

# iCON Pressure Controller

*Intelligent controller for pressure applications*



- 1-3 pumps
- Large LCD screen and user-friendly menu structure
- Pressure transducer operation
- IP65 and NEMA4X rated
- Suitable for new and existing installations

## Applications

- Agriculture & viticulture
- Irrigation & turf watering
- Domestic water supply
- Industrial water supply
- Building services

Rugged, reliable and easy to use, the new iCON pressure controller from CAP Industries sets new standards in efficient pump control. Featuring advanced menu-driven design, large LCD screen and an unprecedented IP65 rating, the iCON controller is the smart solution for your pressure application.

## Improving operational efficiency

The iCON pressure controller works at the heart of your pump system to maintain optimum operational efficiency within set parameters. Settings can be easily entered or changed via the intuitive menu structure which allows you to tailor your control to suit anysite-specific conditions or requirements.

Key information is displayed clearly on the large LCD screen including:

- system status
- setpoint pressure
- actual pressure
- individual pump status; and
- fault conditions.

This ensures you can confidently monitor system operation and diagnose any system failures for immediate action.

## Other features include:

- pressure transducer operation (pressure switch on request)
- data logging of hours run and number of starts per pump
- DOL start (up to 15kW) or soft start (5.5 to 110kW) available
- automatic rotation of lead pump each start or fixed operation
- pump start/stop delay timers to eliminate nuisance cycling
- manual test function for each pump
- pause function
- all settings secured on memory with battery backup.

## System & individual pump protection

Featuring a range of system and individual pump protection features, the iCON pressure controller is the ideal solution for maintaining the long-term reliability and operational integrity of your pump investment.

Protection parameters can be tailored to suit your specific application, and all settings are safeguarded by an access code which prevents unauthorised changes.

## Key protection features include:

- low pressure and high pressure protection with time delay
- 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
- minimum run timers per pump to reduce pump cycling.

## Additional inputs also give the option to add:

- loss of prime/no flow protection; and
- other switched protection equipment for system or individual pumps (eg. temperature sensor).

## Upgrades & customisation

Flexible design combined with multiple inputs/outputs and a range of customisable options ensures the iCON controller easily – and cost effectively – caters for a wide range of applications or site-specific requirements. This includes the addition of:

- LEDs and flashing lights
- buzzers and sirens
- remote start relay; and
- Next G/GSM modem for SMS alerts.

Upgradeability is assured by the systems robust, industry-proven PLC programming. This together with IP65 and NEMA4X rating ensures your iCON pressure control system is today's most reliable, long-lasting solution for your pumping operation.

## Telemetry & communication options

The iCON controller can supply information regarding system status, system alarms and fault indications directly to your BMS system via industry-standard MODBUS communications or voltage free contacts (optional). Remote monitoring and control are also available with the iCON pressure controller to ensure you have the ability to effectively manage your pump system at all times.

## iCON

*The new iCON pump controller is an easy to use, flexible pump control solution with versions available for pressure control, level control and variable speed control applications.*

*Designed to help operators achieve better, more effective control of pumps and pump stations, it offers a number of unique features including:*

- *rugged and powerful PLC programming to ensure simple upgradability and industry-proven reliability;*
- *multiple inputs and outputs enabling the controller to cater for a wide range of site-specific requirements and/or system designs without significant cost or reprogramming;*
- *intuitive, menu structure based on end-user requirements;*
- *IP65 and NEMA4X rating for greater protection in the harsh Australian conditions; and*
- *optional MODBUS communications.*

## Technical Data

Display	LED, yellow-green, software controlled LCD backlight; enables display to be viewed in the dark 2 lines, 16 characters
Control voltage	24VDC
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°C
Communication (option)	Modem – GSM or NextG MODBUS
Frequency	50 or 60 Hz
Relative humidity	10% to 95% (non-condensing)
Inputs	8 digital (standard controller) 18 digital (advanced controller) 2 analogue (0-10V or 4-20mA)
Output relays	6 (standard controller) 11 (advanced controller)
Protection - controller	IP65/NEMA4X
Protection - panel	IP56 PVC enclosure IP65 powder coated metal enclosure (IP55 rating with addition of lights and/or switches)

**Note: 1-3 pump systems standard, 4-6 pump systems available on request**



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