time each day the sampler is programmed to take samples. This allows for accurate daily comparisons of analyzed samples.

Bottle Configurations	Part Number
Twenty-four 1-liter PP bottles	68-5800-015
Twenty-four 350-mL glass bottles	68-5800-016
Four 10-liter round PE bottles	68-5800-005
Four 10-liter round glass bottles	68-5800-006
Two 10-liter round PE bottles	68-5800-007
Two 10-liter round glass bottles	68-5800-008
One 20-liter round PE bottle	68-5800-011
One 20-liter round glass bottle	68-5800-012
One 10-liter round PE bottle	68-5800-009
One 10-liter round glass bottle	68-5800-010
Twenty-four 1-liter ProPak bottles	68-5800-017
One 10-liter ProPak bottle	68-5800-018
Four 20-liter Rectangular PE bottles	68-5800-019

Isco 5800 Refrigerated Sampler		
Size (HxWxD)	52 x 29 x 33 inches (132 x 74 x 84 cm)	
Weight (empty)	195 lbs (88.5 kg)	
Refrigerator Body	Linear low-density polyethylene (LLDPE)	
Power Requirements	120 VAC, 60 Hz, or 240 VAC, 50 Hz (specify)	
Operational temperature	-20 to 120 °F (-29 to 49 °C)	

Description	Part Number
Isco 5800 Refrigerated Sampler. Suction	
line, strainer, and bottle configuration not	
included; order separately.	
120V/60Hz	68-5800-001
230V/50Hz	68-5800-002
As above with Pump Heater	
120V/60Hz	68-5800-102
230V/50Hz	68-5800-103

