

MP15 Digital Control & Power Backpack

The Ultimate In Portable Control And Power For Low-Flow Sampling

The MP15 MicroPurge® Backpack combines advanced low-flow control with the quiet power of a built-in compressed gas source, for the ultimate in portability and ease of use in sampling ground water with bladder pumps.

The MicroPurge® MP15 Controller revolutionizes low-flow ground water sampling with advanced logic control of purge flow and well drawdown. Simple up-down arrow keys increase and decrease purge flow to meet low-flow requirements. Once optimized, settings can be easily recalled in the next round of sampling.

Portable power to sample ground water with any bladder pump

The easy, advanced MicroPurge flow rate and drawdown control features are housed in a molded case along with a lightweight CO2 cylinder, putting everything you need to operate bladder pumps into one easily portable unit. A standard padded nylon case protects the MP15 MicroPurge control & power pack in transport, provides over-the-shoulder on-site carrying convenience, and even has a hook on the back to let you hang it from the well casing during sampling.

With this combination, a complete sampling setup can be carried by a single person, to reach wells where trucks or even compressor carts can't go.

The 5 lb (2.3 kg) capacity CO2 cylinder provides hours of sampling power, and is easily refilled. But the MP15 isn't just for remote monitoring wells. Its built-in bypass fitting allows it to be used with larger cylinders or other gas sources, extending your range even more.

The MP15 also offers an easy way to prevent excessive drawdown during purging of monitoring wells, by linking to the optional [MP30 Drawdown/Water Level Meter](#).

The lightweight, compact MP15 leads the field with genuine MicroPurge low-flow ground water sampling equipment, the most complete line of equipment for low-flow sampling.

OED's MicroPurge groundwater sampling equipment is lighter and more portable, and increases sampling crew productivity. Simplified, sealed electronics are put together in a design that delivers famous OED long term durability and value under true field use conditions.

Simple, stable, repeatable flow rate setting

The MicroPurge basics Controller's six-button keypad is your gateway to the control and power of the most advanced low-flow bladder pump control system ever made. With remarkable ease, you will achieve precise, stable control of low pumping rates, quickly and repeatably, from one sampling event to the next.



How the MP15 Works



Multi-mode digital control

The MP15 gives you three easy-to-use operating modes, to cover every sampling protocol and situation.

MicroPurge (MP) Mode quickly optimizes control settings to reach the desired pump flow rate. You don't have to worry about calculating pump cycles or refill and discharge times.

ID Mode instantly recalls optimized settings previously established for each well, providing precise, consistent performance from event to event.

User Set (MN) Mode provides manual control of pump operation for extreme depths and other special cases.



Pressing the UP Arrow increases the bladder pump flow in controlled steps,



The DOWN Arrow Key decreases the pump flow rate in controlled steps.



The LEFT/ RIGHT Arrow Key adjusts the Cycles Per Minute (CPM) of your pump.



The ID Number changes when an UP or DOWN Arrow is pressed. This number can be used in ID Mode to recall the setting for the next sampling round.



The CYCLE Key Starts and Stops pump cycling.



The MODE Key changes modes from default MP (MicroPurge) to ID Mode to MN (User Set) Mode. This key also allows battery check.



Pressing the PAUSE Key puts the controller in HOLD Mode, stopping flow. A second press starts the SAMPLE mode, which starts a continuous discharge cycle for controlled sample vial filling without interruption. A third press returns the system to normal cycling.

MP15 Advantages

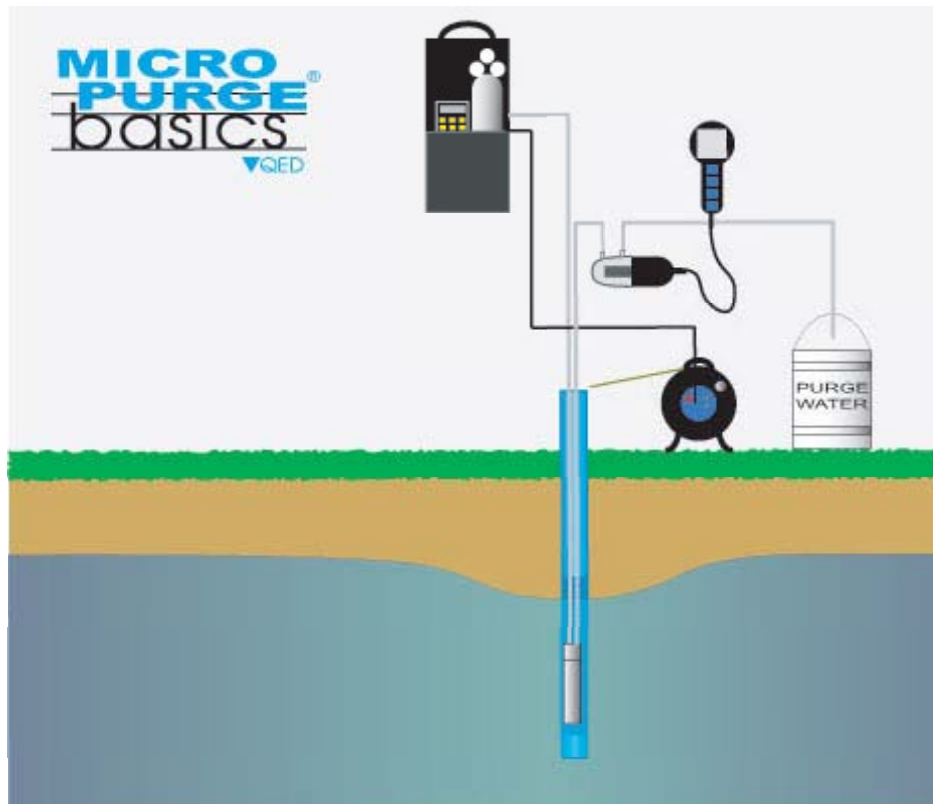
- ▼ All the advanced MicroPurge control capabilities for bladder pumps, plus a lightweight, built-in compressed gas source for ultimate portable control and power
- ▼ Exclusive MicroPurge control mode uses simple arrow keys to adjust low-flow rates easily and repeatably, using a microprocessor to re-create flow adjustment strategies used by experienced samplers.
- ▼ The MP15 weighs just 27 lbs (12 Kg) with a full cylinder in its padded nylon field case. Backpack carrying leaves hands free for other sampling equipment.
- ▼ Also includes capability for optional drawdown control with link to the MP30 Drawdown Meter
- ▼ Lightweight, silent drive power: 3.5 hours of purging capacity at 75 foot (22.8m) pump depth! A high quality CO₂ regulator is included, along with a cylinder change wrench: field ready!
- ▼ The MP15 includes a quick-connect bypass fitting so other compressed gas sources can also be used, for maximum versatility.

Backpack portability makes the MP15 a powerful tool for faster, more efficient sampling at remote sites. With its alternate air supply fitting, it also works great at closer wells.

MicroPurge System Diagram

The MicroPurge Groundwater Sampling System has been designed for complete integration of the MP15 Digital Groundwater Sampling Controller & Power Backpack, MP20 Flow Cell and MP30 Drawdown & Water Level Meter. The diagram below shows a complete MicroPurge Groundwater Sampling System with the MP15 Digital Controller & Power Backpack driving the sampling pump.

Move your mouse over the components of the groundwater sampling system below to learn more about each component of the MicroPurge System.



Specifications

Model No.	MP15
Dimensions	25-1/2"x12-1/2"x10" (65x32x25 cm)
Weight	27 lbs (12 kg)
Case Material	Polyethylene
Carry Bag	Standard
Backpack Straps	Optional
Keypad	6 Keys
Display	2 Line, 16 Character / LCD Display
Power	3 "AA" batteries
Battery Life	50,000 Cycles @ 70°F (21°C)
Max. Pressure	120 PSI (8.27 bar)
Max. Pump Depth	250 Feet (76 m)
Operating Temperature	-20 - 150°F (-29 - 66°C)
Cylinder	5 lbs (2.3 kg)CO ₂
Cylinder Life	Over 3 hours at 75 foot (22.8m) pump depth
Connection to MP30 Drawdown Meter	heavy-duty cable (supplied with MP30)

MP15 Purge Capacity*

Pump Depth	Purge Time
50 ft (15.2m)	400 min
100 (30.4m)	120min
150 (45.7m)	90 min
200 (60.8m)	50 min

*Purge times based on 200 ml/min flow rate, full 5 lb (2.3kg) CO₂ cylinder; See [the full graph](#) or consult QED for more detail.