

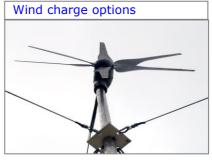
Oxy-Box

Battery Powered Aeration System

The Oxybox system pumps air into tanks, ponds and small lakes. It is powered from internal batteries and uses intelligent charge & control regimes and can harvest energy from the sun or wind. This cost effective system can ensure DO_2 levels are maintained and fish are kept at their best and in an unstressed state.







Typical Operation

The Oxybox system has a 2 stage 24hr timer system and is configured via the simple keypad/display. The system is designed to pump for >8hour/day* 4 on a user programmable duty cycle. Typical usage would be to harvest power during daylight hours and inject air during time periods between 3.00am– 11.00am when DO₂ levels are typically at the lowest levels.

Specifications

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Timer Controls:	4 digit LCD display, 7 day 24hour setting	
	Auto power save mode, over ride	
Internal Battery: *1	12V AGM maintenance Free	
Internal Battery	(Other options available)	
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Mains charge option	10 hour charge via fast charger	
	(Provided as a option)	
Ambient Conditions:	-10 to +40°C Operation	
	IP65 water proof enclosure	
Max Pumped Air rating*2	>14000 Litres Air/hour >2mtrs depth*3	
	Twin high reliability diaphragm pumps	
Typical Solar Panels adopted:	Polycrystalline Silicon 260-285W	
Typical Wind Turbine option:	300W 3 phase turbine	
	1 mtr diameter Poly GRP blades	
Enclosure:	High impact resistance Polypropylene	
	658mm x 420mm x 400mm	
Air outlets:	3/8" BSP Female, two to eight ports	
	(Normally factory configured)	
Other Controls:	Isolation switch, Battery condition voltmeter	
Carci Conditions.		
	& Charge Ammeter	
Remote control	Radio control for remote on/off	
Weight – with 200Ah battery	65 kilograms	
Oxybox base unit only	20 Kilograms	
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- *1 External fast charger available to top up battery if no sun/wind for >8 days
- *2 Pump run rates dependant upon geographical locations/sunlight hours/wind
- *3 Actual aeration rates dependant upon depth of diffuser and timer settings
- *4 Typical at 80% duty cycle dependant upon daily battery charge levels
- *5 Optimum usage details typical requirements when the Oxybox is set for 8 hours on time and 80% duty cycle.

Typical Setup with twin solar panels



Functionality/Benefits

Unattended Operation

Programmed timed aeration 365 days a year

Low Cost of ownership

Save on energy costs, harvest free solar/wind power – Very Low maintenance

Expandable aeration

Ideal for stock ponds and small lakes when linked to network of diffusers

Ice reduction

In winter, use to pump oxygen under ice covered ponds and help remove bad gases

Emergency aeration

Where no power/generator exists provides a safe haven for fish stocks

UK Manufactured

Designed, manufactured and supported in UK

Ordering Configuration

Туре	Battery	Solar	Wind	Optimum Usage*5
Oxybox S1	110Ah AGM	260W		Typical with 10 hours light
Oxybox S2	200Ah AGM	260W + 260W		Typically with 8 hours light
Oxybox S3	230Ah AGM	285W + 285W		Typically with 7 hours light
Oxybox S4	230Ah AGM	260W + 260W	300W	Typical use indefinitely

Oxybox System Options

- Transportation wheels allowing one person operation
- Solar panel mounting kits standard or bespoke
- Additional solar panels allowing longer run times
- Wind turbine, for coastal/inland ponds with good air flow (>3M/S)
- Wind turbine rigging kit 5 mtrs mounting pole + guy lines
- Diffuser kits Various types plus pipes and fittings available
- External fast battery charge for AGM batteries



http://www.solaraerationsystems.co.uk Solaraerationsystems@gmail.com Solar Aeration Systems 6A Fir Tree Lane Groby Leicester LE6 0FH 0116 2874201

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