

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 DO₂ levels are maintained and fish are kept at their best and in an unstressed state.

Oxybox base unit



Solar charge options



Wind charge options



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

Timer Controls:	4 digit LCD display, 7 day 24hour setting Auto power save mode, over ride
Internal Battery: * ¹	12V AGM maintenance Free (Other options available)
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 & Charge Ammeter
Remote control	Radio control for remote on/off
Weight – with 200Ah battery Oxybox base unit only	65 kilograms 20 Kilograms

- *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

Type	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



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