

## Description of New SC2000

- The New SC2000 is a Drop in Replacement for all previous versions of the Controller.  
All the Electrical Connections and Physical Dimensions are the same as before.  
All features of any merit were retained in the new version and some new features were added.
- Ethernet Port ENET1, with Modbus TCP Protocol, is now provided on all units.
- One Analog Output AOX1 (4-20mA) will now be provided on all units. Four additional Analog Outputs are still an option.
- The Function of AOX1 is menu selectable. Menu options include Copy of Wet Well Level and VFD Speed Control.
- Hardware updated with newer Microcontroller with faster processing speed, more memory and 32-bit math.
- All Internal electronics updated with newer more available components.
- All Analog Inputs upgraded from 10-bit to 12-bit.
- The Numerical Display was enlarged from 3 digits to 5 digits to accommodate the display of larger menu items.
- Transmit and Receive LEDs have been added to provide positive indication of SCADA communication traffic.
- The Ethernet Port ENET1 and the Serial Port COM1 may now both be accessed by SCADA at the same time.  
(The earlier version of the Controller only allowed SCADA communication through one port at a time, not both.)
- All Setup Parameters are now accessible through the communication ports ENET1 and COM1, which allows the use of the TSID (Touch Screen Interface Device) to easily view and change the Controller's setup parameters.
- Float Switch Inputs may now be selected in the menu as the primary level input rather just as Float Backup.
- The Analog Level Input Span parameter P.24 now no longer requires that a 20mA signal be applied while setting P.24.  
The Span of the Pressure Transducer can now simply be entered into parameter P.24.
- The Flow Calculator has been upgraded to include an Inflow Totalizer and Pump Run Cycle Time meters have been added for each pump.
- Parameter Security was added for the protection of the Controllers Setup Parameters from remote tampering through SCADA.
- Maneuvering around the Menu was made faster by not immediately resetting the scrolling speed each time the Up or Down pushbutton is released. Now the scrolling speed is gradually reduced the longer the Up or Down pushbuttons are released. This allows for a short pause in scrolling through the menu, while retaining most of the scrolling speed.
- The Instruction Manual has been updated and expanded to provide more clarity to all of the features of the Controller.  
A Table of Contents and Cross References were added to the Manual to makes finding information much easier.  
Setup Parameter in the Manual that are related to each other are now grouped together, usually on the same page.  
More and better Electrical Connection Examples were added to the Manual.  
The main part of the Manual (Section 1) covers all the basic information needed for most installations.  
The Manual now has 22 Supplemental Sections (Sections A through Z), providing exhaustive information on each topic.  
A hard copy of the Manual (Section 1) will continue to be provided with each Controller.  
The Supplemental Sections (Sections A through Z) will be available (in pdf format) on MPE's website.