

Irrigation Automation Equipment 1

Our Irrigation Automation equipment can be implemented as one complete system, or as individual components as needed. Please review the different components for more information.

Radio Valve Controller (RVU)

The RVU module controls valves remotely. This radio unit eliminates wires, reducing maintenance and theft problems. The reply-back radio communication ensures system reliability. No solar panels required (but can be supplied separately).

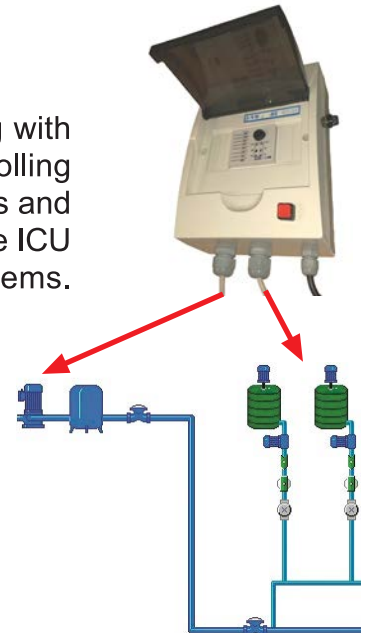
- 4 channel 12Vdc latching outputs
- Reply-back radio communication protocol
- Radio signal repeater functionality included
- Radio signal strength = tested 2km line of sight (DQD +RSSI logged)
- Power supply = 3.6V D-Cell long life lithium battery (voltage logged)
- Battery life expectancy under normal operating conditions = 2 years
- Steel bracket mounting 4 solenoids with cable junction box
- 12Vdc latched NO solenoids available on request
- Charge pump latch pulse booster capabilities per channel
- Programmable frequencies



Irrigation Control Unit (ICU)

The ICU is implemented as a pump-house controller, directly interfacing with the PC. This unit logs water flows, EC and Ph meters, as well as controlling fertilizer injection equipment. This unit also controls pumps, valves, mixers and flush systems. Systems overwrite conditions can also be implemented. The ICU can also be connected to long-range modems, for remote control systems.

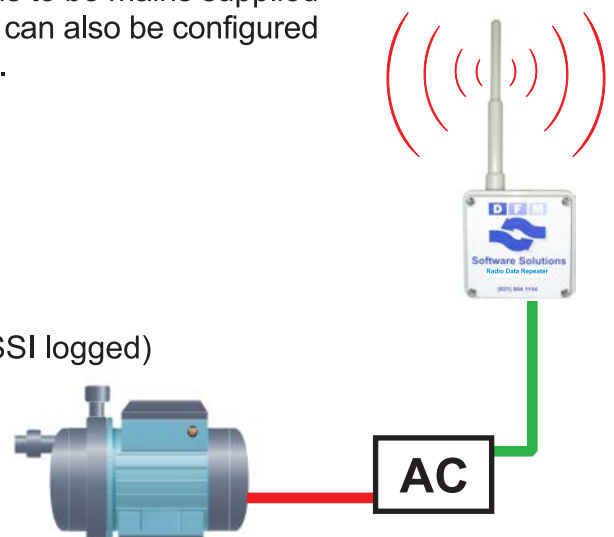
- 8 channel 24Vac IO pump-house controller
- LED status indication
- Up to 8 relay isolated 24Vac outputs
- Up to 8 opto-isolated 24Vac inputs
- ICU's can be daisy chained
- RS485 and/or RS232 master interface protocol
- RS485 slave interface protocol



Remote Pump Start Unit (RPS)

The RPS can control up to 4 pumps or valves. This unit needs to be mains supplied (24Vac). It can also act as data repeater for the valve units. It can also be configured to interpret DLC broadcasting information to control outputs.

- 4 channel 24 Vac output controller
- Manual & Automatic operation
- 24Vac supply + 12Vdc Supply
- Can be used in conjunction with DLC
- Reply-Back radio communication protocol
- Radio signal repeater functionality included
- Radio signal strength = tested 2km line of sight (DQD+RSSI logged)
- Programmable frequencies



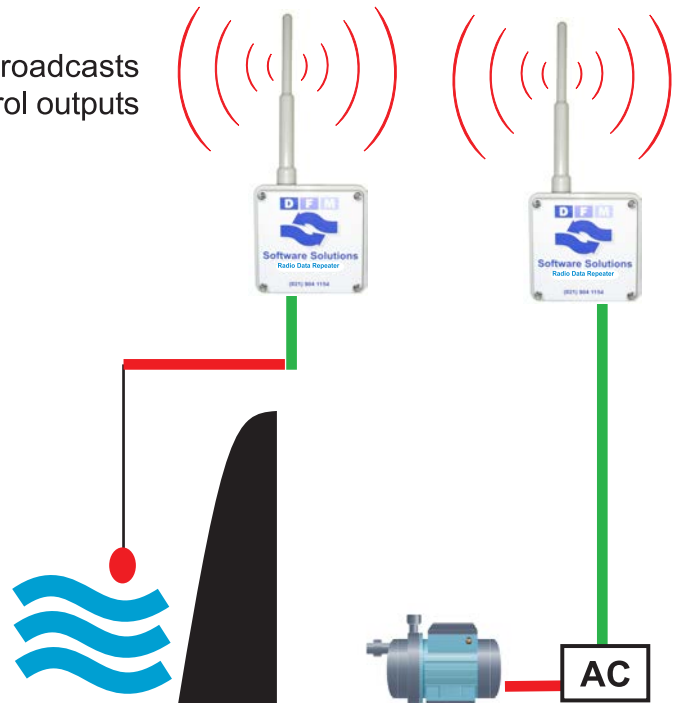
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Irrigation Automation Equipment 2

Dam Level Control (DLC)

The DLC is a input condition monitoring unit, which broadcasts conditions like dam levels. It can be configured to control outputs on any RVU, ICU, or RPS.

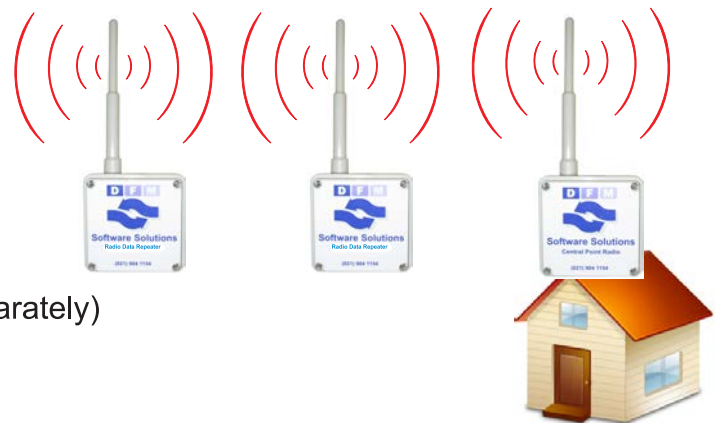
- 1 channel digital input for remote control
- Reply-back radio communication protocol
- Radio signal repeater functionality included
- Radio signal strength = tested 2km line of sight (DQD +RSSI logged)
- Power supply =3.6V D-Cell long life lithium battery (voltage logged)
- Battery life expectancy under normal operating conditions = 5 years
- No solar panels required (but can be supplied separately)
- 12Vdc latched NO solenoids available on request
- Programmable frequencies



Radio Data Repeater (RPT)

In cases where long distances between radio units need to be covered, it is recommended that a data repeater be installed between these units. The repeater works in broadcast mode, where it can repeat radio signals from one radio to many other radio units.

- Radio signal repeater functionality included
- Radio signal strength = tested 2km line of sight (DQD +RSSI logged)
- Power supply =3.6V D-Cell long life lithium battery (voltage logged)
- Battery life expectancy under normal operating conditions = 1 year
- No solar panels required (but can be supplied separately)
- Programmable frequencies



Central Point Radio (CPR)

A CPR (or data server) is required for linking the control system to a PC, or linking an ICU onto the system.

- Reply-back radio communication protocol
- Radio signal repeater functionality included
- Radio signal strength = tested 2km line of sight (DQD +RSSI logged)
- Power supply = 9Vdc
- BES232 interface protocol
- Data storage capabilities
- Programmable frequencies



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