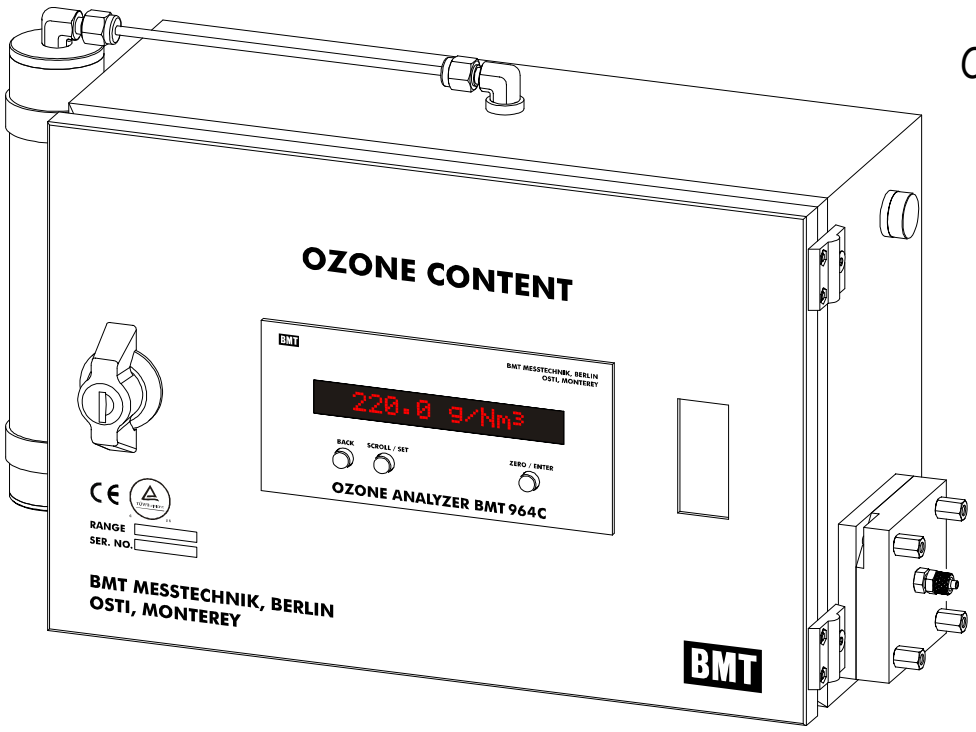
OZONE ANALYZER **BMT 964 C**

Cabinet Version of
High Concentration
Ozone Gas Analyzer



FEATURES

- Dual beam UV photometer
- Long-life mercury lamp
- Warranty 3 years, 5 years on the UV lamp
- High accuracy, error less than 0.5%
- Pressure and temperature compensated
- Ranges from 10 to 600 g/Nm^3
- Built-in sample gas filter
- Built-in purge unit for automatic zeroing
- Failure warnings include: lamp low, cuvette dirty, overrange, summary error
- Key functions programmable via the front panel, or a Windows PC
- Display in g/Nm^3, %wt/wt, or ppm$_v$
- High and low limit alarms
- Timing sequence for automatic zeroing
- Pressure readout in bar, psi, Torr or MPa
- 4-20mA and 0-10V isolated outputs
- RS-232 interface (bidirectional, isolated)

APPLICATIONS

- Ozone measurement in hostile environment
- Monitoring of ozone generator output
- Monitoring of residual ozone after a process
- Potable water treatment
- Waste water treatment
- Industrial ozone processes

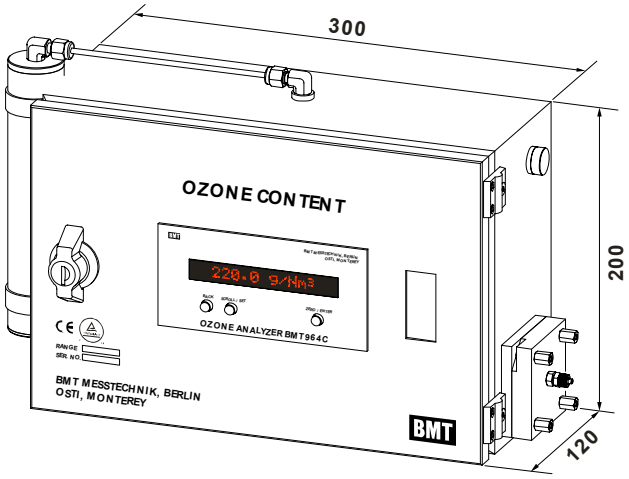
The OZONE ANALYZER BMT 964 C is the wall-mount version of the standard BMT 964 (see data sheet of standard BMT 964) for application in a hostile environment. It is housed in a splash-proof IP 65 (NEMA 4X) aluminum cabinet, and is equipped with everything needed for fully automatic stand-alone operation.

Fully automatic means: a purge unit is provided which consists of a 3-way solenoid valve, and an air pump with particle filter, both being controlled by the automatic purge timer of the analyser. The system automatically purges the cuvette with clean, filtered air, and then zeroes the analyser. The zeroing interval may be chosen between 1 and 99 hours.

Stand-alone means: a sample gas filter is provided (external to the cabinet), a throttle valve, a flow meter (behind the front door), and a Catalyzing Cartridge (external). An external Dirt Trap to remove namely fluidic dirt before it can reach the analyser, may be provided on request.

Superior stability of the photometer is achieved by use of a true dual beam optical system with an extremely long-life mercury lamp. MTBF of the instrument, including the lamp, is in excess of 65,000 hours. Excluding the lamp it is 120,000 hours.

	SPECIFICATIONS
measurement principle	dual-beam UV photometer (254 nm), no moving parts
MTBF	instrument incl. UV lamp 65,000 h, excl. UV lamp 120,000 h
UV lamp	low pressure mercury lamp, long life design, burnt-in for 300 h
display	16 character alphanumeric backlit LCD
concentration ranges	50, 100, 200, 300, 400, 500, 600 g/Nm³, selectable units g/Nm³, %wt/wt and ppm_v
optional ranges	10, 20 g/Nm³,
accuracy	after zeroing the max. error is the sum: 0.4% of measurement + 0.1% of scale
repeatability error	0.2 % of measurement
response time	0.03 s (analog output), 0.3 s (display)
zero drift	typ. 0.2% of range per day, after warm-up, non-cumulative
max. inlet pressure	2.5 bar g
max. outlet pressure	1.15 bar abs
ambient temperature	0 - 50°C (non-condensing)
materials in contact with ozone	quartz (cuvette windows), Al_2O_3 (cuvette), FFPM (window seals), PTFE (tubing), stainless steel (fittings, cuvette spacer)
inlet gas port	for 3x5 mm (1/8" x 3/16") tubing, opt. 4x6 mm, or 1/8" or 1/4" or 6mm Swagelok Built-in sample gas filter is standard
outlet gas port	for 4x6 mm tubing
recommended flow rate	0.1 to 1 l/min typical
pressure drop	approx. 5 mbar at 0.5 l/min (throttle valve fully open)
temperature compens.	is standard
pressure compensation	with built-in cuvette pressure transducer units selectable: bar, psi, Torr, MPa
signal outputs	concentration 4 - 20 mA (isolated, active) concentration 0 - 10 V (isolated)
concentration alarms	High Alarm, Low Alarm, latching, not latching
control input	set to zero (24 V, 18 mA, isolated)
control outputs	relay contacts, 28 V, 0.5 A, isolated: Lamp Low Cuvette Dirty High Alarm Low Alarm
error handling	Error Relay: 30 V, 1 A, summarizing instrument failures Warnings and errors: Lamp Low Warning, Lamp Low Error, Lamp Off Error, Cuvette Dirty Warning, Cuvette Dirty Error, Overrange, Overpressure
serial interface	RS-232, bidirectional, isolated, 2400 - 38400 Baud
automatic zeroing	with internal purge pump and solenoid valve only with pressure range 1.15 bara
software	BMT 964 Link, instrument configuration, readout of Event & Error Logs (Windows)
power	wide range input: 100 - 240 VAC, 35 VA
dimensions (W x H x D)	300 x 200 x 120 mm (W x H x D)
weight	3.9 kg
compliance	CE-marked (EMC & safety), cTUVus NRTL-listed USCG 46 CFR 612.060-30



dimensional outline

The OZONE ANALYZER BMT 964 C is housed in a powder coated aluminum cabinet. The space needed (door open, sample gas tubing and cables connected) is approx. 480 x 240 x 420 mm (W x H x D). The cabinet can be wall-mounted using the four brackets provided at the rear (four mounting holes 6 mm ID, spaced 240 x 225 mm, W x H).

For sample gas connection (inlet gas port) 3x5 mm (or 1/8" x 3/16") PTFE tubing should be used. The BMT 964 C is also available with 1/8" or 1/4" Swagelok fittings.

Additional BMT Products (for details, refer to the appropriate data sheets):

- BMT 964 BT (Bench Top) for stand-alone applications on the bench, or in the field
- BMT 964 AQ and BMT 964 AQ-LC for ozone measurement in DI (de-ionized) water
- BMT 964 AQ/HF for ozone measurement in DI water with hydrofluoric acid
- Sample Gas Dehumidifier for drying of wet ozone sample gas
- BMT 932 Ozone Monitor for TLV monitoring in ambient air (1, 3 & 6 channels)

A broad spectrum of field-proven accessories - from simple fittings and tubing up to the thermoelectric sample gas dryer - helps the user with the application and installation of the OZONE ANALYZER BMT 964 C. Please ask for our assistance!

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