

Llyn Aqua Sensor Monitoring System



LAS-1

Oxygen

Temperature

Switched inputs

On request -

ORP

Conductivity

pH

Light

OV up to 12V

The System comprises of the Llyn Aqua Interface (**LAS-1**) and the Llyn Aqua Sensor Management software (**LASM**) which runs on a Windows based PC and collects data, manages alarms and data storage.

Mains powered, from 100 to 240VAC, with international 12 V transformer supplied. Internal sealed backup battery providing at least 2 hrs of operation. Built in power failure alarm.

Easy user connection via Ethernet (LAN) or wireless network bridge.

LCD display giving system generated messages.

Eight sensor channels with multi function interface (see left)



Eight relay output channels NO/NC
Alarm channel (eg. For connection to phone dialer / siren, beacon)

3 colour coded push buttons for local alarm reset (Red). Other two reserved for Last alarm display and current sensor values on the LCD.

Two panel lamps. Red=Alarm, green shows normal scanning.

85dB sounder built in.



Above. Newly built Llyn Aqua Perch farm with 4 LAS-1 units covering all Oxygen monitoring and alarm functions for 20 tanks.



Right. Llyn Aqua Arctic Charr farm.

Llyn Aqua Sensor Management

LASM

Environmental and process management

Program runs under Windows (2000 upwards) All LAS-1 data and configuration stored in SQL Data Base. Exportable to XL.

Data collected every 1 minute and stored for 7 days after which it is archived into hourly max / min and average.

All sensors can be user configured for type / units / resolution / location / alarm set point high and low.



Sensors can be calibrated online at any time.

New sensors can be added or others removed at any time without taking system out of action

The 8 inputs can be configured to trigger ANY one of the 8 outputs—eg, to open valves, turn on blowers / pumps etc.

Multiple triggers per sensor are allowed.

Alarms can be reset from the PC screen as well as any of the LAS-1 units on the network

Reports can be configured to suit the installation. Reports can be by sensor type (eg all oxygen, all temperature) or by location (eg. Nursery 1, Nursery 2, Growout 1 etc.)

A separate program, LASM Plot provides graphing. Any sensor can be plotted over a selection of time frames from 1 hr to 1 week. Any number of graphs can run simultaneously.

Using readily available software the system can be viewed and controlled from anywhere with broadband internet access.

Future developments. We are currently developing POE (power over Ethernet), a Web Based Interface, WiFi connection of up to 100 LAS-1 units within 100m of wireless hub plus extenders for outdoor installations such as shrimp farms or pond fish farms or cage sites. Software is being continually upgraded and can be downloaded from our server via e-mail link or we can perform this remotely if there is broadband access.

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