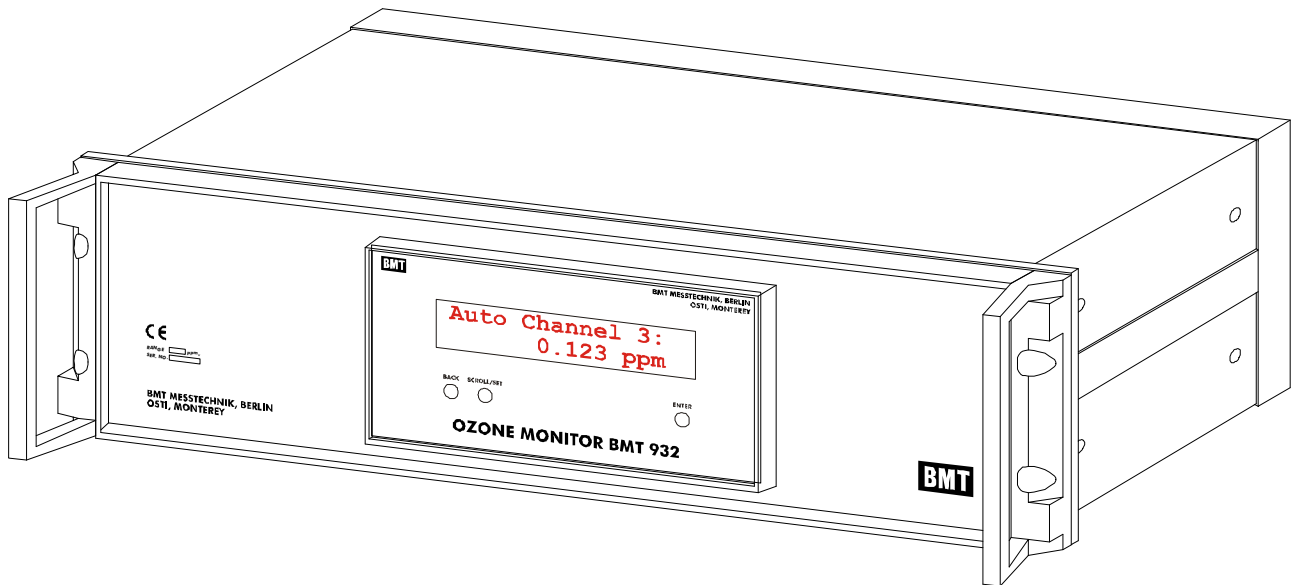


OZONE MONITOR BMT 932

*Low Concentration
Ambient Ozone Monitor*



FEATURES

- Dual beam UV photometer
- Warranty 3 years
- Long-life mercury lamp (5 years warranty)
- High accuracy, error less than 1%
- Resolution 0.001 ppm_v
- Pressure and temperature compensated
- Ranges from 1 to 250 ppm_v
- 19" rack mount, or cabinet versions
- Traceable to international standard (NIST)
- 1, 3, 6 channel versions
- Two individual threshold alarm levels for each channel, three configurable EMO outputs
- Cycle time 20 s per channel
- Two scrubbers (utility + reserve)
- Ozone generator for automatically testing the utility scrubber every 24 hours
- Reserve scrubber automatically replaces the utility scrubber when it is faulty
- Sample gas flow 1 l/min, auto controlled via an electronic flow meter

APPLICATIONS

- Monitoring of ozone in ambient air
- TLV monitoring (Threshold Limit Value)
- Ambient monitoring in ozone plants
- Vent-Gas monitoring

The OZONE MONITOR BMT 932 is a state-of-the-art UV photometer for measuring and monitoring ozone content of the ambient air.

The instrument may be ordered with 1, 3, or 6 sample channels. Switching from channel to channel is automatic, or manual via push button.

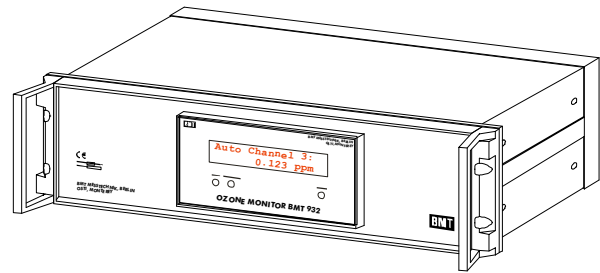
The scrubber is the most important element of any photometric ozone monitor. The OZONE MONITOR BMT 932 has two precisely ozone selective scrubbers: one Utility Scrubber, and one Reserve Scrubber. Additionally it has a built-in Ozone Generator which periodically tests the ability of the Utility Scrubber to remove all of the ozone from the sample. When the Utility Scrubber fails this test the Reserve Scrubber takes over. Now the Scrubber Warning is activated and the Scrubber Test is verifying the Reserve Scrubber.

The sample gas flow rate is maintained constant by a pump which is automatically controlled by a built-in electronic flow meter.

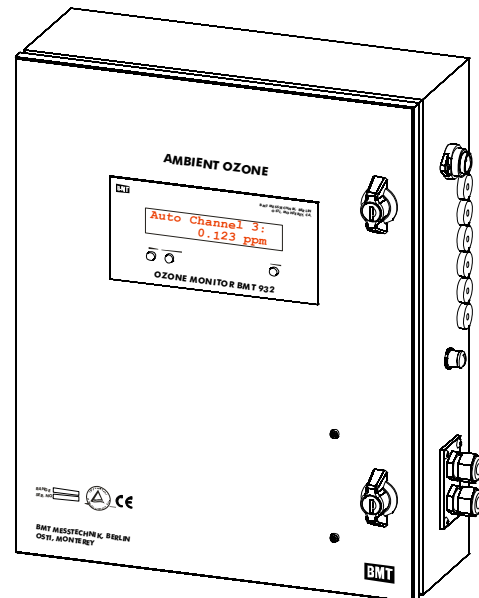
The BMT 932 can be configured via the front panel alphanumeric display or on a Windows PC using the provided software. A complete error and event log, with timestamps from the internal clock, can be printed out for trouble shooting.

SPECIFICATIONS

| | |
|---------------------------------------|---|
| Measurement principle | Dual-beam UV photometer (254 nm) |
| UV lamp | Low pressure mercury lamp, long life design, burnt-in for 300 h |
| Display | Alphanumeric LCD 2x20 char. |
| Concentration ranges | 1 ppm _v (1.000 ppm _v), 2.000, 5.000, 10.000, 20.00, 100.0 and 250.0 ppm _v |
| Noise | ±0.001 ppm _v |
| Min. detectable Conc. | 0.002 ppm _v |
| Accuracy | max. error, traceable to NIST, is the sum: 0.8% of measurement + 0.2% of scale |
| Response time | 20 s (0 - 95 %) |
| Temperature and pressure Compensation | Standard |
| Flow rate | 1 l/min, automatically controlled by an electronic flow meter |
| Sample ports | 1, 3 or 6 (please specify), automatic and manual selection of sample port |
| Scrubber life | > 8 years (safety monitor operation) |
| Threshold alarms | Two individual alarm thresholds for each channel, 3 EMO outputs controlled by any combination of alarms |
| Error relay | Indicating any instrument failure, including Lamp low (easy lamp replacement) Low flow Scrubber failure (tested for every 24 h, reserve scrubber takes over automatically) Warmup |
| Gas ports | Compression type for ¼" PFA/FEP/PTFE tubing (Cabinet: ¼" One-Touch Fitting) Safety catalyst for off gas included |
| Signal outputs | Concentration 4-20 mA (isolated, active) Concentration 0-1 V, 0-10 V (isolated) Sample port identification by binary output Option: 932-RELAY with contacts identifying each port plus its low/high alarm, access by 50-pole D-Sub connector |
| Control output | Lamp low (relay contact, 30 V, 1 A) |
| Digital interface | RS-232, isolated, showing concentration and error messages. Link Mode commands allow full control from Windows PC or PLC. |
| Accessories kit (included) | One filter holder & one mounting fitting for filter holder per sample port, 200 filter inserts |
| Spare parts (available) | UV lamp, scrubber, filter holder |
| Warmup time | 7 min. max., 4 min. typical |
| Power | Universal line voltage: 100 - 240 VAC, 35 VA, 50/60 Hz optional: 18-36 VDC, 25W (19" rack mount) |
| Ambient temperature | 0 - 45°C (non-condensing) |
| Cabinet version | IP65, NEMA 4X |
| Dimensions (HxD) | 132x300 mm (19" rack mount) |
| (WxHxD) | 357x440x133 mm (wall mount BMT 932 C) |
| Weight | 9 kg (19" rack mount) 7 kg (wall mount BMT 932 C) |
| Compliance | CE-marked (EMC & safety), cTUVus NRTL-listed, RoHS |



19" rack mount version



Cabinet version
(IP65, NEMA 4X)

The OZONE MONITOR BMT 932 comes in a 19" rack mount enclosure 132 x 300 mm (H x D), or in a wall mount aluminum cabinet 357 x 440 x 133 (W x H x D). This cabinet is named BMT 932 C. The cabinet can be wall mounted using the four brackets provided at the rear (four mounting holes 6 mm ID, spaced 307 x 397 mm, W x H).

Dirt, organic compounds, and other contaminants in the ambient air can react with the ozone in the sample gas tubes. It is important that the sample gas tubes and the ozone monitor are kept clean inside. Therefore filters have to be provided at the inlet ports of the sample tubes. Filter holders and filter inserts are shipped with the instrument.

The filter inserts are of fine pure glass fibre felt to remove aerosol particles without affecting the ozone. This latter property may decrease with increasing dirt being retained by the filter. Therefore the filters should be replaced on a regular basis. Each user must determine the replacement interval optimum for the specific situation.

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