

## MP50 CONTROLLER/12 VDC COMPRESSOR



Expert flow and drawdown control for low-volume purging, and air compressor - all in one!

**PED** has combined its rugged and reliable fan-cooled 12 VDC air compressor with the time-proven QED MicroPurge Basics controller to provide an "all-in-one" package.

The MP50 also offers an easy way to prevent excessive monitoring well drawdown during purging, by linking to the optional MP30 Drawdown/Water Level Meter.

### **QFD** First in Control & Power for Low-Flow Sampling

P.O. Box 3726 Ann Arbor. MI 48106-3726 USA FAX 734-995-1170 1-800-624-2026 e-mail info@qedenv.com www.micropurge.com

### MicroPurge® basics™ MP50 **Controller/Compressor Advantages**

- Built-in rugged, durable fan-cooled 12 VDC air compressor, with the option to use an external air source, if desired.
- Exclusive MicroPurge control mode uses simple arrow keys to adjust low-flow rates easily and repeatably, using a microprocessor to re-create the flow adjustment strategies used by experienced samplers.
- Connection port allows linking to optional MP30 Drawdown/Water Level Meter, which signals MP50 Controller to enter standby mode if drawdown limit is exceeded.
- Multi-mode digital control includes MicroPurge Mode, ID Mode for repeat events, and manual control.
- · Weatherproof controls are housed in a rugged, compact (16" x 13" x 6.5") case.
- · Full digital display of all setting and status information

### MICROPURGE® basics™MP50 CONTROLLER/COMPRESSOR

# Simple, stable, repeatable flow rate setting

The MP50 puts you in control of the most advanced low-flow sampling system ever made. You will purge and sample quickly and easily, with precise, steady low-flow pumping rates from one sampling event to the next. QED's new basics equipment is also designed to take advantage of the opportunities for downsized equipment, which is lighter and more portable, reduces equipment cost and increases sampling crew productivity. Simplified, sealed electronics are put together in a design that delivers famous QED durability and value.

MicroPurge basics controllers can be connected to the MP30 Drawdown Meter for optional Automatic Drawdown Control, an industry first.

### Multi-mode digital control

The MP50 gives you three easy-touse 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.

### **HOW IT WORKS**

#### **MicroPurge Basics Controller** MP MicroPurge ID ID Time Set MN Manual Time Set LVL Level Shutoff Time ID Refill 00.1/104 CPM4 MP >05.5 Discharge **CPM** CPM / Value Flow / Value Flow / Value I/O MODE On/Start/ ID/MN/MP/ Hold/Sample/ **V**QED Off



Pressing the **UP** Arrow increases the pump flow in controlled steps.



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

### MicroPurge Mode Quick Guide

- 1. Press I/O key to turn power ON.
- 2. Select desired Cycles Per Minute (CPM) with the ◀▶ key (default value is 4 CPM).
- 3. Turn throttle to set depth on gauge to 10 20 feet deeper than the pump location in the well.
- 4. Press I/O again to START pumping.
- 5. When water discharge begins, adjust throttle until a slow, steady flowstream is achieved.
- 6. Press ▲ ▼ keys to set the desired purge flow rate.
- 7. To collect samples, continue purge flow, or use II key to directly controls ample flow and pause.



The LEFT/ RIGHT Arrow Key adjusts the Cycles PerMinute (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 **I/O** Key steps through the sequence of **On-Start-Off**.



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

delivers push button controlled vial filling. A third press returns the system to normal cycling.

Can be used with any bladder pump system, with the use of simple adapters

SPECIFICATIONS	
Model No.:	MP50
Dimensions:	16" x 13" x 6.5" (40.6 x 33 x 16.5 cm)
Weight:	21 lbs (9.52 kg)
Case Material:	Structural Resin
Keypad:	6 keys
Display:	2 line, 16 character / LCD Display
Controller Power:	3 "AA" Batteries
Controller Battery Life:	50,000 Cycles @ 70° F (21° C)
Compressor Power:	12 VDC (Battery Cable)
*Max. Lift:	200 Feet (60 m)
Output:	0.21 SCFM@ 100 psi (0.357 m 3/h@ 6.89 kPa)
Max. Pressure:	105 psi (7.24 kPa)
Operating Temperature:	-20° - 120° F (-29° - 49° C)
Connection to MP30 Drawdown Meter:	Heavy-Duty Cable (Supplied with MP30)
*Pump flow rates in deeper wells (>100 feet) may be low, especially where pumps have limited liquid submergence.	