

Well Manager[®] Basic Control Package



**Collect entire well production
Or limit the amount withdrawn
Fill a pond, tank, cistern or tower**

- **Nema 4, UL/cUL listed** pump control runs pumps on field adjustable timed cycles.
- **Control includes circuit breakers**
- **All parts replaceable**
- **Control is dual voltage** to control 240 V or 120V well or pressure pumps to 2 HP
- **Run larger pumps** using separate motor starters not included
- **Operate 2 wells or combine 2 different water sources.** Well and water service, water haul tank, rain collection or other
- **LED function lights** on door for long life & easy trouble shooting – even on the phone!
- **Control has accessory connection points** for solenoids, fans, blowers, chem. pumps
- **HOA switches** on door permit manual operation of either well
- **Built in 24VAC power supply** for level control will run low voltage accessories
- **OverFill ShutOff device** turns well and pressure pump off if system overfills.
- **Ultra sensitive Flow Detector** turns well pump off if water fails to arrive
- **Backflow Preventer** protects the aquifer from treatment chemical contamination
- **Low water float** protects delivery pump(s)
- **Operate optional remote alarm** for low stored water condition & others
- **Optional pressure pump overheat shutoff** monitors head or PumpChamber Temp
- **Timer Override Option** switches system from timer to float control when Fire System starts so all of well storage and tank storage is available automatically

Electrical requirements for the Duplex

Control: Two dedicated circuits. One circuit will operate both wells if they have pumps. The control circuits require a 120 volt feed which could also power the pressure pump if it is a ½ hp 120 volt pump. If the pressure pump is 240 volt, there will be dedicated circuit required for that.

The control is designed for dual voltages and will run pumps with 240 or 120 volt motors. There is a built in 24VAC power supply that operates tank level controls and can operate other 24 VAC accessories. Use to operate existing cistern or build your own system using your tank.

Sold by:

Well Manager[®] Systems are protected by US Pat 6077044 & 6682309
Canadian Patent 2257743

Made in the **USA** by Reid Plumbing Products, LLC Hopewell, NJ
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www.wellmanager.com

**“The water you need and
The performance you want”**

Pump Control Sequence of Operation

Well pump run duration and wait time between run times are controlled by a timer that permits run or delay times from 10 seconds to 2.8 hours in 10-second increments. When power is applied to the Well Manager® control the well pump on cycle begins and the well pump starts.

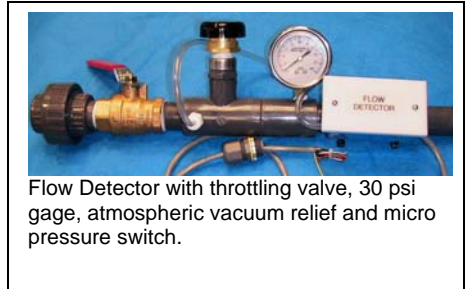
If the pump starts water flowing through the pipe from the well to the atmospheric storage vessel, a flow detector enables the well pump to continue running. If, for any reason, water does not activate the flow detector before the allotted time elapses or water stops flowing from the well during an on cycle, power to the well pump is interrupted. This provides well pump protection in the event that well yield falls below the control setting and the well is inadvertently pumped down.

Once the timed cycle for well #1 completes, well pump #2 starts and runs for a preset period after which the system enters a wait time until the next collection cycle starts. Cycle length is the total of the times set on the well and wait timers.

The well pumps, controlled by the timers, will come on every time an "on time" or collection cycle starts unless the atmospheric storage vessel is full. Once full, a tank full float deactivates the well pump relay but the times keep counting.



Tank level controls, OverFill Shutoff and optional Remote Tank Level Indicator



Flow Detector with throttling valve, 30 psi gage, atmospheric vacuum relief and micro pressure switch.

Tank Level Control and Overfill Shut-off

If the tank full float fails to shut off incoming water, an overfill shut off device will interrupt 24V control power and turn off both the collection and delivery pumps. The system is designed this way so that occupants will know there is a problem. If an over-fill occurs there will be no water pressure, the tank will be full of water and the LOW WATER and TANK FULL lights will be on.

To verify that an overfill event has occurred simply open the OVER FILL SHUT OFF DEVICE drain valve. If water flows from the valve this means that the tank has over filled and that the tank full float is not functioning as it should. Once water is drained from the over fill device, the pressure pump will start and the collection pump will once again be allowed to come on.

If an over-fill has occurred, turn off the well pump breaker to prevent another over fill and look for the problem or call for service. The plumbing will function until the content of the storage tank is exhausted.

The low water float is the safety mechanism that prevents the pressure pump from running the un-pressurized storage vessel dry. This prevents the PumpChamber or other pressure pump from losing its prime and damaging the pump.

Flow Detector

The Well Manager has a flow detector built into the tank fill line. It's not a garden variety flow detector - it's one we came up with because those available were just not sensitive enough, would jamb when well grit got in them or couldn't detect water moving until the water actually arrived at the switch.

Our flow detector is a very sensitive pressure switch which senses pressure in the Well Manager fill line. This permits detection of very small flows - down to 1 quart per minute if need be. This detector can recognize water moving in the well line BEFORE it arrives at the tank since water moving up the pipe will push air pressure ahead of it - so even if there is a small hole in the drop pipe in the well which allows water to drain out of the well line when the pump is not working, the flow detector knows that the pump is working and water is coming because it can sense the air pressure ahead of the flow.

A 30PSI gage is provided on the flow detector to aid in adjusting well line backpressure and to track well water level changes.

This collection system is in use on wells as poor as 0.1 gpm, providing a viable supply using wells previously thought unusable.

Optional Timer Override Feature (-TO)

Well Manager Systems operate on well yield and do not depend on water stored in the well so they can collect the same amount of water from a 100' one gallon per minute well as they can from a similar well 1,000 feet deep. Well Managers can be operated in HAND or AUTO mode. Normally operated in AUTO mode they collect from the well on timed cycles to limit withdrawals to water rights or well yield so that the well is always nearly full.

In systems with the two well Duplex Well Manager control with TO option, activation of the fire system deactivates the wait timer leaving the system running on the two well timers. In this mode the entire content of both wells and tank storage becomes available for fire control but well withdrawals are on a proportional basis, the system drawing more from the better well than the poorer one. Once a well is empty the flow detector will turn off that well pump and allow the remaining well to continue contributing until it too is empty.

Optional Pressure Pump Overheat Shutoff

This device is intended for use on systems that use a PumpChamber™ or centrifugal pump to deliver water in storage to the end use. The overheat sensor is available in two temperature ranges to turn the pump off if outlet pipe temperature rises to (1) 130 deg F. or (2) 90 deg. F. Specify when ordering.