



# AS950 Refrigerated Sampler, 230 V, with 1 - 20 L Bottle

Product #:

ZAR Price: No availability shown ASR.CXXX2X11XX Contact Hach

### Sampling has never been this easy.

The AS950 Refrigerated Sampler is an easy and reliable solution for sample collection. With its large and intuitive display, USB data transfer capabilities, and simple one-screen programming, you can save time and streamline the entire sampling process.

Additionally, the AS950 Refrigerated Sampler accurately preserves your samples with an air-sensing thermostat designed to meet international and USEPA guidelines.

Equipped with an error message for easy troubleshooting and corrosion-resistant materials, the AS950 Refrigerated Sampler is the ideal choice for consistent and accurate sampling. Its large, color display, and USB upload and download capabilities make sampling more convenient and efficient.

Even in challenging environments, the AS950 Refrigerated Sampler ensures sample preservation and eliminates uncertainty with an available error warning and status screen.

Investing in the AS950 Refrigerated Sampler means you'll have an easier and more reliable way to collect samples. Start sampling with precision and confidence today by ordering yours.

#### Easiest and most intuitive operation

The large full colour display and intuitive programming give you access to all your programmable criteria on a single screen - eliminating scrolling through menus and supporting error-free operation.

#### Most convenient data transfer and programming available

The AS950 is the only sampler that utilises a USB drive to upload and download data and copy programs from one sampler to another.

#### Confidence in your sampling process

The program status screen instantly communicates alarms, missed samples and program progress for quick and easy troubleshooting.

#### **Resists corrosion**

The refrigerated sampler base is designed to endure humid and highly corrosive environments, minimizing damage caused by corrosive gases, rodents, and standing water to guarantee environmental integrity.

#### Accurate and consistent sample preservations

The custom-designed air-sensing thermostat controls temperature in accordance with USEPA and international guidelines, preserving samples regardless of outside temperatures and conditions.

## Specifications

Alarm:	Configurable alarms that show on status screen and are recorded in diagnostics alarm logs. Alarms can be set for system diagnostics and logging such as program end, sample complete, missed samples and full bottle. Channel alarms are setpoint alarms for the recorded measurements
	(channels), such as pH, level and power supply voltage.
Automatic Shutdown:	Multiple Bottle Mode: After complete revolution of distributor arm (unless Continuous Mode is selected)
	Composite Mode: After preset number of samples have been delivered to composite container, from 1 to 999 samples, or upon full container.
Base Type:	Vinyl
Body material:	22 Gauge Steel (optional Stainless Steel) with Vinyl laminate over-coating (Refrigerator)
Bottle Set:	Composite (1) 5.5 gallon polyethylene bottle kit
Certifications:	CE, UL
Communication Capabilities:	USB and optional RS485 (Modbus)
Cooling system:	1/7 HP, 75 Watt, 400 BTU/hr compressor, 120 CFM condenser fan, three-sided wraparound plate type evaporator, rigid foam insulation, air sensing thermostat capable of maintaining sample liquid at 4 °C in ambient temperature to 49 °C maximum; accurate to ±0.8 °C, magnetic door seal
Data logging:	SAMPLE HISTORY - Stores up to 4000 entries for sample time stamp, bottle number and sample status (success, bottle full, rinse error, user abort, distributor error, pump fault, purge fail, sample timeout, power fail and low main battery).
	MEASUREMENTS - Stores up to 325,000 entries for selected measurement channels in accordance with the selected logging interval.
	EVENTS - Ability to store up to 2000 entries in Sample History logging. Records Power On, Power Fail, Firmware Updated, Pump Fault, Distributor Arm Error, Low Memory Battery, Low Main Battery, User On, User Off, Program Started, Program Resumed, Program Halted, Program Completed, Grab Sample, Tube Change Required, Sensor Communication Errors, Cooling Failed, Heating Failed, Thermal Error Corrected.
Diagnostics:	View event and alarm logs as well as maintenance diagnostics
Dimensions:	61 cm x 61 cm x 112 cm
Display:	1/4 VGA, Colour; self-prompting/menu-driven program
Factory Installed Options:	TWO SENSOR PORTS
	Accepts Hach digital Differential pH, Hach digital AV9000 analyzer with submerged area velocity flow and/or Hach digital US9000 ultrasonic level sensors
Housing Material:	PC/ABS blend, NEMA 4X, 6, IP68, corrosion and ice resistant (Controller)
Inputs:	One 0/4-20 mA input for flow pacing
Intake:	Strainers: Choice of PTFE and 316 stainless steel construction, or all 316 stainless steel in standard size, high velocity, and low profile for shallow depth applications
	Purge: Air purged automatically before and after each sample;
	duration automatically compensates for varying intake line lengths
	Rinse: Intake line automatically rinsed with source liquid prior to each sample, from 1 to 3 rinses

	Retries or Fault: Sample collection cycle automatically repeated from 1 to 3 times if sample not obtained on initial attempt
Internal Clock:	$\pm 1$ second per day at 25 °C
Languages user interface:	en, fr, es, it, de, pt, zh, tr, hu, cz, pl, ro, hr, el, sl, sk, fi, ru, ja, ko
Manual Sampling:	Initiates a sample collection independent of program in progress
Memory:	Sample history: 4000 records;
	Data log: 325,000 records;
	Event log: 2000 records
Operating Mode:	Continuous or non-continuous
Power requirements (Hz):	50 - 60 Hz
Power requirements (Voltage):	230 V
Power supply:	230V
Probes included:	No
Programs:	Dual Programs: Up to 2 sample programs can be run sequentially, in parallel, or according to day of week scheduling; enabling a single sampler to function like multiple samplers
Pump flow rate:	4.8 L/min at 1 m vertical lift with 3/8" intake tube typical
Rain gauge input:	No
Refrigeration Components and Plumbing:	Corrosion protected with conformal all exposed copper tubing is insulated to avoid sweating and condensation
Sample Container:	1 x 20 L
Sample Interval:	Selectable in single increments from 1 to 9999 flow pulses or 1 to 9999 minutes in one minute increments
Sample Pump:	High-speed peristaltic, dual roller, with 0.95 ID x 1.6 OD cm (3/8" ID x 5/8" OD) pump tube
Sample Transport Velocity:	0.9 m/s with 4.6 m vertical lift, 4.9 m of 3/8" Vinyl intake tubing, 21 °C and 1524 m elevation
Sample Trigger:	When equipped with flow sensor or pH/temperature sensor or peripheral monitoring options, sampling can be triggered upon an upset condition when field selectable limits are exceeded
Sample Volume:	Programmable in 10 mL increments from 10 - 10,000 mL
Sample Volume Accuracy:	Typical: $\pm 5\%$ of 200 mL sample volume with: 4.6 m vertical lift, 4.9 m of 3/8" Vinyl intake tube, single bottle, full bottle shut-off at room temperature and 1524 m elevation
Sample Volume Repeatability:	Typical: $\pm 5\%$ of 200 mL sample volume with: 4.6 m vertical lift, 4.9 m of 3/8" Vinyl intake tube, single bottle, full bottle shut-off at room temperature and 1524 m elevation
Sampling Mode:	Pacing: Time weighted, Flow weighted, Time table, Flow table, Event
	Distribution: Single bottle composite, multi-bottle composite, multi-bottle discrete, bottles per sample, samples per bottle or a combination of bottles per sample and samples per bottle
Sensor Ports:	0
Status Messages:	Communicates what program is running, if there are any missed samples, when the next sample will be taken, how many samples remain, number of logged channels, time of last measurement, memory available, number of active channels, if alarms were triggered, when alarms were triggered, active sensors and cabinet temperature
Suction Hose Outer Diameter:	1/4" and 3/8" ID PTFE-lined Polyethylene with protective outer cover available in clear and black.
Temperature:	Operating: 0 - 50 °C
	Storage: -40 - 60 °C
Tubing:	Pump tubing: 9.5 mm ID x 15.9 mm OD Silicone
	Intake tubing: 1.0 - 4.75 m minimum length, 1/4" or 3/8" ID Vinyl or 3/8" ID PTFE-lined Polyethylene with protective outer cover (black or clear)

User Interface:	Membrane switch keypad with 2 multiple function soft keys
Vertical Lift:	8.5 m using 8.8 m maximum of 3/8" Vinyl intake tube at sea level at 20 to 25 $^{\circ}\mathrm{C}$
Warranty:	12 months
Weight:	63 kg
What's included?:	1 ea. AS950 controller on vinyl 230 V refrigerated base
	1 ea. Bottle kit (RF010060), includes 1 x 20 L PE bottle w/cap (6494), composite tube support (8886) and full bottle shut-off (8847)
	1 ea. 7 m vinyl intake tubing (920)
	1 ea. strainer (926)

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