

# Industrial Ozone Generator

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These medium frequency ozone generators are designed to provide the most efficient and reliable ozone generation commercially available. Several sizes available for any ozone application.



### Features

- up to 10% wt. ozone concentration
- compact design allows use in small spaces
- overheat protection feature
- minimal heat generation due to water cooling jackets surrounding corona cells
- 4-20 mA input proportional control
- simple installation & startup

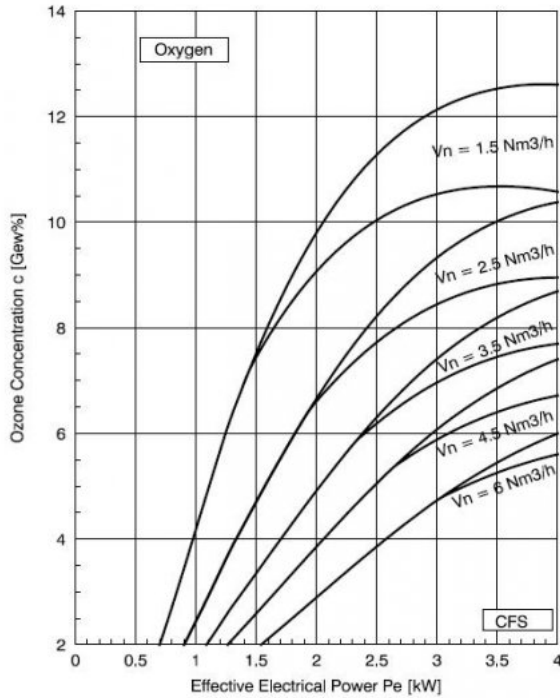
Product ID: **CFS-7**  
Lead Time: **4 weeks**

### Specifications

Ozone Concentration	3-13% by wt. (fully adjustable)
Ozone Output	12.7 lbs/day (240 gm/hr) @ 3% by wt. conc. from 3.9 SCFM (6.2 m3/hr) dry air 25.2 lbs/day (476 gm/hr) @ 6% by wt. conc. from 3.4 SCFM (5.4 Nm3/hr) of 90% oxygen
Cooling Water	2.2 GPM @ 55-deg F (8.3 lpm @ 13-deg C)
Power Requirements	460V 3-Phase, 60Hz (Foreign voltages available)
Power Consumption	4.3 kW
Feed gas connection	1/2" FPT
Ozone Connection	1/2" FPT
Cooling Water In/Out	1/2" FPT
Gas Flow (O2)	22-218 SCFH (10 - 103 lpm) [adjustable]
Gas Flow (Air)	27 - 270 SCFH (13 - 128 lpm) [adjustable]
Panel Mounted Components	Flowmeter with control valve, pressure regulator & pressure gauge. All are on front panel
Ozone Output Control	Fully adjustable with push button up & down
Remote Operation	Yes - 4-20mA or manual control easily selected with toggle switch on front panel
Operating Temperature	41-104 deg F (5-40 deg C)
Humidity	< 65% annual average 75% occasionally
Dimensions	15-in W x 34-in D x 19-in H (38.1-cm W x 86.4-cm D x 48.3-cm H)
Weight	170-lbs (77 kg)

## CFS-7 Output Chart

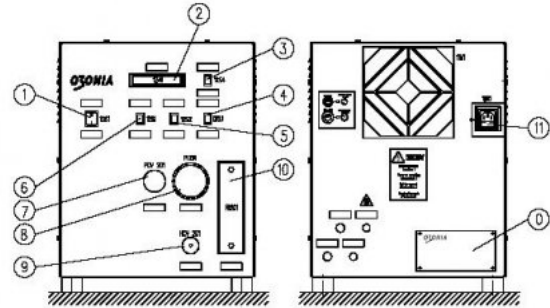
Concentration dependent on electrical real power for oxygen with approx. 2 % nitrogen  
 $t_g = 20^\circ\text{C}$  and  $p_g = 2.5\text{ bar g}$  ( $P_{atm.} = 1013\text{ mbar}$ )



The chart shows the varying ozone outputs of the CFS-7 with different oxygen flows & power applied.

## CFS-7 Component Locations & Operation

### Operation and Display Elements and Operational Modes



**Caption:**

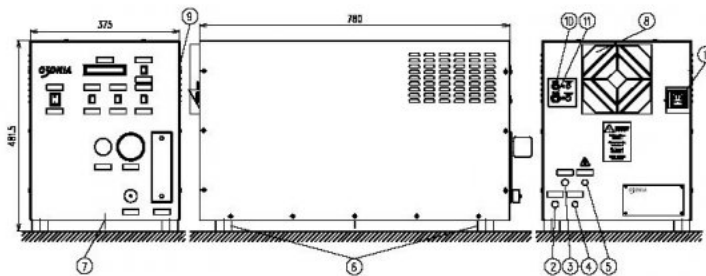
0	Rating plate with CE marking
1	10S1 Mains switch, red: "MAINS ON" also EMERGENCY STOP
2	12A1 Display: DC-Power, Mode, Service hour counter, Failures
3	12S4 Switch, black: "SET POINT LOCAL UP/DOWN"
4	12S3 Switch, black: "SET POINT REMOTE"
5	12S2 Switch, black: "PURGE ON"
6	12S1 Switch, black: "POWER SUPPLY ON"
7	PCV201 Pressure control valve
8	PI201 Gas pressure gauge
9	HCV201 Hand operated control valve
10	FI201 Gas flow meter
11	10F1 Fuse 5x20mm

The set value the DC rating, which effects the ozone production rate, can be adjusted locally or remotely. The gas flow, however, can only be regulated on the apparatus.

Left image shows front panel; right image shows back panel. All controls are on front panel for easy access & adjustment. Many controls allow the user to fine tune the ozone output or feed gas flow rate to exact requirements.

## CFS-7 Connection Drawing

### Dimensional Drawing Showing Connections



**Caption:**

1	Mains socket
2	Cooling media inlet
3	Cooling media outlet
4	Feedgas inlet
5	Ozone gas outlet
6	Rubber feet
7	Condensate drain
8	Air fan inlet (minimum clearance 200mm)
9	Air outlet (minimum clearance 200mm)
10	Plug (X2) for external set value
11	Plug (X7) for external signalisation

The external components can be seen showing the many different features of the CFS-7. This unit is fully adjustable for any large scale ozone application.