

## OZONE GENERATOR BMT 803 BT

*Laboratory Ozone Source  
Bench Top Model  
Air Cooled, Oxygen Fed  
High Concentration*



### FEATURES

- More than 8 g/h of ozone @ 100 g/Nm<sup>3</sup>
- Ozone content up to 250 g/Nm<sup>3</sup>
- Complete control environment built in, including: two check valves, thermal mass flow meter, two particle filters, three pressure gauges, power control selectable: manual or remote
- WxHxD only 255x200x385 mm (10"x8"x15"), 10 kg
- Life expectancy of many years

### APPLICATIONS

- Ozone generation in the laboratory
- Pilot plants for ozone processes
- High concentration ozone experiments

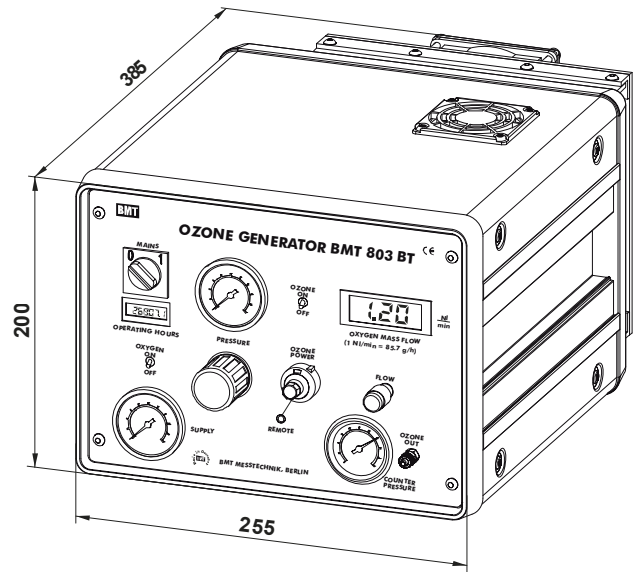
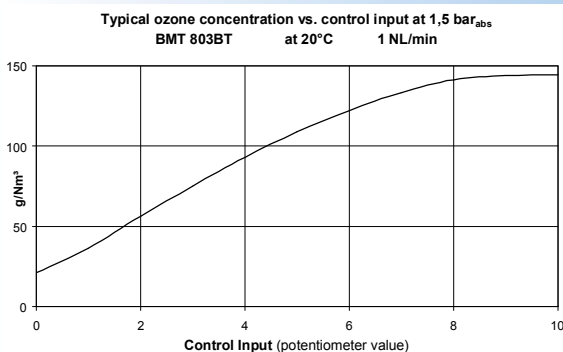
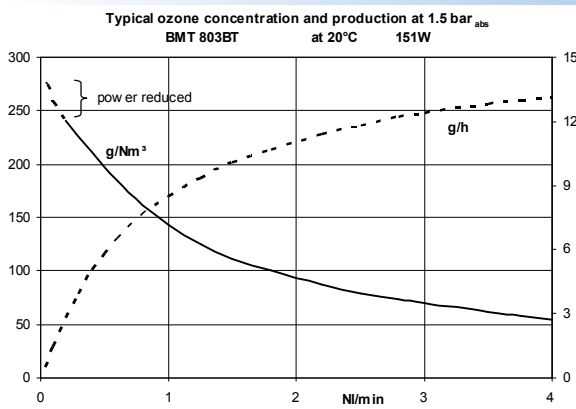
The OZONE GENERATOR BMT 803 BT (Bench Top) is a small, air cooled ozone source for laboratory applications. Operation is from oxygen. The instrument contains every controls and displays necessary, and desirable, for operating the ozone generator, except of an ozone analyser. A special external ozone analyser BMT 964 can be connected to two sample gas fittings at the rear of the BMT 803 BT. This in-line ozone analyser carries the complete ozone gas flow and thus does not consume any ozone gas for its operation.

The oxygen mass flow meter is independent of the pressure and temperature of the oxygen. Displayed is the oxygen flow in NI/min, one NI/min equaling 85.7 g/h.

The ozone-resistant pressure gauge behind the outlet needle valve shows the ozone system counter pressure, the pressure into which the ozone gas is flowing.

## SPECIFICATIONS

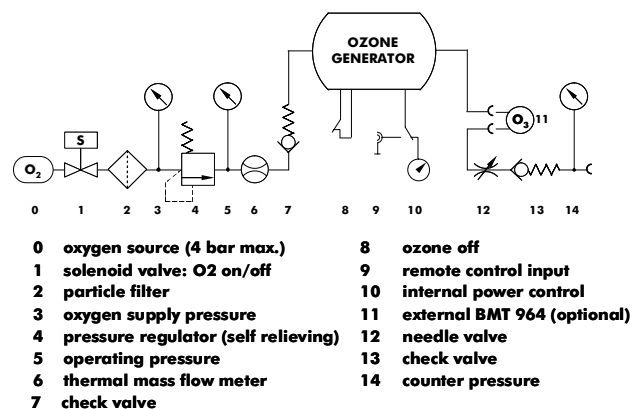
|                                   |                                                                                                                                   |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| feed gas                          | oxygen                                                                                                                            |
| cooling                           | ambient air                                                                                                                       |
| oxygen flow rate                  | 0.1 to 4 NL/min                                                                                                                   |
| flow measurement                  | mass flow meter 0 to 2 NL/min<br>optional: 0 to 5 NL/min                                                                          |
| ozone production                  | > 8 g/h @ 100 g/Nm <sup>3</sup>                                                                                                   |
| max. O <sub>3</sub> concentration | > 250 g/Nm <sup>3</sup>                                                                                                           |
| adjustment range                  | 15 to 100% ozone output<br>at 0 to 100% control input                                                                             |
| max. feed gas pressure            | 4 barg                                                                                                                            |
| max. ozone gas pressure           | 1 barg                                                                                                                            |
| life expectancy of fans           | 40,000 hours                                                                                                                      |
| ambient temperature               | 0 to 30°C                                                                                                                         |
| temperature effect                | output decreasing by approx. 0.8% / K                                                                                             |
| gas ports                         | oxygen inlet: for 4x6mm PTFE tubing<br>ozone outlet: for 3x5mm (1/8"x3/16") PTFE<br>two in-line ports for optional ozone analyser |
| power                             | 230 or 115 VAC, 170 W, 50/60 Hz                                                                                                   |
| dimensions (WxD) (mm)             | 255 x 200 x 385 (10" x 8" x 15")                                                                                                  |
| weight                            | 10 kg                                                                                                                             |



dimensions

Dimensions of the OZONE GENERATOR BMT 803 BT are 255 x 200 x 385 mm (10" x 8" x 15"). The weight is 10 kg. Input voltage is 230 VAC, or 115 VAC. The oxygen inlet fitting (on the rear) is for 4 x 6 mm (or 1/4" x 5/32") PTFE tubing. The ozone gas outlet fitting (on the front panel) is for 3 x 5 mm (or 1/8" x 3/16") PTFE tubing. Power consumption is 170 W max.

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



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