

Heathland Group Limited

SolarAir

Solar Powered Diffused Aeration
System





Description.

The most ADVANCED SOLAR AERATION system on todays global market. Nothing other than the SolarAir is able to provide 24hr aeration.

The SolarAir is the result of many years research and development, providing the end user with a totally off-grid solar aeration solution. This makes it ideal for all those remote locations where a power supply is not accessible. Available with many additional options including online monitoring and management.

The basic system is designed to run anything from a single diffuser up to a total of 8 diffusers with air volumes over 10,000 litres per hour.

Air is pumped through the diffuser membranes on the bed of the waterbody breaking through the thermocline, reducing the effects of thermal stratification while also increasing the pond, lake or reservoirs dissolved oxygen (DO) levels.

Key Features.

- Full system protection.
- Lightning strike protection.
- Full Galvanised solar panel ground mounting frame.
- Latest technology Monocrystalline Solar Panels.
- Latest AGM Super Cycle Battery Technology.
- Advanced Battery monitoring system with full monitoring ability.
- Battery low level shutoff system.
- Compressor includes thermal overload motor protection.
- Heavy duty cooling fans are standard with the compressor enclosure.
- Ultra-low back pressure check valve.
- Diffuser membranes have a non-stick coating to discourage biofilm and calcium build up.
- Bluetooth control and monitoring as standard.
- Optional - 2G, 3G and 4G remote network connection.

- Optional - generator backup with remote start.
- Optional - 24hr aeration timer.
- Optional - Additional Battery banks.
- Stainless / Lockable enclosure.
- All diffusers supplied with stainless base and check valves.



Model Specifications.

| Aeration System | Diffuser Quantity | Solar System Voltage | Airflow M3/h | Battery Running Time (No Solar Available) | Solar Panels | Battery Banks |
|---------------------------------------|-------------------|----------------------|--------------|---|--------------|------------------|
| SolarAir 3600 / SolarAir 3600 Float | 1 - 2 | 24v DC | 3.6 | 48 Hours + | 4 | 1no. 24v / 170Ah |
| SolarAir 4800 / SolarAir 4800 Float | 3 | 24v DC | 4.8 | 38 Hours + | 4 | 1no. 24v / 170Ah |
| SolarAir 7200 / SolarAir 7200 Float | 5 | 24v DC | 7.2 | 56 Hours + | 6 | 2no. 24v / 170Ah |
| SolarAir 9600 / SolarAir 9600 Float | 6 | 24v DC | 8.4 | 40 Hours + | 6 | 2no. 24v / 170Ah |
| SolarAir 10800 / SolarAir 10800 Float | 8 | 24v DC | 9.6 | 40 Hours + | 6 | 2no. 24v / 170Ah |

SolarAir Sizing Chart (please note this is based on basic requirements)

| Water Depth | SolarAir 3600 / SolarAir 3600 Float | SolarAir 4800 / SolarAir 4800 Float | SolarAir 7200 / SolarAir 7200 Float | SolarAir 9600 / SolarAir 9600 Float | SolarAir 10800 / SolarAir 10800 Float |
|-------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|---------------------------------------|
| 1.0 to 2.5m | 0.5 – 1.5 Acres | 1.5 – 2.0 Acres | 2.0 – 6.0 Acres | 3.0 – 8.0 Acres | 4.0 – 12.0 Acres |

****All charging and battery storage calculations are based on winter sunlight hours.**

****Snow / Fog and adverse weather will have detrimental effects on system charging, during these times the pumps may stop until charging commences on the next solar active day. All batteries are low voltage protected.**

****Bespoke SolarAir Deep-Water system also available, pumps and data provided based on requirements. Maximum operating depth with a deep-water system is 10 metres.**

Parts Warranty;

- Compressors 2-year warranty.
- Solar Panel Output 25-year warranty.
- Solar Panel Structure 5-year warranty.
- Batteries 2-year warranty.
- Diffusers and bases 5-year warranty.
- Self-weighted air tubing 15-year warranty.
- General system components 2-year warranty.

***The warranty does not cover serviceable parts after two years. Any damage caused by poor maintenance, careless handling, misuse, abuse or freezing will not be covered under warranty. Modification or repair by an unauthorised repair facility will void the warranty.

The standard service is supplied with a full 2-year return to base labour warranty, service contracts are also available along with remote management contracts whereby your system is monitored closely for downtime, faults and much more. The system can send faults via email to anyone using the SolarAir GSM monitoring kit.

