



# Intelligent VFD-Controlled Constant Pressure Booster System



## Main Introduction



Digital Intelligent VFD controlled Booster System is mainly composed of water inlet summary pipe, pump group, water summary pipe, outlet pressure tank, outlet pressure multiple control and protection system, intelligent frequency conversion control cabinet and so on.

Under the premise of fully ensuring the user's water demand, further improve the equipment's quiet and energy-saving efficiency.

All pumps are equipped with a digital integrated pump special frequency conversion control cabinet, through the Modbus485 protocol between the frequency converter to achieve real-time communication, linkage control, coordination work, and finally achieve multiple sets

When the water pump is running, the operating frequency of each water pump is consistent and the load is balanced. Through actual calculation, the comprehensive energy saving rate reaches more than 15%.

The constant pressure accuracy of the equipment is 0.01MPa, and the pressure is stable during the process of adding and reducing the pump, and the comfort level is high. Can directly enter the man-machine interface.

## Main Functions

### Multiple water pressure control and protection functions

Water pressure sensor and control device, play multiple control and protection functions;

### Pump room overflow alarm system

Through the installation of our patented pump room overflow alarm system, real-time monitoring of leakage in the monitored area; The PLC system software of the control cabinet can obtain the water leakage and other fault information collected by the overflow alarm system of the pump room in real time to realize the function of real-time monitoring. The monitoring system can provide various alarm modes such as LED screen, sound, and mobile communication according to the alarm configuration, and notify the maintenance personnel of the water leakage fault in time to ensure that the alarm is handled in time. At the same time, the monitoring system can automatically realize the corresponding logic control such as pump shutdown and water shutdown according to the alarm, to ensure that the fault is eliminated and reduce the loss caused by the fault.

### Water pressure regulator function

The water hammer in the outlet pipe is eliminated through the outlet pressure stabilizer tank. At the same time, when the outlet pressure of the equipment fluctuates, it has a good effect of stable pressure and steady flow. The stable outlet pressure well reduces frequent switching of the pump.



## Advantages

### Shock absorber for water pump

The use of high quality rubber pump special shock absorber, good buffer effect, reduce the vibration and noise of the pump running;

### Multi-functional Water Quality Online Monitoring System (optional)

The multi-functional online water quality monitoring system designed by our company reflects the water quality in real time on the PC and mobile terminal through real-time monitoring of the residual fluorine, turbidity, pH and other water quality indicators. If the data is abnormal for several times, it will send notification information to the remote monitoring platform and relevant personnel, and arrange relevant personnel to deal with it in time;

### Silent and energy-saving all-in-one machine

Pump integrated high protection design, simple and compact, the overall form level is rich, permanent magnet synchronous machine speed sensor vector control, superior performance. The system is easy to operate and has high reliability. It can realize single pump control and multi-pump intelligent on-line operation. Ultra-low noise design for more comfortable hearing. Synchro efficiency IE5 design, high efficiency and energy saving.



**THANKS**