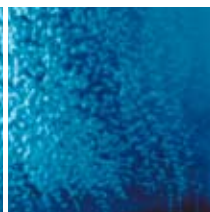
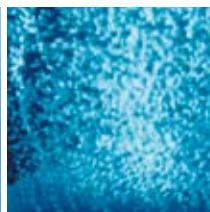


HEADWORKS  
BIOLOGY  
SEPARATION  
MEMBRANE  
► **DISINFECTION**  
BIOSOLIDS  
SYSTEMS



**QUALITY**

**LOW-COST**

**VERSATILITY**

**PERFORMANCE**

► Applications

- Bottled water plants
- Cooling towers
- Aquaculture, etc.

► Main characteristics

- Advanced technology
- Fully assembled and tested
- Compact dimensions



The OZAT® CFS ozone generators are a range of small units which incorporate the same features as Degrémont Technologies' larger units such as AT dielectrics and IGBT power electronics.

## MAIN FEATURES

- Second generation
- Production rates from 55 to 730 gO<sub>3</sub>/h from oxygen
- Production rates from 37 to 470 gO<sub>3</sub>/h from air
- Robust industrial quality for reliability and long service life
- High ozone concentration at full-load
- Very compact dimensions for easy integration
- Low maintenance and service personnel requirement
- Second generation technology

## OZAT® CFS SPECIFIC TECHNOLOGY

The CFS range is Degrémont Technologies' second generation development of generators for small to medium sized ozone applications. The design is based on feedback from hundreds of operators and includes the latest technology to ensure continuous operation at full-load in industrial environments.

An OZAT® CFS unit is made-up from the ozone generator part, the power supply for the high voltage medium frequency supply to the generator, control system, process related control equipment and interconnections. The control system ensures flexible operation and allows integration into all types of plant concepts.

## HOW IT WORKS

Ozone, the triatomic form of oxygen, is generated by recombining oxygen atoms with oxygen molecules. This process takes place in the gap between the dielectric layer on the high voltage electrode and an earth electrode in the ozone generator. When high voltage is applied to this arrangement a silent electrical discharge occurs in the gap which excites the oxygen molecules in the feed gas flowing through the gap which causes them to split and combine with other oxygen molecules to form ozone.

## Product highlights

- High performance
- Compact and versatile
- Low-cost
- High ozone concentration
- Low specific power
- User friendly
- Easily integrated
- Low service requirement

## TECHNICAL DATA

OZAT® CFS-2G Model	Ozone Production		Oxygen Requirement	Air Requirement	Outlet pressure		Cooling Water
	Oxygen 10 wt%	Air 3 wt%	10 wt%	3 wt%	Oxygen	Air	
	g/h	g/h	Nm³/h	Nm³/h	barg	barg	
CFS-1	55	37	0.39	0.95	0.7	2.0	0.09
CFS-3	165	115	1.17	2.93	0.7	2.0	0.27
CFS-7	370	240	2.61	6.19	1.0	2.0	0.56
CFS-14	730	470	5.11	12.10	1.0	2.0	1.09

The recommended concentration range is between 6wt% and 12wt% when fed with oxygen and 3wt% to 5wt% when fed with dry air.

### ► Standards

- **Design standards:** SN-EN, IEC, ISO
- **Protection class:** IP 42
- **Conformity:** CE

### ► Materials

- **Enclosure:** powder coated mild steel
- **In contact with ozone:** stainless steel 316, PTFE, PVDF, Viton
- **In contact with water:** PE, brass, stainless steel 304/316

### ► Remote controls and alarms

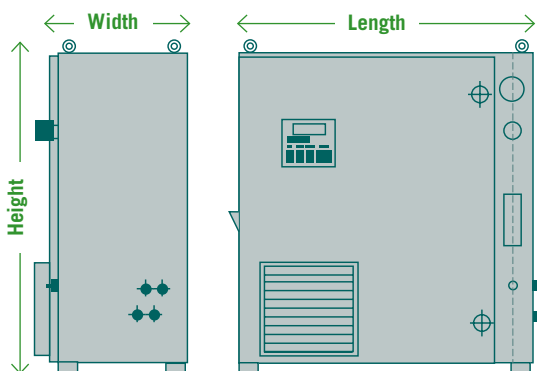
- **Supply ON/OFF**
- **RESET**
- **Gas valves OPEN**
- **Enable REMOTE**
- **Production STOP**
- **Collective ALARM**

## Technical features

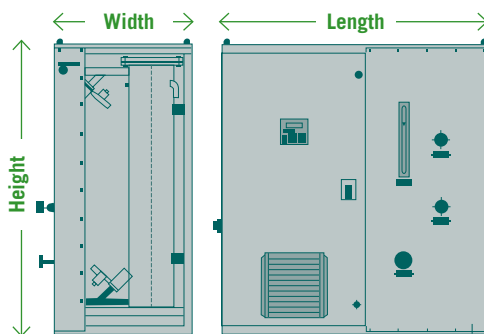
- **Voltage:**
  - CFS-1 & CFS-3:  
1 x 230 VAC ± 10%
  - CFS-7 & CFS-14:  
3 x 400 VAC ± 10%
- **Frequency:** 50 / 60 Hz
- **Ambient temperature:** +5...40°C
- **Design altitude:** <1000 m.a.s.l.
- **Humidity:** RH<65% (yearly average)

## DIMENSIONS

OZAT® CFS-2G Model	I x h x w	Weight
	mm	kg
CFS-1	720 x 800 x 370	70
CFS-3	720 x 800 x 370	85
CFS-7	1000 x 800 x 450	200
CFS-14	1300 x 1450 x 670	420



Types: CFS-1, 3 & 7 (typical)



Type CFS-14



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