IMO

Case Study

i³ Intelligent Controller

Lobster Containment Solution

Lobster alive

i^3 Intelligent Controller

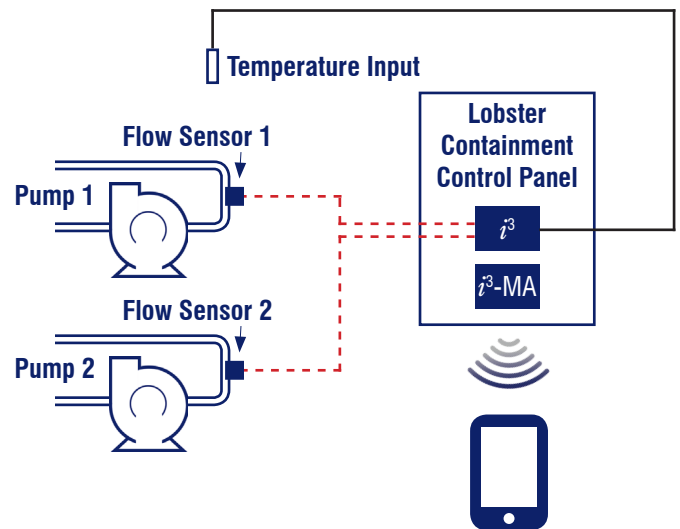## Lobster Containment Solution

IMO

Application:	Monitor and remote access livestock containment system
Equipment:	IMO i³A + i³-MA
Requirement:	Remote alarm in case of critical system fault
Location:	Balcatta, Western Australia
System:	IMO i³A intelligent controller & i³-MA, Flow & Temperature sensors, Control Panel, 2 x Containment Tanks

Temperature Input

Flow Sensor 1

Pump 1

Flow Sensor 2

Pump 2

Lobster Containment Control Panel

i^3

i^3-MA

The customer required remote alarm messaging in case of any critical system faults to a sometimes unmanned live Lobster containment facility. In this instance live crayfish are contained in large seawater tanks (up to several tons of livestock) prior to export around the world. Each tank is temperature controlled and a continuous flow of seawater must be maintained for the filtration and oxygenation system to keep the lobster in a healthy condition. In the event of loss of flow or dramatic change in water temperature action must be taken to rectify quickly as there is a risk that the live stock will not survive at great cost to the customer.

The i³A and i³-MA was deemed the best and most cost effective solution after a site visit and customer consultation.

The i³ sat alongside the existing control system to check the status of 2 x containment tanks, both temperature and flow were monitored. The customer was able to send status messages to the i³ and receive system information back as to the running conditions. Upon no flow or over/under temperature alarms the customer received SMS messages alerting them of the situation and allowing them to act to save the livestock.

"Our client required the local and remote monitoring of temperatures and flow feeding water tanks for live lobster storage. Mounted to the front of an electrical panel, digital and analogue signals were easily wired directly to the i3A, with expansion IO provided by an IMO Modbus Remote IO Module. Familiarity with this protocol allowed for the quick configuration of communications between the two devices. SMS status and alarming was a relatively simple addition with the i3MA, and provided a straightforward solution for the customer to monitor each input with their mobile phone. The i3A proved to be the perfect all-in-one solution, and is a product we would happily use again."

Automation Engineer, Motherwell Automation

"The i3 monitoring system has helped Lobster Alive maintain constant temperatures throughout the hot summer months or throughout the year by advising me when a problem has arisen eg high temperature or low flow rate by alerting me with an sms to my mobile phone and 2 other phones. Once the text is received I can respond immediately to the problem whether it is during the day or in the middle of the night.

This instant message and quick response by either myself or staff means that my live lobsters can be saved and no mortality will occur. I thoroughly recommend the i3 monitoring system for users who deal with water flow and livestock."

Owner, Lobster Alive (Perth, W.Australia)

Lobster alive

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