

BLZZRD™

Portable Refrigerated Wastewater Sampler

AC or DC Battery Powered Cooling with State-of-the-Art Data Logging

Get the water samples that you need, when you need it with the BLZZRD portable refrigerated sampler. From remote locations like streams and drainage canals, to city or industrial locations, the BLZZRD can be easily moved from site to site for quick sampling or short-term studies.

Based on Teledyne ISCO's industry-leading 6712 controller, you get advanced control, data logging, and communication features. Available routines include: pause-and-resume for intermittent-discharge flow monitoring; sampler pacing by time, non-uniform time, flow or external event; and random interval sample collection.

Most portable samplers use ice to cool samples, but samples must be collected in a short time period before the ice melts. This refrigerated design allows samples to be kept at a desired temperature for a long time and can be collected when convenient.

Dual DC battery or AC line power give you the flexibility to sample anywhere.

- A 12V deep-cycle battery delivers 48 hours—or more—of refrigeration. The power-saving cooling system remains on standby until the first sample is drawn, and only then switches on to preserve the collected samples for pickup. Solar panels can be used to recharge batteries for long-term studies in remote locations.
- AC line power allows the sampler to be positioned indefinitely in one location if desired.
- When AC line power and battery are used simultaneously, power to unit will automatically switched to battery during power outage, protecting samples integrity.

Multi-bottle set up lets you choose Composite (single bottle) and Sequential (multi-bottles) to fit your sampling application. Bottle options include 5- and 2.5 gallon composites as well as 4 x 1-gallon, 4 x 1.8 L, and 14 x 950 mL sequentials.

A removable optional Mobility Kit with handles and pneumatic tires make it easier for one person to move around over rough terrain, even bottles full with water samples.



Shown with optional Mobility Kit and Battery Box



Applications:

- Stormwater Runoff Compliance
- TMDL and Watershed monitoring
- Enforcement Monitoring
- Anywhere you need advanced sampling capability combined with data logging and communications for flow, rainfall, and water quality parameters—plus reliable, on-demand cooling

Standard Features:

- Standard and extended programming keeps setup simple when you don't need advanced features
- NEMA 4x, 6 (IP67) controller enclosure is watertight and dustproof
- SDI-12 interface provides "plug and play" connection with multi-parameter water-quality sondes and other compatible devices
- Standard on-board memory gives you great flexibility for logging environmental data
- Sample delivery at the EPA-recommended velocity of 2 ft/sec., even at head heights of 26 feet
- Patented pump revolution counter ensures accurate sample volumes—and tells you when tubing should be replaced

BLZZRD™ Sampler

Size (W x D x H):	28 x 18.5 x 31.5 (71 x 47 x 80 cm)
Weight:	Dry, less battery—74 lbs (34 kg)
Power requirements:	12 Vdc, 6 Amps (supplied by external battery), OR 90 to 264 Vac, 47 to 63 Hz, 2 Amps
Bottle configurations:	5-gallon (19 Liter) poly bottle 2.5-gallon (9.5 Liter) glass bottle configuration 2.5-gallon (9.5 Liter) poly bottle configuration 1.8-L glass bottle configuration (4 bottles) 1-gallon (3.7 Liter) poly bottle configuration (4 bottles) 950-mL poly bottle configuration (14 bottles)

Pump

Intake suction tubing:	
-Length:	3 to 99 ft (1 to 30 m)
-Material:	Vinyl or PTFE
-Inside dimension:	3/8 in (1 cm)
Pump tubing life:	Typically 1,000,000 pump counts
Maximum lift:	28 ft (8.5 m)
Typical repeatability:	±5 mL or ±5% of the average volume in a set
Typical line velocity at Head height of:	
	3.0 ft./s @ 3 ft (0.91 m/s @ 0.9 m)
	2.9 ft./s @ 10 ft (0.87 m/s @ 3.1 m)
	2.7 ft./s @ 15 ft (0.83 m/s @ 4.6 m)

Liquid presence detector:	Non-wetted, non-conductive sensor detects when liquid sample reaches the pump to automatically compensate for changes in head heights
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Controller

Weight:	13 lbs (5.9 kg)
Size (HxWxD):	10 x 12.5 x 10 in (26 x 32 x 25 cm)
Operational temperature:	32 ° to 120 °F (0 ° to 49 °C)
Enclosure rating:	NEMA 4X, 6 (IP67)
Program memory:	Non-volatile ROM
Flow meter signal input:	5 to 15 Vdc pulse or 25 millisecond isolated contact closure
External trigger:	Initiates sample collection and cooling from contact closure signal
No. of programmable composite samples:	1 to 999 samples
Clock accuracy:	1 minute per month, typical, for real time clock

Software

Sample frequency:	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
Sampling modes:	Uniform time, non-uniform time, flow, event. (Flow mode is controlled by external flow meter pulses.)
Programmable sample volumes:	10 to 9,990 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:	5 sampling programs
Sampling Stop/Resume:	Up to 24 real time/date sample stop/resume commands
Controller diagnostics:	Tests for RAM, ROM, pump, display, and distributor

Ordering Information

Note: Bottle configuration, suction line, and strainer must be ordered separately. 12 Vdc operation requires external battery. Contact Teledyne ISCO or your local Representative for complete information.

BLZZRD Sampler

(115–230 Vac/12 Vdc) Includes controller, distributor arm, instruction manual, pocket guide. Standard power cord.	68-2964-000
5-gallon (19 Liter) poly bottle	68-2960-023
2.5-gallon (9.5 Liter) glass bottle configuration	68-2960-021
2.5-gallon (9.5 Liter) poly bottle configuration	68-2960-024
1-gallon (3.7 Liter) poly bottle configuration (4 bottles)	68-2960-025
1.8-L Glass bottle configuration (4 bottles)	68-2960-026
950 mL poly bottle configuration (14 bottles)	68-2960-020
Mobility Kit	60-2974-048



Multiple bottle configurations are available to fit your application.

This equipment uses fluorinated greenhouse gases with a GWP greater than 150.