

# BIC2500

### BIC2500

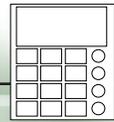
The Bermad BIC2500 is an Internet enabled complete management system. The BIC2500 allows for integration of different monitoring and control technologies and powerful analytical tools in a user friendly interfaces. The results of using the BIC2500 are increased quantities and higher quality products at lower input costs. The BIC2500 gives the user the management tools for efficient use of resources such as water, energy, chemicals, and manpower and is cost effective.



## Features

- **Modular Hardware:**
  - **Local DC or AC** outputs and digital inputs
  - **Single Cable, Two-Wire** - Two way communication, Up to six miles radius from the controller
  - **Radio** - Two way communication between the nodes and controller allows variety of inputs for monitoring physical values and outputs for system control.
  - **Weather** monitoring and control is enabled by connecting a full weather station and/or a temperature, humidity and dew point.
  - **pH/EC** monitoring and control including multiple chemical injection channels
  - **Analog inputs** connected to the controller and end nodes using radio or two-wire communication allows the collection of physical parameters such as pressure, flow, soil moisture, engines system values, and more for analyzing and control decisions making.
- **Irrigation:**
  - Hundreds of irrigation programs, and irrigation fields including pumps, filters, chemical injectors, and valves can be define in a single controller
  - Water dosage by time, volume, volume per area, and ET
  - Irrigation by days of the week or cycle of days
  - Single cycle or pulse irrigation
  - Start by time, manually, and/or physical or environmental conditions
  - Each program allows the control of single valve, sequence of valves and/or groups of valves
  - Main valve opening and closing can be delayed, prior-to or together with the irrigation valves
  - Managing multiple water sources including pump stations with multiple pumps in each location, storage tanks and reservoirs
- **Chemical injection:**
  - Local and multiline (central) injection sites. Up to 6 chemicals per site
  - **Chemical dosage modes:**
    - Continuous - Time (h:m:s) or Volume (Gallons)
    - Concentration - Gallons (G)/Thousand Gallons (THG), G/m:s, sec/min, m:s/THG
    - Proportional - proportion calculated from the amount of water and injected chemical
  - Three stage injection: Pre-water, injection, post water
- **Filtration management:**
  - Local and multiline filter stations sites
  - Flush by time, pressure differential (PD), or both time and PD
  - Adjustable parameters - Interval between flush cycles, Pre-dwell time, Dwell time, Flush time, PD delay
  - Endless looping detection and prevention
  - Accumulation of flush cycles by time and PD
- **Alarms:**
  - High flow, low flow, leaks, pipe brakes, low pressure
  - Chemical leakage, injector malfunction
  - PD sensor failure
  - Low battery, no AC power (For AC controllers)
- **General:**
  - Multi language controller
  - Large graphic LCD and full numeric keyboard
  - Multi level programing allows to fit the User Interface (UI) to the specific application and user
  - Conditions system allows start, stop, enable or disable programs
  - Detailed event log for all system events

# BERMAD Irrigation



BIC2500

CONTROLLERS

## Communication

### Internet Communication Channels:

- USB or GSM modem operating on most common cellular networks
- Ethernet cable
- E-mail notifications sent directly from the local controller to the assigned subscriber.

## Console

### Powerful management tool for monitoring, planing and analyzing the results

- **Monitoring:** Real-time monitoring tailored to the local operation with integrated solutions transferring reliable data from the sensor in the field to your computer.

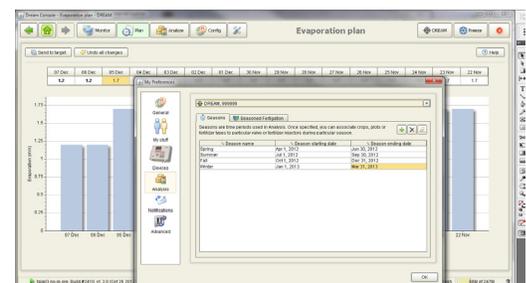
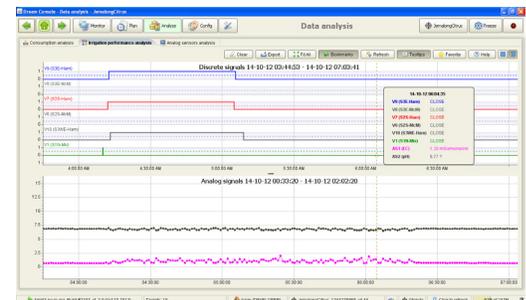
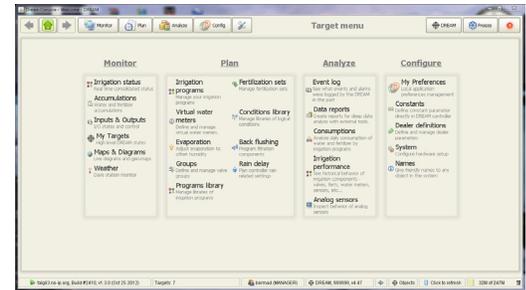
- Monitor geo-maps and live diagrams
- Accumulation of water and chemicals
- System real-time status
- Weather

- **Analyzing:** The information gathered from the field can be analyzed by using the powerful analytical tools offered by the Console

- Analyze behavior of analog sensors such as soil moisture to learn plant/soil behavior
- Historical behavior of system components
- Create reports of thorough data analysis using external tools
- Analyze events log

- **Planing:** The results of the analysis can be translated into automatic actions or alerts, or allow the user to plan and manage the system resulting in high quality production at lower operating cost and efficient use of resources

- Manage your system
- Adjust evaporation to match ETc and ET0
- Manage chemical injection, filters flush, conditions and more
- Adjust scheduling by seasons, crops, and fields



## Spot

- Mobile application allows remote operation and monitoring of systems from any mobile device or standard web browser, thus allowing manpower efficiency

- User friendly interface
- Easy to monitor real time activity
- Easy to schedule operation
- Multiple controllers monitoring and control



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