



CLEAR[™]
NANOBUBBLE GENERATOR



APPLICATIONS

- Pond & Lake Treatment
- Horticulture & Irrigation Reservoir Treatment
- Algae Control
- Water Quality Improvement
- Odor Control
- Iron & Manganese Control
- Midge Fly Control
- Hypolimnetic Aeration
- Sediment Decomposition
- Fish and Ecosystem Health
- Side Stream Oxygenation
- Nutrient Reduction

Moleaer's patented Clear[™] nanobubble generator is a chemical-free solution for improving water quality and restoring the natural health of lakes and ponds. The Clear is a hyper-efficient gas-injection technology that uses air or oxygen enriched air to produce a constant, concentrated stream of nanobubbles that provide a continuous source of treatment. Once injected, the nanobubbles distribute throughout the water column and the waterbody effectively delivering oxygen and a mild, oxidative impact even at the sediment layer. Nanobubbles are a sustainable option for increasing dissolved oxygen concentrations, improving water clarity, and overall waterbody health even in shallow or hard to treatment water bodies.

The Clear is available in 11 or 34 m³/hr (50 and 150 GPM) flow rates that use integrated compressors to supply atmospheric air or optional oxygen enriched-air for more demanding treatment applications.

The Clear comes standard with remote equipment monitoring capability that enables each system to be monitored by both the user and Moleaer's global team of field service technicians to ensure optimum performance. Furthermore, each system offers an optional dissolved oxygen monitoring solution that can be tracked in real time, remotely. Additional water quality monitoring solutions are also available.

Features & Benefits:

- Highest Oxygen Transfer Efficiency
- Global Remote Monitoring Capability
- Quiet, <65 dB
- 120 nm-sized Bubbles
- >1 Billion Nanobubbles / mL
- Easy to Install & Maintain
- Small Footprint & Lightweight
- Shore Mounted

Options:

- Remote Water Quality Monitoring
- Integrated Enriched-Air Generation (Doubles Oxygen Supply)
- Integrated Ozone Generation

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CLEAR EU Series

| MODELS | Clear 50 | Clear 150 | Clear 150 Enriched |
|--|---|-----------|--------------------|
| LIQUID FLOW CAPACITY (WATER) | | | |
| Flow Rate, m ³ /hr | 11.4 | 34 | 34 |
| Maximum Liquid Pressure, Bar | 1.5 | | |
| OPERATING PARAMETERS | | | |
| Temperature Tolerance, °C | 5 - 60 | | |
| Solids, mm | <9.5 | | |
| GAS FEED | | | |
| Maximum Gas Pressure, Bar | 8.5 | | |
| Indicated Gas Flow Range, LPM | 0 - 10 | | |
| ELECTRICAL POWER | | | |
| Voltage | 230 | 230 | 230 |
| Phase | 1 | 1 | 1 |
| Hz | 50 | 50 | 50 |
| Pump Motor Power (kW) | 1 | 3.20 | 3.20 |
| Total Compressor Power (kW) | 0.09 | 0.09 | 0.28 |
| Max Amp Draw | 17.7 | 17.7 | 19.5 |
| PUMP | | | |
| Pump Type | TEFC | | |
| Wetted Parts Materials | Polypropylene/316 SS/Buna | | |
| Motor Starter Switch | Start Button (Latching) | | |
| UNIT CONNECTIONS | | | |
| Customer Pipe Connection | 63 | 90 | 90 |
| Unit Inlet (Slip and Groove), mm | 63 | 90 | 90 |
| Unit Discharge (Slip and Groove), mm | 63 | 90 | 90 |
| DIMENSIONS AND WEIGHT | | | |
| Height, cm | 81 | | |
| Width, cm | 70 | | |
| Length, cm | 100 | | |
| Weight, kg | 114 | 114 | 114 |
| OZONE (OPTIONAL FEATURE OFFERED ONLY ON THE 150 GPM ENRICHED OPTION ONLY) | | | |
| Additional Amp Draw | NA | NA | 0.4 |
| OPTIONAL FEATURES | | | |
| Remote Monitoring | Global GPS and 4G/3G service | | |
| Dissolved Oxygen Sensor | Optical, 0 - 40 ppm (+/- 1.5 ppm), 30 Second Response Time | | |
| OPTIONAL UPGRADE FEATURES | | | |
| Remote Monitoring | Equipment performance sensors included standard, option to upgrade to access real time data and receive notifications | | |
| Dissolved Oxygen | Option to include Dissolved Oxygen (DO) sensor in unit and monitor data 24/7 | | |
| External Water Monitoring | Option to include additional water quality sensor to monitor Temperature, Conductivity, pH, ORP, DO, Chlorophyll-A | | |

Remote Monitoring: All systems are remote-monitoring ready. Subscriptions and fees apply to activate.

Notes: EPA Establishment Number 94231-CA-1 Intake screen is necessary to prevent clogging.

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