

AMERICAN AUTOMATED CONTROLS

REMOTE / ONSITE DATA RETRIEVAL

RESIDENTIAL & LIGHT COMMERCIAL APPLICATIONS

American Manufacturing has developed various applications to allow the user to link up to the Drip controller via laptop or remotely through a standard phone line to retrieve data and view system parameters through our line of Siemens PLC units. All cycle counter and elapsed time information can be easily downloaded to the PC by the click of a button.

Zone	Counter	ETM
1	854	1189
2	17	42
3	17	42
4	16	44

Zone	Counter
1	0
2	0
3	0
4	0

Pump	Name	Counter	ETM
1	Drip Tank	145	1410

Name	Counter	ETM
High Level Float	8	13
Peak Drip Float		64

Name	Counter	ETM
Peak Drip Cycle	16	39

Buttons: Change Zone Data Path, Log Zone Data, Change Drip Tank Path, Log Drip Tank Data

Applications are available for the following residential applications:

- 2Tank/Vault (X9163P)
- All four-zone simplex models (X9141P, X9157P, X9159)

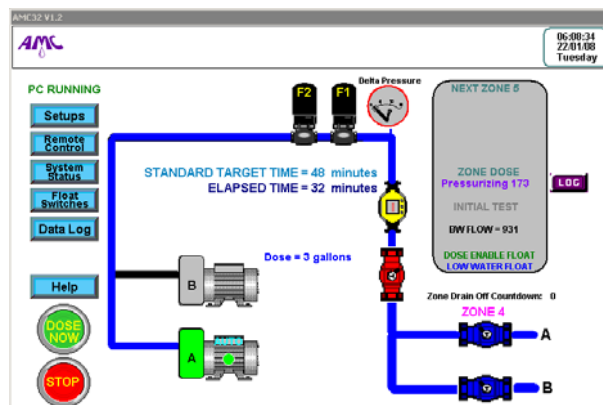
Applications available for Light Industrial are:

- Duplex Pump, 3 filter up to 24 zones, with the ability to obtain data from a duplex pump pretreatment configuration and a sludge/auxiliary pump configuration.

HEAVY COMMERCIAL/COMMUNITY APPLICATIONS

Two product lines for process control have been developed for large commercial/community applications, OPTO 22 and Unitronics. The OPTO 22 platform offers a proprietary (stand alone) communication through an On-site PC, while the Unitronics offers a Touch-screen interface or basic controls through a standard PLC display and has modbus protocol allowing for seamless integration with the majority of SCADA packages available.

These systems allow the user to interface with the equipment remotely to retrieve all system data including failures, warnings, cycle counts, elapsed time meters, field flushes and filter backwashes. The user also has the ability to take any parameter or component in the system and disable/enable it remotely, such as zones, and pumps. The system also does daily and monthly data dumps to individual databases to log all information for future reference and trending purposes.



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WIRELESS DATA TRANSFER / PROCESS CONTROL

WIRELESS OPERATION:

Wireless data transfer/process control can be utilized when it is not economical or possible to bring hard lines to the desired areas. Wireless technology can consist of Blue Tooth (for shorter distances) or full wireless radios with remote I/O (longer distances). Line of sight is always recommended for maximum bandwidth, but in instances where it is not possible to have full line of sight, an analysis can be performed to determine if wireless control is feasible for the application. Wireless operation can be point-to-point, or master/slave control, and typically consists of an MCU (main control unit) and an RCU (remote control unit).



Point-to-point is when I/O is replicated from the MCU to the RCU. Master/Slave control is when 1 or more PLC's function and control a process based on data received from the MCU. This type of control allows for the user to enter parameters and control each RCU from the MCU interface screen. All data can be logged back to the MCU to have a central control station with multiple substations used for maintenance purposes only. All radio systems provided by American Manufacturing come standard with surge suppression to avoid/limit transients from being induced into the system via the antenna, and are all UL approved/tested. Any customized application can be developed on an as needed basis.

FIBER OPTICS:

Fiber Optics can be utilized when radio telemetry is not an option. Using fiber allows for larger distances between the MCU and the RTU(s) without using conventional copper. Fiber Optic cable reduces the possibility of inducing transients into the transmission lines because they are not susceptible to lightning. Fiber Optic runs can be either aerial or underground/direct burial. It is recommended that all lines even those with a jacket suited for direct burial be placed in conduit to avoid accidental damage.



Point-to-point control and OPTO coupling are currently the standard Fiber Optic solutions provided by American Manufacturing. Any customized application can be developed on an as needed basis. The Fiber Optic converters and switches specified in our designs are rugged, reliable, real-time, and secure with ratings consisting of UL, CE, Marine, Hazardous Locations, etc.