

"Quick Response & Quick Solutions"

# TREND

## SUPER OZONE GENERATOR

GPRS / **WiFi** MONITORING  
SYSTEM READY



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## SUPER OZONE GENERATOR

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### What is Ozone (O<sub>3</sub>)?

In natural, Ozone (O<sub>3</sub>) is an unstable gas formed by combining three atoms of oxygen. Ozone has a short half-life so retains potency for only a short time and quickly decays into diatomic oxygen.

### How to produce Ozone?

Ozone often forms in nature under conditions where generates from ultraviolet light, (UV wavelengths at 185 nm.) and react to oxygen molecules at between about 20-50 Km above the surface of the earth. This produces two oxygen atoms, and then the oxygen atom joins up with an oxygen molecule to regenerate ozone. Ozone can also be generated from UV source and corona discharge generators and etc.

### Features of TREND Super Ozone Generator

- 1) Thank you for an innovative mixing between water to ozone gas, our specially mixing technique accelerates Ozonated water which has ozone mixing efficiency up to 70%
- 2) No chemicals are required which are no other toxic remains in cooling tower system and surrounding area. It is safeties for environment and operators who operates and maintain the system.
- 3) Compact system where equipments are installed inside enclosure and ease installation. It is saving for installation area and operating cost. Our super ozone generator system has no static mixer, dissolving tank and other complex structure supporting as same as conventional system.
- 4) TREND system has added significant extensions to its monitoring system and warning via GPRS. Anywhere with a precision and accuracy information which allows user to become more effectiveness in monitoring of our system. Report on working state is available via Email.



## Advantage of using TREND Super Ozone Generator to Cooling tower

- 1) Water softener system can be eliminated from cooling tower
- 2) Avoiding chemical usage in water and reduce labor cost of maintenance.
- 3) Ozone has a very high oxidation potential more than 3,000 times of Chlorine, killed more than 99% of bacteria in the water which causes of Affliction. Ozone is more effective and faster in destroying bacteria, virus and including some protozoa.
- 4) Electricity saving by operating chiller with clean condenser from mitigating scale and slime.
- 5) Reducing the preventive maintenance cost of piping, valves, metallic structures and cost of cleaning condenser.
- 6) Reducing the downtime and repairing times of water cooled system.
- 7) Reducing Make-up supplying to Cooling tower due to stabilizing water parameter.



ก่อนใช้ O<sub>3</sub>



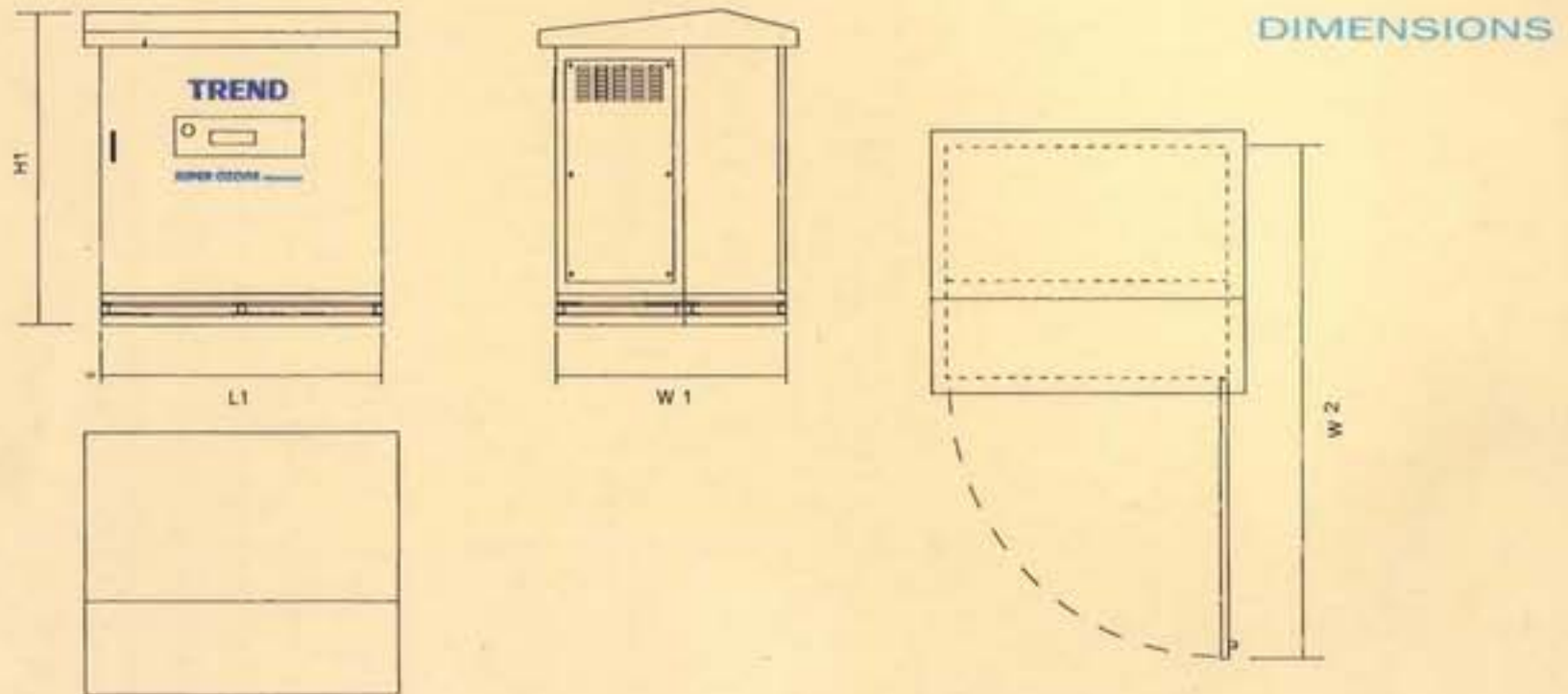
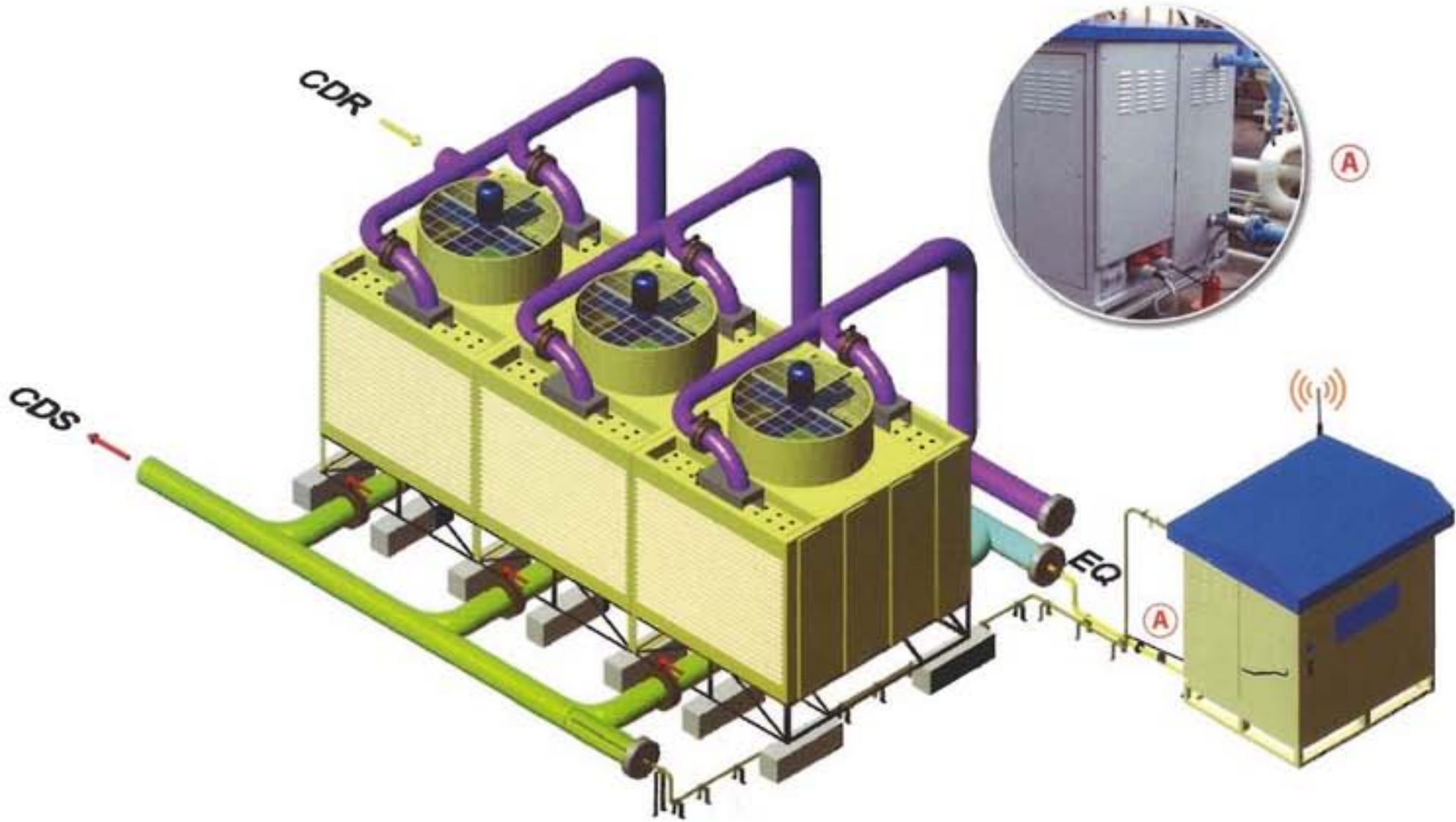
หลังใช้ O<sub>3</sub>



SPECIFICATION	OZONE-50g	OZONE-30g
Ozone Dissolve Capacity	up to 4.2 ppm (at sampling point, 25 °C clean water without chemical)	up to 2.5 ppm (at sampling point, 25 °C clean water without chemical)
Ozone Gas Capacity	50 g/hr (at 25 °C)	30 g/hr (at 25 °C)
Power Consumption	4.18 kW/6.0 kW	3.74 kW/5.6 kW
Internal Oxygen Supply	ATF Oxygen Modules Flow 15 LPM at 90% O <sub>2</sub> v/v (+3% / -5%) Ta 4 °C to 54 °C (inside operating enclosure) Oxygen Delivery Dewpoint : -73 °C	
Cooling System	Water and Air Cooling for Corona Discharge Chamber	
Supply Voltage	380V 3φ, 4 Wire 50/60Hz	
Ozone Mixing Method	Dynamic Mixing up to 80% Efficiency of Mixing (at 25 °C clean water without chemical)	
Control System	MPCU (Maximum Performance Control Unit, PCL with LCD display)	
Monitoring System	GPRS, LCD panel, Emergency Stop, Corona Discharge Failure, Ozone Leakage Sensor,	
Protection	Over Current Protection, Door open Protection, Water Loss Protection.	
Alarm	Wireless Remote Alarm Box, Siren (optional), Mobile SMS (optional)	

# TECHNICAL DATA AND DIMENTION

1 SET OF SUPER OZONE = 3 SET x 500T FOR COOLING TOWER



## TECHNICAL DATA

## DIMENSIONS

Model	Option	Capacity (g/hr)	Rated Voltage (V)	Total Power Consumption	L1 (mm)	W1 (mm)	W2 (mm)	H1 (mm)	Weight (kg.)
OZONE-50g	Standard IP42	50	3 $\phi$ , 4wire 50/60Hz	4.18 kW/6.0 kW	1,150	950	2,100	1,300	350
OZONE-30g	Standard IP42	30	3 $\phi$ , 4wire 50/60Hz	3.74 kW/5.6 kW	1,150	950	2,100	1,300	300

**Note :**

1. The product must be installed by skilled persons. All ineffective results will be caused by none professional installation.
2. Systems are comprised with ozone generator, oxygen generator, ozone mixing pump, monitoring and controller.

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