

# OZONE GENERATOR BMT 801BT

*Small Laboratory Ozone Source  
Oxygen Fed, Passive Air Cooling  
High Concentration  
Bench Top Model*



## FEATURES

- Integrated Flow Meter & Throttle Valve
- Ozone generation from Oxygen
- Ozone production 0.35 g/h (at 100 g/Nm<sup>3</sup>)
- Highest O<sub>3</sub> concentration exceeding 200 g/Nm<sup>3</sup>
- Power control via potentiometer and switch
- Control range 1:30
- Life expectancy of many years
- Rugged aluminium enclosure

## APPLICATIONS

- Ozone generation in the laboratory

The OZONE GENERATOR BMT 801 BT (Bench Top) is a small air cooled ozone generator for laboratory applications.

The generator provides a flow meter and a throttle valve for immediate operation from an oxygen source. The electric power is set by a potentiometer.

Inlet fitting is for 3 x 5 mm (or 1/8" x 3/16") PTFE tubing, outlet for 2.5 x 4 mm, both accessible on the front panel.

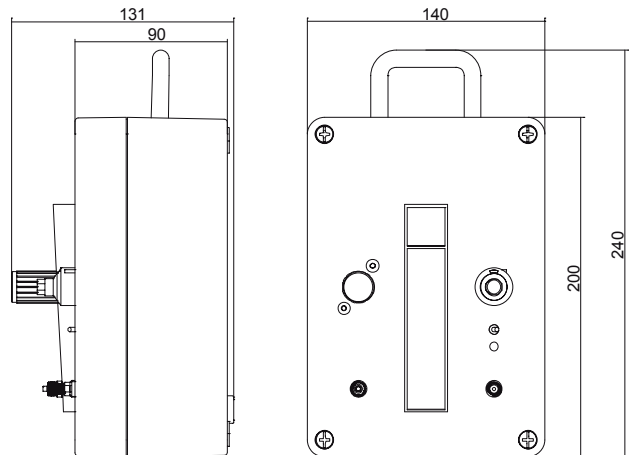
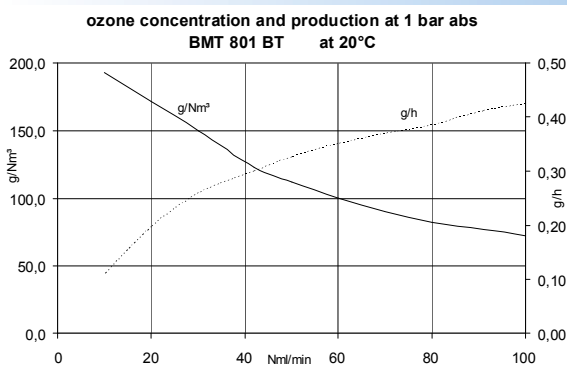
The operating pressure at the outlet must not exceed 1 bar gauge. Between 0.5 and 1.0 bar gauge (1.5 to 2.0 bar abs), 100 g/Nm<sup>3</sup>, the ozone production is 0.35 g/h or more. The maximally obtainable ozone concentration exceeds 200 g/Nm<sup>3</sup>.

The ozone production decreases with increasing ambient air temperature by approx. 0.8% per degree centigrade.

## SPECIFICATIONS

feed gas	oxygen
typical flow rate	10 to 100 ml/min
flow measurement	rotameter 0 to 100ml/min optional: 0 to 50ml/min
ozone production	> 0.35 g/h (at 100g/Nm <sup>3</sup> / 20°C)
max. O <sub>3</sub> concentration	> 200 g/Nm <sup>3</sup>
adjustment range	3 to 100% ozone output at 0 to 100% potentiometer setting
feed gas pressure	max. 2.5 barg
ozone gas pressure at the outlet	max. 1 barg
cooling	passive, ambient air
ambient temperature	0 to +35°C (non-condensing)
amb. temperature effect	output decreasing by approx. 0.8% / K
materials in contact with ozone	Al <sub>2</sub> O <sub>3</sub> ceramic and 35µm anodised aluminium, SS, FEP
gas ports	oxygen inlet: for 3x5 mm FEP (or PTFE) ozone outlet: for 2.5x4 mm FEP (or PTFE)
power	24 VDC, 450 mA, comes with wall mount power supply for 100-240 VAC
dimensions (W x H x D)	140 x 240 x 131 mm
weight	approx. 2.4 kg

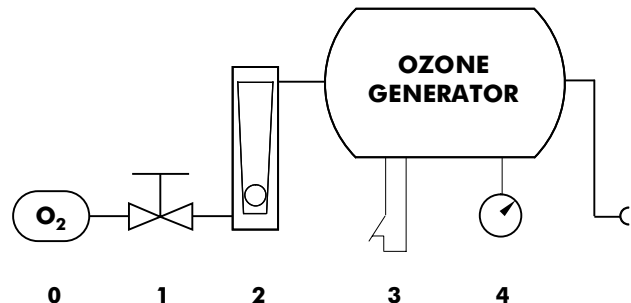
### Typical Performance Curve:



Dimensions of the generator are approx. 140 x 240 x 131 mm.  
The weight is approx. 2.4 kg.

Input voltage is 24 VDC with a maximal power consumption of 11 W. A wall mount adapter for 100 - 240 VAC comes with the generator.

The following piping and instrumentation diagram illustrates the functioning of the ozone source:



- |  |                        |
|--|------------------------|
| <b>0 oxygen source (2.5 barg max.)</b> | <b>3 ozone off</b>     |
| <b>1 throttle valve</b>                | <b>4 power control</b> |
| <b>2 flow meter</b>                    |                        |

A broad spectrum of ozone measurement products and field proven accessories is also available, e.g.:

- OZONE GENERATOR BMT 803N (8 g/h)
- OZONE ANALYZER BMT 964 for ozone measurement
- OZONE-IN-WATER SENSOR BMT 964 AQ
- OZONE MONITOR BMT 932 for TLV monitoring