CAMPBELL SCIENTIFIC®
WHEN MEASUREMENTS MATTER

PVS4150C

Portable, Battery-Powered Water Sampler

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The PVS4150C is a portable, battery-operated water sampler that deposits its water samples into a 2.3 gallon container. Designed for easy transport, the PVS4150C includes in-line wheels, a telescoping handle, three soft-grip handles, and a rugged enclosure.

The PVS4150C sampler uses an external vacuum pump to draw water through intake tubing, instead of the traditional peristaltic pump that induce flow by squeezing flexible tubing. Advantages of the vacuum pump method include faster sampling rates, longer sampling distances, and less maintenance. Because the vacuum method disturbs the water samples less, they better represent the original water solution, especially if the solution has high concentrations of suspended solids. See our vacuum pump water samplers in action at: www.youtube.com/watch?v=wi4dxFTw-ks

The pump in the PVS4150C is smaller than our larger models. The lightweight pump is able to take samples at over 5 ft/sec for horizontal draws of up to 25 ft.

The PVS4150C includes a programmable controller with 16-key intuitive touch pad. See a demonstration of the programmable controller at: www.youtube.com/watch?v=yRr80Lm-5Hs.

The controller can accept a pulse input (e.g., rain gage), a 4- to 20-mA signal (e.g., flow meter), or initiate a sample on a timed basis. The sampler can also be interfaced with our dataloggers. Our dataloggers can measure nearly any turbidity, water level, or hydrometeorologic sensor, as well as control the sampler based on time, event, or measured conditions.

Features

- Controller housed in an environmentally sealed enclosure for corrosion protection, and all information is easily controlled and viewable on a 2x16 character backlit LCD.
- Rapid transport velocities of samples (over 5 ft/s for horizontal draw of up to 100 ft), meaning more accurate samples, even of solids.
- Watertight enclosure constructed of strong, lightweight, HPX® resin
- Enclosure design that includes four press and pull latches; three double-layered, soft-grip handles; two padlockable hasps; in-line wheels, telescoping handle; Vortex® valve; flush hinges
- Three-year warranty (five-year extended warranty available as an option)
- Interfaces with Campbell Scientific dataloggers for more measurement and control capabilities

Ordering Information

Automatic Samplers

PVS4150C	Composite Portable Automatic Liquid Sampler. Requires 3/8-in. inner diameter intake and discharge hose. See Common Accessories.

Pressure/Vacuum Options (choose one)

-NP	No Pressure Gage
-VP	Pressure/Vacuum Gage

Warranty Options (choose one)

-SW	Standard three year warranty.
-XW	Extended five year warranty.

Common Accessories

26925-L	Sampler 3/8 inch PVC Intake Hose with user-specified length. Enter length, in feet, after the -L. Standard length is 25 ft.; maximum length is 250 ft. Must choose a hose termination option (see below).

Hose Termination Options

-E1	Includes a lead sinker.
-E2	Includes a stainless-steel strainer.

Specifications

Sampler

Dimensions

Height:	24.6 in. (62.5 cm)
Width:	19.7 in. (50.0 cm)
Depth:	14.4 in. (36.6 cm)

Weight

Sampler (no battery):	35.5 lbs (16.1 kg)
Battery:	4 lbs (1.8 kg)

Enclosure: HPX high performance resin. Press and pull latches and soft-grip handles

Integral Battery: 12 Vdc, 7 Ahrs with external charger and cable

Cooling System: Cavity space for two Zero-Pak (#12396)

Vacuum System

Pinch Valve: Fixed – normally open

Purge Cycle: Adjustable from 5 to 99 s

Suction Cycle: Variable (adjusts automatically to double the input value of the purge time setting or until liquid contacts level electrode in metering chamber)

Sample Volume: Adjustable, 50 to 250 cc

Horizontal Transport

Velocity:	4 ft/s at 100 ft; > 2.5 ft/s at 220 ft (67m)
Maximum Distance:	220 ft (67m)

Metering Chamber: Acrylic 250 cc with reinforced Teflon top 50/100/200 cc calibration

Volume Control Tube: 316 stainless steel

Metering Chamber Level Electrode: 316 stainless steel

Hose Material

Intake:	Nylon reinforced PVC
Discharge:	Latex

Sample Container: 2.3 US Gallon (9 L) HDPE

Pressure Gauge: WIKA vacuum/pressure gauge

Controller

Display: 2x16 character backlit LCD

Touchpad: 16 key with multi-level menu

Start Delay: Disabled; Time/Day; Pulse Count; 4-20 mA (0 to 100 pulses/min.); External Contact; Level Control

Sample Initiation: Disabled; Time/Day; Pulse Count; 4-20 mA (0 to 100 pulses/min.); External Contact

Program Type: Composite; Multi-Composite; Consecutive; Daily Cycle; Timed Step

Clock: Real-time clock and operating system

Direct Function Keys: Manual sample; Manual purge; Manual bottle advance; Restart

Switches: Controller "on/off" (SPST toggle)

Available Displays: Real-time clock; process timing; process totals; pulse counting; event response; multilevel descriptions; flashing prompts; diagnostics

Automatic Displays: Container Full; Fault; Power Interrupt (program resumed); Alternating Time Stamp; Cycle(s) abandoned

Backup Power Source: Internal Lithium battery to maintain program settings and information in case of power failure

Design features include a telescoping handle, quick connectors that facilitate intake hose removal, push and pull latches, in-line wheels, and an optional pressure/vacuum gage.

CAMPBELL SCIENTIFIC
Campbell Scientific, Inc. | 815 W 1800 N | Logan, UT 84321-1784 | (435) 227-9000 | www.campbellsci.com
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