

 **COMMAND CENTER DESCRIPTION**

The Calsense Command Center software is a centralized based computer system designed to make easy work of complete irrigation control. It's self-prompting program is specifically designed for easy operation and requires no prior computer operating experience. Problem areas are pinpointed in a complete daily ALERT report as to cause and exact location, enabling maintenance crews to handle them effectively.

The Command Center system can send and receive information to and from any Calsense irrigation controller to which it is linked. It can receive daily ET from a Calsense ET gage (ETG) and rainfall from a Calsense Rain Bucket (RB-1) and send it to other field controllers. The irrigation controllers use this information to calculate station run times automatically.

Each irrigation controller's program may be viewed and adjusted from the Command Center software. However the stand alone controller can still be operated in the field. Calsense provides several flexible options for the communication between the central computer and the field units. The software is compatible with local radio, digital radio, Ethernet, fiber optic modem, GPRS, CDPD, phone modem and hardwired communications options. The central system is capable of using any combination of one or more of these communication methods.

 **COMMAND CENTER FOR WINDOWS**

For ET1, ET2000, and ET2000e controllers

Command Center for windows version 4 is the latest version of Command Center. It is mouse driven, and controller data is displayed in an easy to read format. It supports ET1 and ET2000 controllers with all communications options, such as telephone, direct wire, local radio, and digital radio. Some communication options are not available on older model controllers. Group alerts, group functions, local radio communications, and improved reporting capabilities are provided.

 **CENTRAL COMPUTER SOFTWARE**

The central control software shall have the following characteristics:

1. Run on any IBM compatible computer with minimum of 128 MB of memory available for program operation.
2. Compatible with all Calsense ET-driven and moisture sensor-driven controllers.
3. Functions with any combination of hardwired, phone, Ethernet, GPRS, fiber optic modem, digital radio or local radio communication.
4. Does not conflict with other software programs running on the same computer.
5. Allows direct real-time access to run stations, run programs, check for flow, check master valve operation, and turn controllers on or off.
6. Prints alerts each day based on operator-set data filters. This feature prints only program changes and problem flags selected by the operator.
7. Automatically creates permanent files each time log or program data is uploaded.
8. Allows all program data, log data, summary data and alert data for each controller to be selectively printed by controller or group.
9. Automatically uploads weather data from ET gage or weather station, and Tipping Rain Bucket and re-distributes to all field units.
10. Capacity to operate more than 9,999 controllers.
11. Intuitive Windows-based menu driven format requires no special training to operate.
12. Water usage data is automatically retrieved monthly from each controller and written to a text files for easy placement into Windows graphing programs.
13. Allows user to view and / or override any changes made at irrigation controllers.
14. When used with digital network radio, the central computer can roam throughout the United States without changing frequencies.
15. Failure of the central control system or communications shall not affect normal, water management operation of irrigation controllers.



 **CENTRAL COMPUTER
SPECIFICATIONS**

The Calsense Command Center software can be used with an IBM compatible computer. Calsense recommends, although it is not required, that the central computer be dedicated for irrigation control in order to achieve efficient monitoring of the system. The central computer shall have the following characteristics:

1. IBM PC or 100% compatible, 80586(Pentium) minimum 600 Mhz.
2. Windows 95 / 98 / XP / NT 4.0 (SP4) / 2000 (ME not supported)..
3. Minimum 128MB of RAM (256 MB RAM recommended).
4. Minimum 150 MB hard disk space (10 GB recommended) for data storage.
5. 3.5" Floppy Drive (double-speed CD-ROM drive recommended).
6. Two serial ports and one parallel port.
7. 15" monitor (17" recommended).
8. 256 color VGA video (True-Color recommended).
9. 9600 baud modem (28.8 K or faster recommended).
10. Microsoft compatible mouse.
11. Microsoft compatible printer recommended.
12. Calsense Command Center central software.