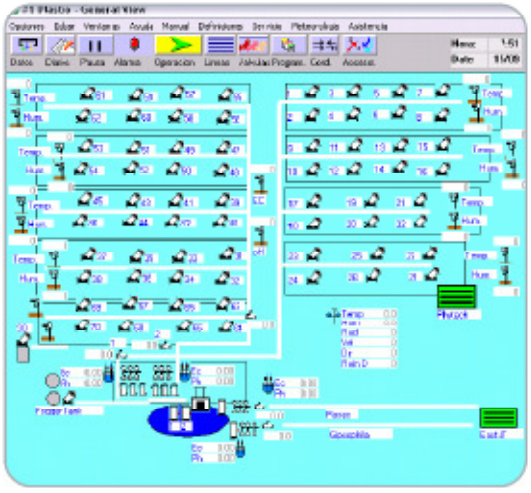
Galileo

galcon
Computerized Control Systems
The Science of Solutions

Galileo is a computerized agricultural control system, among the most advanced in its field, for climate control and irrigation in green houses and irrigation control of large open fields, farms, orchards, turf, public gardens and more.

The Open Field Irrigation Application



This unique application is designed to provide a solution for a wide variety of irrigation needs. It can be used in very small irrigation systems such as a home garden or for the largest systems such as irrigation communities. The system fully supports the use of cable and radio RTU. The Open Field PC Software is graphic and allows the user to draw a realistic picture of the field.

Setup Features

Pipe Lines & Main Valve (up to 70)

In this unique system each pipeline can be connected to another pipeline thus enabling defining the pipelines as a network.

The pipelines can be set in the same way as they appear in the field.

This enables:

- **Hierarchy** of main valves and head definition.
- **Gradual** opening and closing of irrigation to prevent high pressure buildup.
- **Flow rate** limit to a pipeline (in the case of bottle necks).

Upon programming the limiting flow rate, the system does not allow the actual flow rate to exceed the limit by detaining irrigation programs when the flow rate is already too high.

- **Protection** of definition errors such as fertilizer pump not in route to the valve using it.

Irrigation Valves (up to 200)

The valve features include accumulation data of water, time and up to 7 different fertilizers.

Water Meters (up to 100)

The water meters characteristics include the ability to divide the amount and flow rate of water measured by the water meter between the valves using it (according to the valves' nominal flow rates). It allows using one water meter for many valves, whilst operating and accumulating each valve separately.

Fertilizer System: there are two fertilizing elements

Local fertilizer pump (up to 30) using a simple operation program (included in the irrigation program) and Fertilizer Center (up to 10) that includes the operation of up to 6 fertilizer pumps, control of EC and pH and more.

Pump Houses (up to 5)

A special program to control the operation of a combination of up to 5 water pumps.

Virtual Water Meters (up to 20)

An element that consists of up to 20 water meters. It shows the sum of the flow rate and the accumulation of water meters. The virtual water meter can also show the balance of the flow rate at a certain point allowing the use of the element called Burst Control (Net Protection).

Pause Element (up to 10)

An element which contains a condition input and/or a sensor (such as pressure transducer) and can pause the pipe line it is connected to, as a condition of the input/sensor status.

Mixing Junction (up to 5)

A program that controls the dilution of water such as drainage water with fresh water, according to the EC of the resulting mixture.

Irrigation programs (up to 200)

Each irrigation program includes:

- Up to 50 valves for operation
- Quantity or duration
- Local Fert. Pump
- Selection of Fert. Program of fertilizer center
- Over/under flow alarms
- Sequential operation
- Start and stop time
- Cyclic irrigation
- Daily (days of the week)
- Conditioned irrigation
- Many other options