

# iCON irrigator

Simple, direct control for your complete irrigation pumping system



Achieve better, more streamlined control of your irrigation – including fertigation – with the iCONirrigator pump controller from CAP Industries.

The iCONirrigator provides efficient control for systems using one main pump with optional jockey and fertiliser pumps, together with an automatic back-flushing filter. It is ideal for applications where one pump is used to supply an individual irrigation system such as a centre pivot, or a linear, soft or hard hose irrigator.



- Integrated control of your main pump, jockey & fertiliser injection pumps
- Inbuilt time clock for scheduling system operation
- Automatic filter control (PD or time-based)
- Remote start
- IP65 and NEMA4x rated

## Key benefits

- Ease of use is guaranteed via the straightforward menus and instructions displayed on screen in real-English
- Automatic control of back-flushing filter based on pressure differential or timed flushing
- Start and stop settings for each pump and filter can be adjusted via the keypad of the controller
- Real time clock allows for scheduled start and stop operation
- Key information is displayed on screen for quick assessment of system performance (including system status, individual pump status and fault conditions)
- Integrated pump and system protection
- Data logging for each pump including hours run and starting times
- Access code prevents unauthorized access to the control setup
- Accepts inputs from irrigation controllers and other field equipment
- Robust, easy to use software designed, developed and supported in Australia



## Ideal Applications

- Agriculture
- Irrigation
- Horticulture





### System features

- System pressure is monitored via pressure transducer
- Main pump can be started/stopped via:
  - system pressure
  - remote signal
  - programmable time clock
- Time clock caters for 4 independent programs:
  - daily
  - working week
  - weekend
  - standard (7 day) week
- Automatic shut-down in case of fault to irrigation pump
- Data logging of key information
- Caters for additional equipment via programmable alarms and/or fault inputs with independent delay time, for example:
  - flow meter input
  - water level input
  - additional pump and system protection
- System operation and protection parameters can be tailored to suit specific applications
- Manual test function for each pump
- System settings are secured via memory with battery backup
- Programmable auxiliary output for additional equipment control

### Pump & system protection

- Low pressure and high pressure protection with adjustable time delays
- Adjustable time delays for pump start/stop times to ensure:
  - fertigation stops before the main pump stops
  - jockey pump does not operate during irrigation
  - filter flush only operates when main pump is running
  - fertigation stops during filter flushing
- Start and stop delays to eliminate pressure surges and pump cycling
- Pump and/or system alarm inputs with adjustable time delays for system and/or individual pump protection
- Option to add:
  - loss of prime/no flow protection; and other switched protection equipment
  - for system or individual pumps (eg. temperature sensor)

### Upgrades & customisation

The iCON*irrigator* includes a wide range of customisable options to cater for site-specific requirements including:

- LED and flashing lights
- external buzzers, alarms or sirens
- remote start relays

### Telemetry & communication options

In-built functionality easily caters for addition of:

- MODBUS communication
- Next G/GSM modem for SMS alerts
- radio networks

### Technical Data

Display	LED, yellow-green, software controlled (LCD backlight) 2 lines, 16 characters
System power supply options	Single phase 1x240V, 1x480V Three phase 3x415V
Clock (RTC)	Real-time clock functions (date and time)
Battery back-up	10 years typical at 25°C, battery back-up for RTC and system data, including variable data
Operating Temperature	0 to 50°
Communication (option)	Modem – GSM or NextG MODBUS
Frequency	50 or 60 Hz
Relative humidity	10% to 95% (non-condensing)
Inputs	8 digital
Output relays	6
Protection	Controller: IP65/NEMA4x Panel options: IP65 powder coated metal enclosure (IP55 rating with additional of lights and/or switches)

*Note: Larger systems and/or variable speed systems available on request.*

