



# PACIFIC OZONE<sup>™</sup> MNG SERIES OZONE GENERATORS

#### **MODULAR DESIGN, UNPARALLELED FLEXIBILITY & PERFORMANCE**

**POWERFUL, SCALABLE AND AIR-COOLED** – The advanced air-cooled, chassis-based design of MNG Series ozone generators delivers powerful, ultra-flexible and precision-controllable large industrial ozone production systems from 140g/h (5lbs/day) to 1.4kg/hr (75lbs/day). MNG Ozone Generators package Pacific Ozone's air-cooled Floating Plate Technology<sup>™</sup> ozone reactor cells with advanced Powertron<sup>™</sup> electronics in rugged industrial enclosures.



**DESIGNED FOR INDUSTRY** – Using Pacific Ozone's exclusive Smart Ozone Module (SO<sub>3</sub>M) chassis design, MNG Series Ozone Generators deliver production rates to 1.4kg/hr with programmable operating modes in 70g/h increments while maintaining full resolution control and automatically adjusting feed gas flow rates for full efficiency and ozone production optimization.

#### Features

- SO3M Smart Modular Ozone
- Redundant Chassis Design
- Demand Measured Ozone and Feed Gas
- Air-Cooled FPT™ Titanium Reactor Cells
- Precision Ozone Control Powered by Powertron<sup>™</sup>
- Easy-to-use Instrument Panel
- Painted Steel or Stainless-Steel
  Enclosures

#### **Benefits**

- Demand based Ozone
  Production
- Lower Operating Cost
- Feed Gas Optimization
- Full Control Resolution
- Automated Start, Stop & Purge Sequencing
- Simple Install & Integration
- HMI and Visual Ozone Indication
- Ideal for Upgrading Existing Systems

### SIMPLE. PROVEN. OZONE TECHNOLOGY.



**MODULAR DESIGN** - Modular redundancy is the key to the MNG Series revolutionary chassis-based design, providing unsurpassed reliability. The innovative design produces a solid foundation for a flexible and robust air-cooled ozone production system. The MNG Series is engineered to meet the most demanding industrial ozone process requirements with easy-to-use system control interface. The automated start, stop and purge sequencing joined with Pacific Ozone's precision ozone turn-down control provide the ultimate simple and safe operation for seamless integration in virtually all industrial applications.

**SIMPLE UNIVERSAL CONTROL** - The single Ozone Generator HMI interface with SO<sub>3</sub>M controls power, flow and output of self-contained Floating Plate Technology<sup>™</sup>

ozone reactor cells powered by advanced Powertron™ power supplies housed in a stainless-steel enclosure. This provides

ultimate mission critical ozone production security. Patent pending Powertron<sup>™</sup> power supplies are revolutionary and precisely control the power in the cell used to produce the corona, so energy does not become wasted heat. Powertron<sup>™</sup> monitors electrical parameters to deliver the most efficient energy usage with stable operation and unsurpassed reliability. Flexible enclosure configurations may be combined to form the most powerful air-cooled ozone generators available.



**APPLICATION FLEXIBILITY** – Aquaculture, Marine, Industrial, Food & Beverage and Drinking Water applications are ideal for MNG Series applications. The powerful MNG Series combined with its ultimate flexibility and scalability provides a superior platform for ozone production.

# STANDARD CONFIGURATION AND CAPABILITIES

#### **Construction and Design**

- Scalable Stainless Steel Construction
- Air-cooled Powertron<sup>™</sup> FPT Ozone Generator
- NEMA 304 Stainless Steel Enclosure
- 304 Stainless Steel Frame
- PSA Oxygen Concentrators Onboard
- Auto-unified Pneumatics Package
- 316 Stainless Steel/PTFE Wetted Components
- Sanitary Pump, Injection System and Instruments
- Backflow prevention and Auto-Drain
- Sanitary Stainless Steel Feet/Anchor Plate

#### **Controls and Interface**

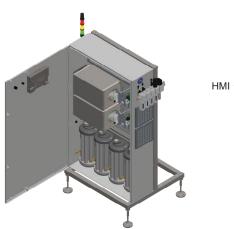
- WaterReady™ Ultra-Control O<sub>3</sub> Software
- Ozone Process Trending
- Local/Remote Operation
- EtherNet/IP Ready
- Fully Integrated Air Filtration Package (MNGA model)
- Auto-Start/Stop/Safety Purge Cycles
- Auto-precision Dissolved Ozone Control
- 10" HMI Touch Screen, Light Tower and E-Stop
- Ambient Ozone Detector Safety Interlock
- Dissolved Ozone Analyzer

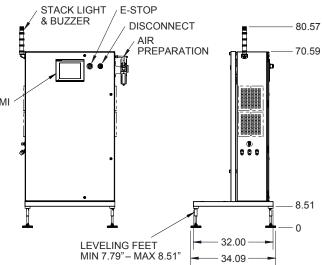


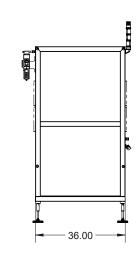




## **MNGA2X**

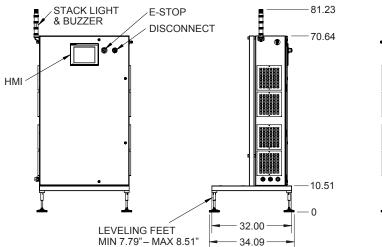






MNG4X

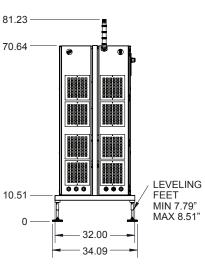




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MNG8X





MNG16X



### **ADAPTABLE TO DEMANDING ENVIRONMENTS**

The MNG Series modular multi-chassis, scalable air-cooled ozone generators are designed to operate with high-quality plant air provided from the facility. Optional integrated air compressor and filter packages are available from Pacific Ozone (model MNGA) if plant air is unavailable or insufficient.



Feed Gas System

MNGA models include the standard MNG Series features along with a rotary valve PSA oxygen feed gas system that ranges from 140g/h to 280g/h (MNG2X and 4X) and the two bed units for 560/g/h to 1120 g/h (MNG8X and 16X). Additional safety is integrated through auto-precision dissolved ozone control.

Standard and scalable configurations include:

- Ambient Ozone Safety Interlock
- Linear Ozone Output
- Power Consumption Includes Air-cooling
- All Stainless Steel Construction
- WaterReady<sup>™</sup> Ultra-control O3 Software
- EtherNet/IP Ready
- Ozone Process Trending



Air Filter Package

### **TECHNICAL SPECIFICATIONS**

	Ozone Generator				
Model	O <sub>3</sub> g/h Production	PPD	Volts	ĸw	Feed Gas (SCFH)
MNG2X34	140	7.4	240	2.2	80
MNG4X34	280	17.8	240	4.2	160
MNG8X34	560	29.6	240	8.4	320
MNG16X34	1120	59.3	240	16.8	600

NOTES:

Compressed Air Requirement: Clean, dry and free from contaminants. See Pacific Ozone Air Quality Specification for Ozone Generator with Compressed Air Preparation Unit and Oxygen Concentrator. Complete specifications are provided in the product manual.

Contact your Evoqua sales representative for more information.



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