

# Greenhouse

The unpredictable weather conditions and the increasing demand for vegetables, flowers and other agricultural products all around the year long, have led modern farms to invest in greenhouse worldwide. Several crucial parameters must be monitored inside a greenhouse to assure the well being of the plants in process. Furthermore, local automation systems based on PLCs take control of the inner conditions and activate the appropriate machinery. Unfortunately this isn't enough, as in most of the cases the greenhouses are located far away from the maintenance personnel and greenhouse administration.



Therefore, it is highly needed to install a telemetric monitoring system that will guard the installation, keep historical data for the most important parameters of the greenhouse environment, transmit data and alarms to remote control centers, and last but not least, automatically transmit SMS alarms to authorized technical personnel, in order to handle critical cases.

The use of an iLOG-GSM can resolve the case easily, regardless of the actual location of the remote greenhouse and the control center. If a phone line is accessible, then an iLOG-EDM could be used too, attached to an external dialup modem, to handle the transmission. If more I/Os must be monitored, than those an iLOG can hold, then multiple iLOG-LAN units should be used, hooked on the same local network with an external GSM router that will handle the transmission.

Each greenhouse will have its own iLOG system and the readings will automatically be transmitted, on predefined time intervals, using Internet access to send data files to multiple Email accounts or FTP sites. At the same, alarms will be immediately transmitted via the GSM network to multiple SMS recipients to take immediate action.