



Gator

iGATOR

PC Based Irrigation Control System

iGator is an affordable PC based central software irrigation control system offering immense versatility and flexibility allowing virtually limitless control and monitoring capabilities.

The system utilizes a dedicated PC which is pre-loaded with a specialized irrigation control software package. The PC is interfaced to one or more Gator wireless irrigation transmitter unit/s allowing for the control of system outputs such as pumps, filters, valves, etc. using the latest wireless switching technology.

The **iGator** systems functionality can be further enhanced by deploying optional “Fert. or Pump Controller/s” which provide additional functions such as advanced fertilizer control, flow meter monitoring, automated pump pressure adjustment (T&C’s) and the feedback of sensors such as: pressure, level, temperature, etc.

iGator Lite is the downscaled “Freeware” version of iGator, offering reduced functionality. iGator Lite is ideal for smaller single head irrigation systems that are able to operate on a time basis only with the ability to control a limited number of outputs and monitor a limited number of inputs. Suitable for applications such as nurseries, sports fields, residential complexes, etc. where high levels of sophisticated control are not required.

iGator Lite can easily be upgraded to the full version at a later stage should the system have grown to require this.

Main Features

- Maximum of 256 possible outputs per radio transmitter unit where multiple transmitters can be used
- Unlimited number of irrigation systems (heads) available
- Unlimited number of irrigation programs per system
- Valves can be controlled according to volumetric flow in cubic meters, or on a time basis of minutes
- Back indication from remote flow meters; pressure transducers and other digital or analogue equipment is possible
- Logging of events and other info is standard and reports can be printed or exported to other formats
- GSM units for SMS alerts etc and other similar devices can be interfaced
- Integration with the Internet and WiFi equipment is possible allowing for monitoring and control from anywhere



General Overview

The **iGator** system is a PC based irrigation control system that is scalable to meet the needs of the simplest control system to that of the most advanced control system. It makes use of a dedicated personal computer such as - a desktop PC, mini PC, all in-one PC or an industrial spec. PC. The PC is pre loaded with the iGator software and interfaced, using the internal serial or ethernet communications ports, to various sub components to meet the specific irrigation applications control and monitoring needs. The PC can typically be located in an office or in a pump house.

Hardware at the irrigation control location -

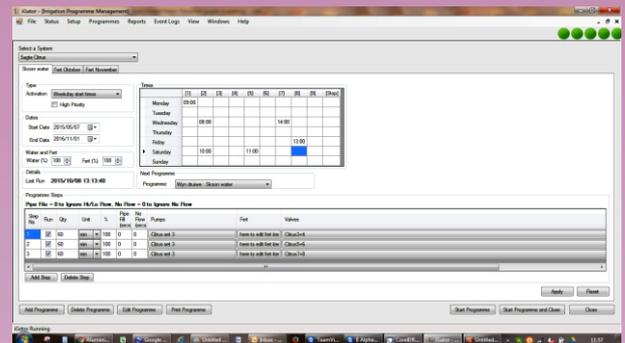
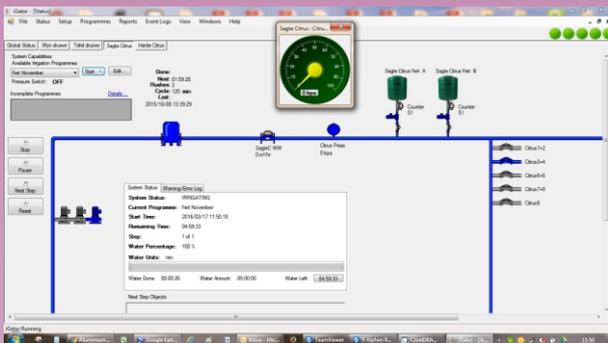
In a typical system the PC is linked to one or more Gator radio transmitter unit/s which are responsible for the activation/deactivation of systems outputs (pumps, filters, valves, etc.) while irrigation is being performed. Additional hardware can be linked to the PC such as - fertilizer or pump controllers, allowing for the control and monitoring of other processes in the system such as fertilizer injection, water meter counting, auto pump pressure adjustment and the monitoring of system sensors such as - pressure, level, temperature, etc. The PC can be connected to the internet allowing for offsite system control and monitoring using a remote desktop service on a tablet, smart phone or a remote PC.

Hardware in the field -

If the system makes use of a Gator wireless control system for the control of outputs, Gator G series radio modules will be installed at the location of valve/s, pump/s and other devices to be controlled in the irrigation system. The Gator G series radio modules can control 1 to 4 independent outputs and are powered by a long life Lithium battery. Each Gator G series radio module is programmed with its outputs numbers as well as the unique system ID that matches the transmitter to which it will be listening for output status updates.

Fertilizer and pump controllers, as mentioned above, can also be remotely located and linked via a radio network back to the PC allowing for more flexible system design and greater overall system control and monitoring capabilities.

System Status Screen



iGator Transmitter unit



Gator G4 Receiver module



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