

SamplePro Groundwater Sampling Pump

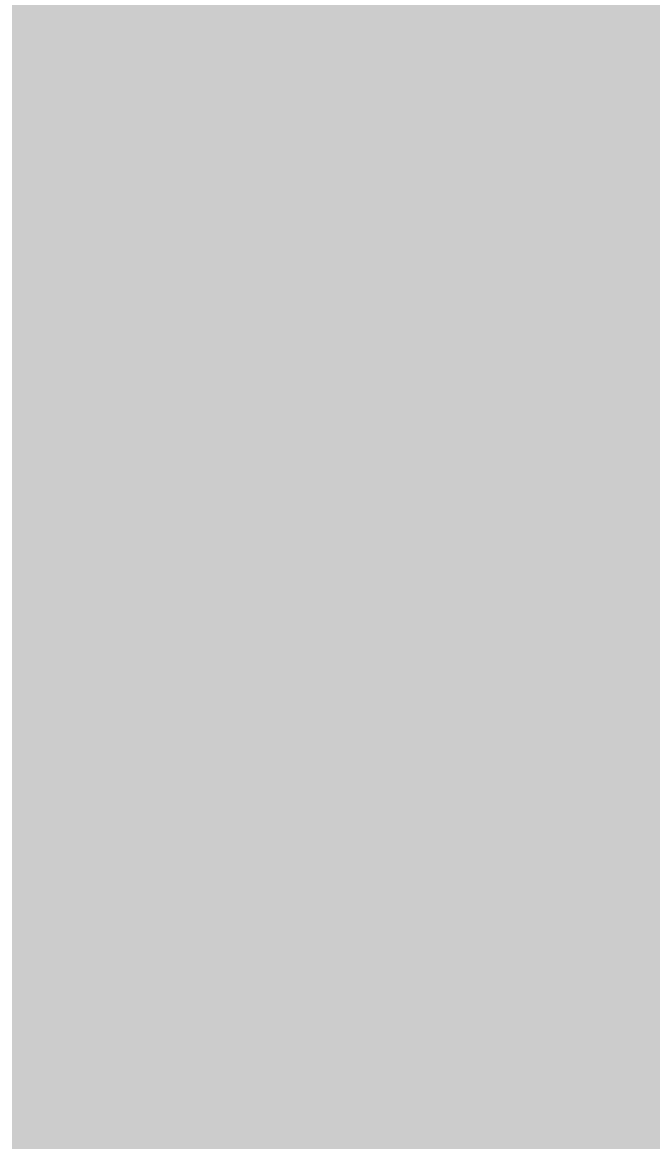
The first fully take-apart sampling pump for Low-Flow Sampling and Direct-Push groundwater sampling applications

The Sample Pro Portable MicroPurge Pump is the first pump developed specifically to bring the advantages of low-flow sampling to sites where groundwater samples are collected from many monitoring wells with the same pump. The Sample Pro Pump is easy to disassemble, without any tools, and simple to clean to eliminate any potential cross contamination. That includes the exclusive SamplePro disposable bladder, which snaps in and out without any clamps, so they can be discarded after each well is sampled.

The SamplePro pump is available in two diameters: 1.75" (4.45cm) to fit in 2" (50mm) monitoring wells or larger; and 3/4" (1.91 cm) to fit small diameter wells and direct-push boreholes. Both pump models are capable of pumping from depths up to 200 feet (61m).



How the SamplePro Works





The SamplePro Portable MicroPurge Pump uses a quick-change, one-piece bladder design. Compressed gas squeezes the outside of the bladder to force liquid out of the pump; there is no gas contact with the pumped water inside the bladder.

Squeeze type bladder pumps are supported by years of independent research that shows they provide unaltered samples for even the most sensitive parameters.

Groundwater enters the pump through the inlet in the upper, head section, then flows down into the bladder. The high inlet helps keep the pump from clogging if it is accidentally lowered into a sediment-filled sump.

Check valves with stainless steel seats and check balls are located at the inlet and outlet. Inlet screens are replaceable to help ensure proper sealing of the check valves in wells with high solids levels. The Sample Pro Pump is shipped in a heavy-duty tube with rubber end caps to help keep the pump clean and protected between uses.

The pump is disassembled by a 1/4 turn of the cap and body; no special tools are needed. The bladder pulls off for replacement. Both check valves are press-in, pull-out design, and use Teflon for the fluid inlet and stainless steel in the fluid discharge.



Push-in tube fitting kits provide high pullout strength, but a cable eye is also included for applications where a support cable is desired.

With the [MP15 Control & Power Pack](#) and the Sampling Consultant's Kit (below), one person can carry everything needed to sample a multi-well site.

SamplePro Advantages

- ¥ Exclusive Sample Pro disposable bladder is quick & easy to replace in the field, for fast cleaning.
- ¥ Rugged, reliable, complete system designed for easy use in the field.
- ¥ Quick 1/4 turn disassembly with no tools means simple, fast and complete field cleaning. Disposable bladders and push-in tubing replace in seconds, speeding you on to the next well.
- ¥ Solid stainless steel construction is truly durable, with no motors, bearings, or impellers to go bad. Even if the pump fills with silt, it can be put into action again with a quick, simple cleaning. Output pressure is strong and controllable.
- ¥ Direct push technology and low flow sampling reduce the costs of well installation, sampling and purge water handling. This is the only sampling pump that minimizes turbidity and silting caused by the well surging of other devices such as bailers and jerk samplers, and collects quality samples from small diameter wells at significant savings.

Specifications

			
Pump Model	SamplePro 3/4"	SamplePro 1-3/4"	
Outside Diameter	0.75 in (19 mm)	1.75 in (47 mm)	
Lenght	10.75 in (273 mm) with Push-In Fittings 9.18 in (233 mm) from Bottom of pump to centerline of inlet	14.75 in (375 mm) with Push-In Fittings 16.5 in (419 mm) with Compression Fittings 12.1 in (307 mm) from Bottom of pump to centerline of inlet	
Weight	0.5 lbs (0.23 Kg)	4.25 lbs (1.93 Kg)	
Maximum Lift	200 ft (61m)	200 ft (61m)	
Volume per Stroke*	0.33 - 0.50 oz (10 - 15 ml)	3.34 oz (100 ml)	
Materials of Construction			
• Body and Cover	316 Stainless Steel	316 Stainless Steel	
• Inlet, Discharge & Head	303 Stainless Steel	303 Stainless Steel	

• Bladder	Polyethylene	Polyethylene
• O-Rings	Viton®	Viton®
Fitting Type	Push-in Fitting w/ 316 Stainless Steel Grab Plate	Push-in Fitting w/ 316 Stainless Steel Grab Plate
• Air Fitting	1/8 in (3.2mm) OD	1/4" (6.4 mm) O.D.
• Fluid Discharge	1/4" (6.4 mm) O.D.	1/4" (6.4 mm) or 3/8 in (9.5mm) O.D.
Pump Part Numbers	SP-3/4-P	MP-SP-4P (1/4" discharge, push-in fittings) MP-SP-4C (1/4" discharge, compression fittings) MP-SP-6P (3/8" discharge, push-in fittings) MP-SP-6C (3/8" discharge, compression fittings)

* Pumped volume per stroke increases with greater depths.

Viton® is a registered trademark of DuPont Dow Elastomers.

SamplePro Consultant Kits

The Sample Pro Pumps are also offered in these exclusive kits, which hold accessories and supplies in a rugged case that also carries and protects the pump.

The kit includes all supplies, accessories, and replacement parts necessary to sample 10 wells, packed in a convenient and rugged tool box.



	SamplePro 3/4" Consultant Kit	SamplePro 1-3/4" Consultant Kit
Kit Part Numbers	SP-3/4-PK	MP-SPK-4P (1/4" discharge, push-in fittings) MP-SPK-4C (1/4" discharge, compression fittings) MP-SPK-6P (3/8" discharge, push-in fittings) MP-SPK-6C (3/8" discharge, compression fittings)

Accessories

MP10 MicroPurge Digital Controller

Microprocessor-based advanced logic for precise and accurate flow adjustment.



- Simple up/down arrow keys adjust flow rates with digital precision, with manual on/off control for sample collection.
- Automatic drawdown control when connected to MP30 Drawdown Meter.
- Compact, rugged, lightweight; allows easy recall of optimized settings for next sampling round.

Dimensions: 10-3/4"x9-3/4"x5" (27x25x13 cm); Weight: 5.5 lb. (2.5 kg); Max. Pressure: 120 PSI (8,275 kPa); Max. Pump Depth: 250 feet (76 m); Power: 3 "AA" batteries.

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MP15 MicroPurge Control & Power Pack

Backpack unit does it all, combining digital control and a quiet, portable compressed gas bottle.



- At just 27 pounds (12Kg), it makes remote monitoring wells easier than ever to reach and sample.
- Automatic drawdown control when connected to MP30 Drawdown Meter.
- Pumps up to 7 hours continuously at 50 feet (15.2m) on a single cylinder of CO2.

Dimensions: 25-1/2"x12-1/2"x10" (65x32x25 cm); Weight: 27 lb. (12 kg); Max. Pressure: 120 PSI (8,275 kPa); Max. Pump Depth: 250 Feet (76 m); Power: 3 "AA" batteries; Cylinder: 5 lb. (2.3 kg) CO2.

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MP20 MicroPurge Flow Cell

Measures purge water indicator parameters in-line; compact, more portable size (50%



smaller than previous models).

- PurgeScan technology (U.S. Patent No. 6,415,659) provides automatic stabilization alert, with visible and audible signals.
- Displays 7 parameters- temperature, DO, specific conductivity, pH, ORP, turbidity, salinity, with optional download capability to your desktop or notebook computer.
- Engineered flow cell with automatic stirring for quicker, more accurate response.

Overall Dimensions: 18-1/2"x15"x6-1/2" (47x38x17 cm); Weight: 14 lb. (6.4 kg); Power: 3 "C" batteries; Sonde: 3"x9" (8x23 cm), 1.3 lbs (0.6 kg); Meter: 3.5" (9 cm) Display, 2.1 lb. (1 kg); Memory: 100 Data Frames.

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MP30 MicroPurge Drawdown & Water Level Meter

Prevents excessive drawdown during low-flow sampling; also functions as a standard level meter.

- Allows setting of drawdown limit, with link to controller for automatic interruption of purging when limit is reached; pumping resumes when well recharges.
- Rugged polyethylene-coated steel tape provides durable performance, accuracy to 0.01 feet.

Overall Dimensions: 14"x10-1/2"x8" (37x27x20 cm); Weight: 7 lb. (3.2 kg) w/ 150' tape; Power: 9 volt battery; Probe: 5/8" O.D. x 7.5" L. (1.6 x 19 cm); Tape Length: 150 or 300 feet (46 or 91 m).

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MP40 MicroPurge Engine/Compressor

Compact, oil-less compressor provides long-term durability and easy starting.

- Rugged for tough field conditions, with shock-absorbing feet and a welded aluminum cage.
- Direct-coupled engine/compressor set decreases weight and minimizes vibration.
- Model 3020 Electric 12 VDC Compressor available as a lightweight (15 lb.), low-output air source.

Overall Dimensions: 14"x18-1/4"x18-1/2" (36x46x47 cm); Weight: 48 lb. (22 kg); Power: 4.0 HP Honda gasoline or propane engine; Max. Pressure: 125 psi (8,620 kPa); Output: 7.0-2.2 CFM (11.9-3.74 m3/h) @ 0-125 psi, 20ft (6.10m) air hose.

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Industry leading in-line filters for groundwater sampling and laboratory applications.

- QED's exclusive CleanRinse eliminates the risk of leaching and sorption to protect your groundwater sample integrity.
- Available in two sizes: high capacity for turbid samples and standard size for samples up to 1 liter.

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a part of Severn Trent Laboratories Inc.

PO Box 3726 • Ann Arbor, MI 48106-3726 USA
Tel (734) 995-2547 • Toll-Free in North America (800) 624-2026 • Fax (734) 995-1170

1133 Seventh Street • Oakland, CA 94607 USA
Tel (510) 891-0880 • Toll-Free in North America (800) 537-1767 • Fax (510) 444-6789

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www.qedenv.com • info@qedenv.com

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