

Ozone Instruments

List of Products

Valid from 01 July 2022

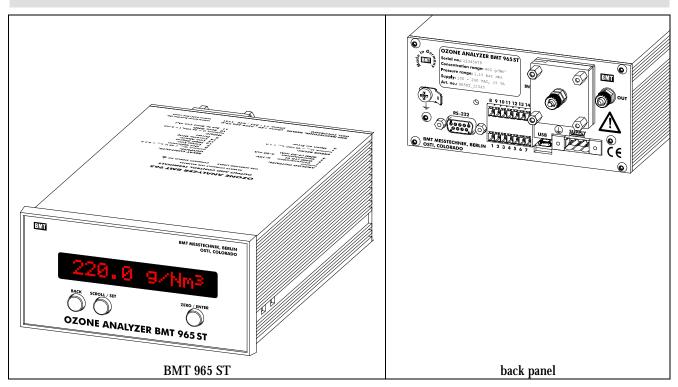
Lowest Cost of Ownership Ozone Instruments:

- Warranty 3 years
- UV lamp warranty 5 years
- Preventive Maintenance not required
- Recalibration not required under normal operating conditions
- Certificate of Calibration included at no charge
- Early Warning for soiled cuvette and weakening lamp
- Error and Event Log integrated, with real time clock
- Windows software for diagnostics and logging included
- NRTL safety listing by TUV for North America (BMT 965C/OG, BMT 932)

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Ozone Measurement

High Concentration OZONE ANALYZERs



order number	description
BMT 965 ST	standard ozone analyser, with temperature and pressure compensation, sample gas filter,
	power input 100-240 VAC, 50/60 Hz (12-36 VDC on request), purge timer, isolated
	analog outputs 0-10 VDC and 4-20 mA, isolated serial interface RS-232, USB (On-The-
	Go, Device/Host mode, Full Speed), instrument control via the interactive display or
	a Windows PC with our software "BMT 965 Link" (on SD card inside of analyser)

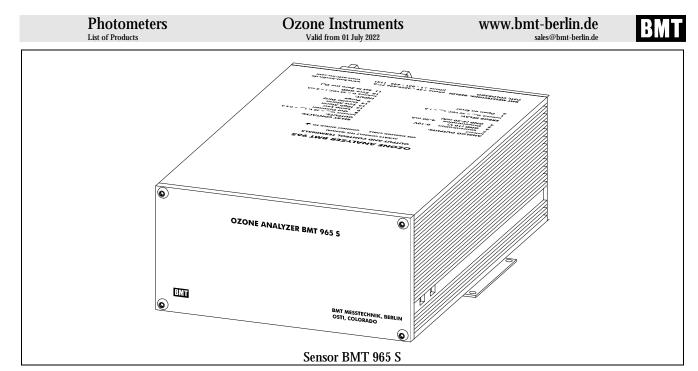
please order only one **concentration** range:

	standard	50, 100, 200,	, 300, 400, 500 or 600 g/Nm ³
LR	low		20 or 10 g/Nm ³
LLR	lowest	instrument is double in height!	1, 2 or 5 g/Nm ³

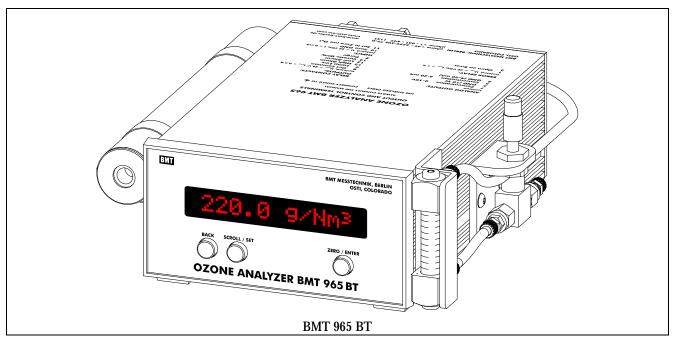
option

internal PU	built-in purge unit (solenoid valve & air pump)
	for fully automatic purging and zeroing on push button command
	not available for HP (high pressure) versions

For a complete overview of options and combinations please refer to our **Order Sheet!**

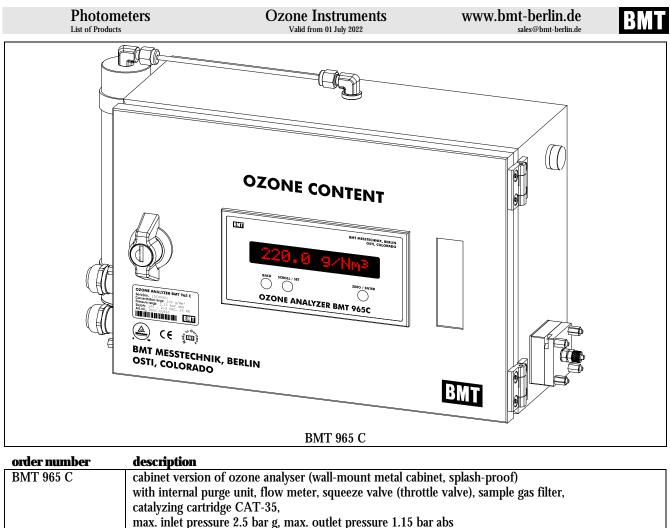


order number	description
BMT 965 S	sensor = ozone analyser BMT 965 without a display



order number	description	
BMT 965 BT	bench top version of BMT 965 ST, portable, throttle valve, flow meter, sample gas filter,	
	catalysing cartridge, for 24 VDC, wall mount power supply for 100-240 VAC included,	
	max. inlet pressure 2.5 bar g, max. outlet pressure 1.15 bar abs,	
	other specs and concentration ranges see BMT 965 ST page 2	
options		
internal PU	built-in purge unit (solenoid valve & air pump)	
	for fully automatic purging and zeroing on push button command	
bag	soft carrying bag (camera bag)	

For a complete overview of options and combinations please refer to our **Order Sheet!**



	max. inlet pressure 2.5 bar g, max. outlet pressure 1.15 bar abs	
please order only one concentration range:		
	standard	50, 100, 200, 300, 400, 500 or 600 g/Nm ³
LR	low	20 or 10 g/Nm ³

•	
interface	options

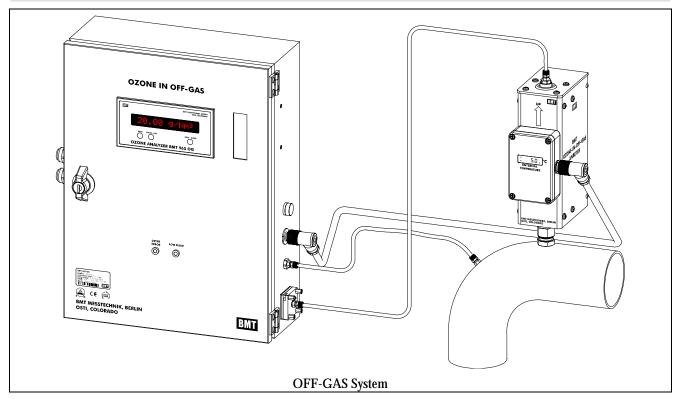
MODBUS RTU	
MODBUS/TCP	
RS-232	bidirectional, isolated, 2400-38400 Baud

spare parts

CAT-35	Catalysing Cartridge for BMT 965 C
REFILL-35	Carulite 200 material to refill CAT-35
FILTER 25G	box with 5 filter inserts of porous PTFE ("GOLD" filters), 25mm
CONN-232	connector for serial interface, 4-pole, solder terminals
Adapter 965C-964C	965C-964C Signal & Mains Adapter
Test Connector	for connecting a test analyser in parallel (see page 14)

For a complete overview of options and combinations please refer to our **Order Sheet!**

OFF-GAS System



order number	description
BMT 965 OG	basic cabinet - including:
	OZONE ANALYZER BMT 965 (ranges 50, 100 g/Nm³, pressure range 1.15 bar abs),
	purge unit, sample gas filter, sample gas pump SGP5-DC,
	flowmeter FM-82-10 (0.1-1.0 l/min)

please order only one concentration range:

	standard	50 or 100 g/Nm ³
LR	low	20 or 10 g/Nm ³
LLR	lowest	5 g/Nm³

please order only one **pressure** range:

	standard	1.15 bar abs
HP	high	1.5 or 2.0 bar abs

interface options

MODBUS RTU	
MODBUS/TCP	

options

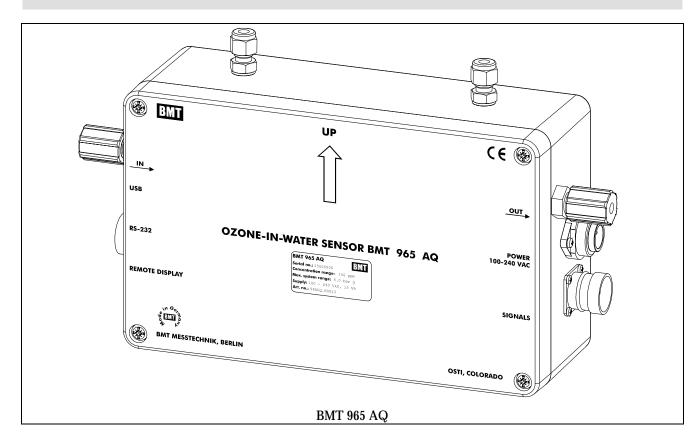
opuons	
DH6	sample gas dehumidifier DH6 (to be mounted at the point of sampling)
	cable length 3 m (others on request, max. 10 m)
SOBV	shut-off ball valve, mounting option for DH6
LFW-2	low flow warning (thermal flow sensor)
CAT-RS	catalyzing cartridge (stainless steel, re-fillable)
DT 100	dirt trap DT 100 (to be mounted near the point of sampling)
Adapter	965OG-964OG Signal & Mains Adapter
965ÔG-964OG	

spare parts

Spare paras	
FILTER 25G	box with 5 filter inserts of porous PTFE ("GOLD" filters), 25mm
SGP5-SPARE	spare parts for SGP5 (membranes, valves, O-rings)

An OFF-GAS system usually has to be tailored according to individual needs - Do not hesitate to ask!

OZONE-IN-WATER SENSORs



order num	ber d	lescription
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014401 11441111111111111111111111111111	4650111111111111111111111111111111111111
BMT 965 AQ	SENSOR BMT 965 AQ, USB (On-The-Go, Device/Host mode, Full Speed),
	range: 10, 50, 100 or 150 ppm _w (g/m³), please specify
BMT 965 AQ/HF	SENSOR BMT 965 AQ (HF version) for up to 20% hydrofluoric acid (HF)
	range: 10, 20, 50, 100 or 150 ppm _w (g/m³), please specify

interface options

MODBUS/TCP	
RS-232	bidirectional, isolated, 2400-38400 Baud

options

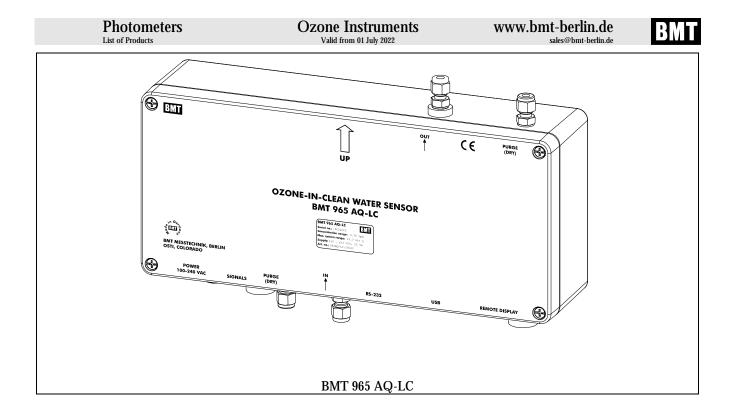
\RD	optional connector for Remote Display BMT 965 RD (see page 7)
\RD cable	special cable, length > 10 m up to 30 m (up to 100 m please contact factory)

Connectors

CONN-MAINS	connector for mains input, 4-pole, screw terminals
CONN-SIG 16	connector for signals, 16-pole, solder terminals
CONN-232	connector for serial interface, 4-pole, solder terminals
CONN-TOOL	mounting Tool for Signal Connector

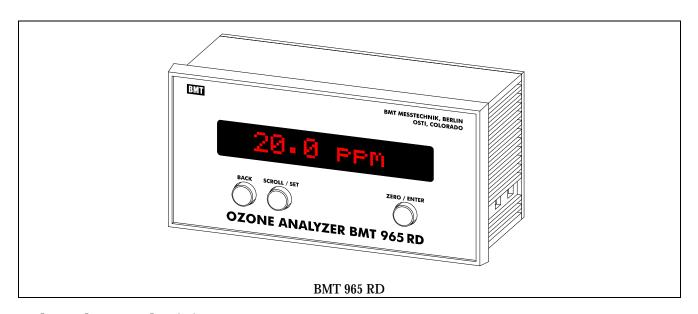
Cables

AQ Signal Cable	16-pole signal cable, only one connector, standard length 2 m (please specify length)
AQ Power Cable	power cable, only one connector, standard length 2 m (please specify length)
	power cable with connectors on both sides, NEMA 5-15P (2m) or Schuko (1.5 m), please specify
	NEWA 5-13F (2III) Of Schuko (1.5 III), please specify



order number	description	
BMT 965 AQ-LC	SENSOR BMT 965 AQ-LC, USB (On-The-Go, Device/Host mode, Full Speed),	
	range: 0.5, 0.75, 2, 5, 10, or 15 ppm _w (g/m^3), please specify	
	fluid ports PVDF for 4x6 mm tubing, or 1/4" SS Swagelok, please specify	
interface options		
MODBUS/TCP		
RS-232	bidirectional, isolated, 2400-38400 Baud	
options		
/RD	optional connector for Remote Display BMT 965 RD	

For Cables and Connectors see BMT 965 AQ on page 6.



order number	description
BMT 965 RD	Remote Display with 2.5 m cable (or 5 or 10 m, please specify) needs instrument with option /RD
•	

Photometers Ozone Instruments www.bmt-berlin.de Valid from 01 July 2022 List of Products

Order Sheet

			Orde	i Sheet				
 please check options standard version (recommended!) included (no choice) option not available 		BMT 965 ST	BMT 965 BT	BMT 965 C	BMT 965 OG	BMT 965 AQ	BMT 965 AQ/HF	BMT 965 AQ/LC
Basic model ->								
Concentration rouge 1)								
Concentration range ¹⁾ 0.5 g/Nm³ (or 0.04 %wt/wt)		_	_	_		_	_	0.5 ppm _w
0.75 g/Nm³ (or 0.06 %wt/wt)	0		_	_	_	_	_	0.5 ppm _w
1 g/Nm³ (or 0.08 %wt/wt)		2)	2)	_	_		_	0.75 ppinw
2 g/Nm³ (or 0.15 %wt/wt)		2)	2)	_	_	_	_	2 ppm _w
5 g/Nm³ (or 0.35 %wt/wt)		2)	2)	_		_	_	5 ppm _w
10 g/Nm³ (or 0.7 %wt/wt)]	,	,			10 ppm _w	10 ppm _w	10 ppm _w
15 g/Nm³ (or 1.1 %wt/wt)	J	_	_	_	_	— 10 ppinw	TO PPITIW	15 ppm _w
20 g/Nm³ (or 1.5 %wt/wt)						_	20 ppm _w	— 15 ppinw
50 g/Nm³ (or 3.5 %wt/wt)	_					50 ppmw	50 ppm _w	_
100 g/Nm³ (or 7 %wt/wt)						100 ppm _w	100 ppm _w	_
150 g/Nm ³	_	_	_	_	_	150 ppm _w	150 ppm _w	_
200 g/Nm³ (or 14 %wt/wt)					_	- 130 ppinw	- 130 ppinw	_
300 g/Nm³ (or 20 %wt/wt)	_				_	_	_	_
400 g/Nm³ (or 26 %wt/wt)					_	_	_	_
500 g/Nm³ (or 31 %wt/wt)	_				_	_	_	_
600 g/Nm³ (or 37 %wt/wt)					_	_	_	_
_								
Pressure range								
standard, 1.15 bar abs		•		-	•	_	_	_
high, 1.50 bar abs			_	_		_	_	_
high, 2.00 bar abs			_	_		_	_	_
high, 2.50 bar abs			_	_	_	_	_	_
high, 3.00 bar abs			_	_	_	_	_	_
high, 3.50 bar abs			_	_	_	_	_	_
high, 4.00 bar abs			_	_	_	_	_	_
Fittings								
for 3x5 mm FEP		•	•	•	•	_	_	_
for 4x6 mm FEP				_		_	_	_
1/8" Swagelok 3)						_	_	_
1/4" Swagelok 3)		_	_			_	_	
6 mm Swagelok 3)		_	_			_	_	_
PVDF, for 4x6 mm FEP		_	_	_	_	_	_	•
Other built-in options	_				_			
option Internal Purge Unit 4)		1.15 bara	1.15 bara			_	_	_
Sensor Version (no display)			_	_	_			
/RD		_	_	_	_			
Communication Interface								
Options ⁵⁾								
RS-232		-	-					
Modbus RTU		_	_			_	_	_
			1	1	1	1	1	1

Selection of a model including its specs and options is mandatory! Minimum specs are: measurement range, pressure range, type of connecting fittings.

- Note 1): The ranges in %wt/wt are not equal to the ranges in g/Nm³ - the unit may be switched by the user at any time.
- Note 2): The instrument is double in height (front 144 x 144 mm).
- Note 3)

Modbus/TCP

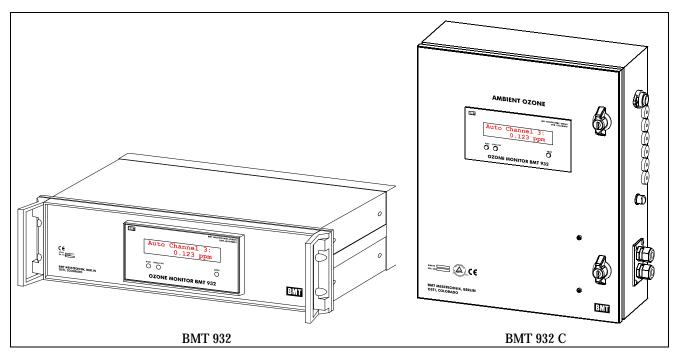
- LET-LOK fitting, Swagelok interchangeable.

 An internal purge unit is only available for a pressure range of 1.15 bar abs, in general. **Note 4)**:
- Only one out of three communication interface options is allowed. Note 5)

To find out more about the above models and their options, please refer to our data sheets (www.bmt-berlin.de).



Ambient OZONE MONITOR



order number	description		
BMT 932-1	19" monitor,	1-channel,	please specify range: 1, 2, 5, 10, 20, 50, 100, or 250 ppm _v
BMT 932-3	19" monitor,	3-channel	
BMT 932-6	19" monitor,	6-channel	
BMT 932 C-1	cabinet monitor,	1-channel	
BMT 932 C-3	cabinet monitor,	3-channel	
BMT 932 C-6	cabinet monitor,	6-channel	
	accessories includ	ed: •	one filter holder and mounting per channel
		•	200 filter inserts

options

- P	
932-24VDC	main power input 18 – 36 VDC (instead of 100 – 240 VAC)
932-RELAY	relay box, 50 pin D-Sub connector, fully compatible with BMT 930 relay box
932-MPA	second display for ozone partial pressure (mPa)
	according to DIN ISO 1431-1 and ASNI D 1149-07

spare parts

շրաշ բա տ			
932-SPARE	spare parts kit (UV lamp, scrubber, additional set of filter holders)		
932-LAMP	UV lamp (please specify serial number)		
932-SCRUBBER	scrubber for 1 ppm _v		
932-PERMSCRUB	permanent scrubber (black)		
932-HOLDER	filter holder		
932-INSERTS	box with filter inserts (200 pcs.)		
932-MALEFIT	mounting fitting (male) for filter holder, mounting hole 13mm		
932-ADAPT	set of fittings (male & female) for both sides of filter holder		
932-FIT	fitting for 1/4" or 4x6 mm tubing, mounting thread G 1/8"		
932-WATERTRAP	for evaluation of condensation risk		
TU 1/4x5/32	tubing, 1/4 x 5/32", transparent FEP	per m	

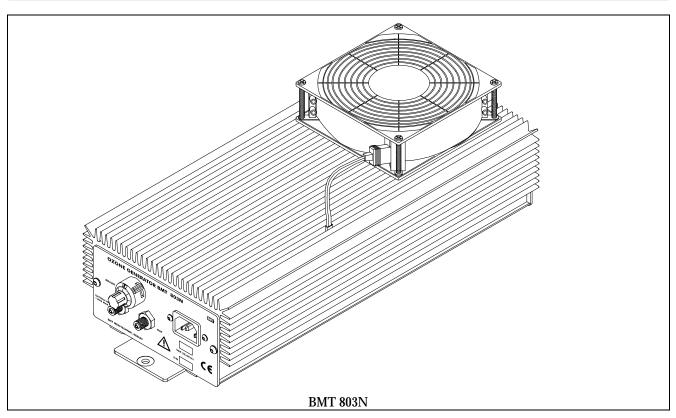
AOS 2	Ambient Ozone Simulator, for comparison of two ozone monitors	see p. 13
DH6-LC	sample gas dryer, peltier-electric, 24 VDC, incl. power supply 100-240 VAC/40 W	
VENT ADAPTER	Adapter 1/4" Swagelok to 932-MALEFIT, 19cm long with FEP lining, Filter Holder	
TEST SCRUBBER	provides "zero air" for ambient monitors of measurement range 1 ppm _v	

If you have any further questions, do not hesitate to contact us – we will find a solution to your problem.



Ozone Sources

Ozone Generators



order number	description
Oluci numbci	ucociibuoii

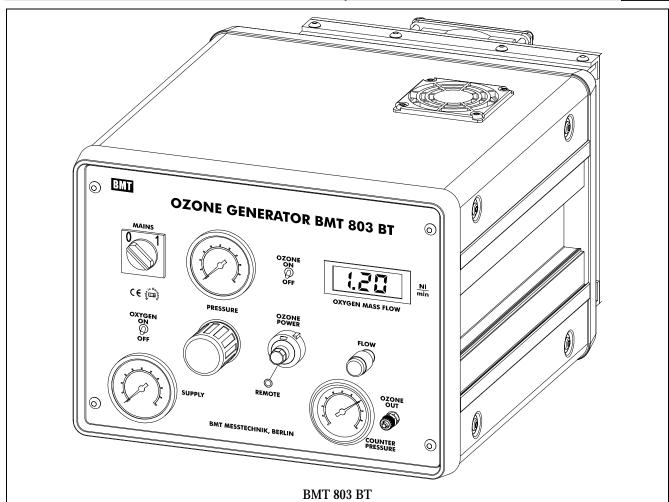
oraci nambci	description
BMT 802N	ozone generator, about 4 g/h @ 100 g/Nm³ (length 311 mm),
	fittings for 3x5 mm or 4x6 mm tubing, please specify
BMT 803N	ozone generator, about 8 g/h @ 100 g/Nm³ (length 391 mm),
	fittings for 3x5 mm or 4x6 mm tubing, please specify
BMT 803N HP	ozone generator, about 8 g/h @ 100 g/Nm³, high pressure version 2 to 3 bar abs,
	fittings for 3x5 mm or 4x6 mm tubing, please specify

options

opuons	
RC	remote control with 0-5 VDC or remote potentiometer (instead of built-in
	potentiometer)
RCS	remote control with 0-5 VDC or remote potentiometer (instead of built-in
	potentiometer), plus ON/OFF control (24 VDC)
SWAGE	generator with 1/4" or 1/8" LET-LOK (Swagelok interchangeable), inlet & outlet
VCR	generator with 1/4" VCR (inlet & outlet, male body)
CHECK	check valve 1/8" or 3x5 mm or 4x6 mm at the outlet (mounted externally)

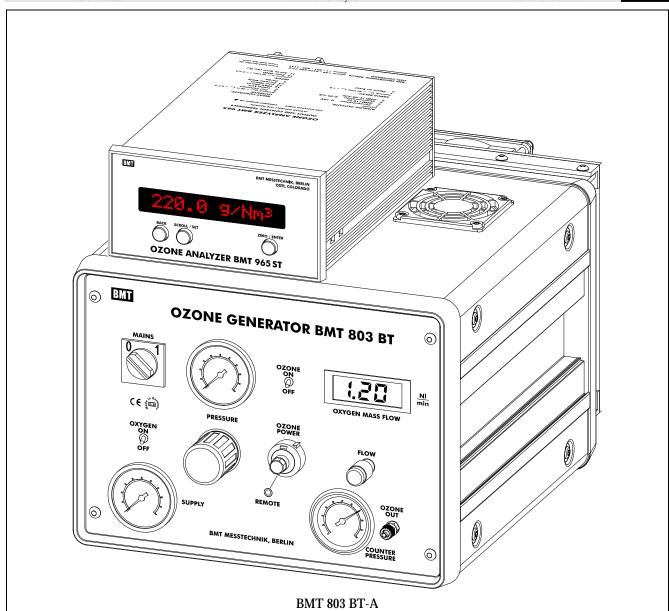
For the operation of the above generators, please see the accessories on the following pages!





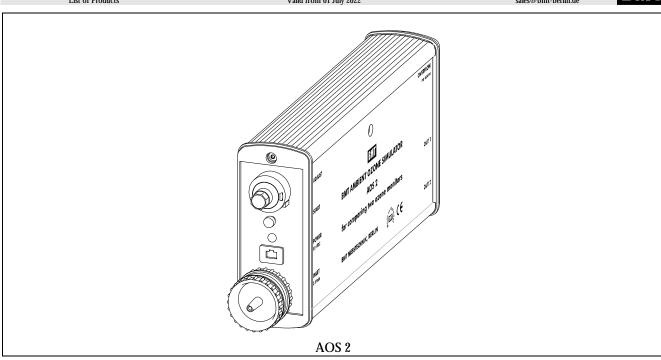
order number	description
BMT 803 BT	Laboratory ozone source, bench top model, more than 8 g/h @ 100 g/Nm³, with valves,
	gauges and controls for immediate operation, oxygen mass flow meter 0-2 Nl/min or
	0-5 NI/min (please specify), flow rate 0.1 to 4 l/min,
	ozone resistant pressure gauge for outlet pressure, inlet fitting for 4x6 mm FEP and
	outlet fitting for 3x5 mm FEP,
	mains voltage 230 or 115 VAC, 155 W, 255 x 200 x 385 mm, 10kg

options	
SWAGE	generator with 1/8" LET-LOK (Swagelok interchangeable), outlet only



order number	description
BMT 803 BT-A	BMT 803 BT combined with special ozone concentration analyser, range 300 g/Nm³,
	pressure range 2.0 bar abs, inlet fitting for 4x6 mm FEP and outlet fitting for 3x5 mm
	FEP

0	ptions	
S	SWAGE	generator with 1/8" LET-LOK (Swagelok interchangeable), outlet only



order number	description
AOS 2	Ambient Ozone Simulator with flow independent concentration, up to 3 l/min,
	for comparison of 2 ozone monitors, 24 VDC/450 mA (wall mount power supply incl.)



Ozone Accessories

Our standard fitting size is for 3x5 mm flexible tubing (FEP, PTFE, etc.). Other fitting types and sizes on request.

Fittings, Reducers, Tubing

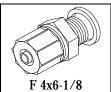




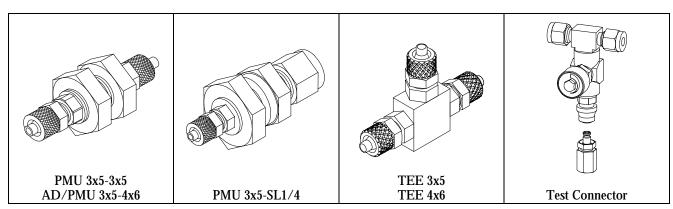






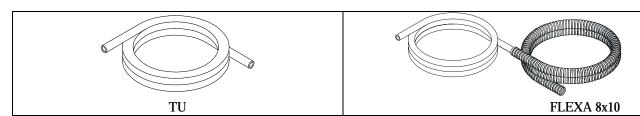


rder number	description
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order number description

PMU 3x5-3x5	panel mount union for FEP tubing, hole 10 mm, max. wall thickness 5 mm, SS
AD/PMU 3x5-4x6	same as above, panel mount reducer
PMU 3x5-SL1/4	panel mount reducer union, 1/4" LET-LOK (Swagelok interchangeable) to 3x5 mm
	FEP tubing, hole 10 mm, max. wall thickness 5 mm, SS
TEE 3x5	Tee connection with fittings for 3x5 mm FEP tubing, AL, SS
TEE 4x6	Tee connection with fittings for 4x6 mm FEP tubing, AL, SS
Test Connector	for connecting a test analyser in parallel

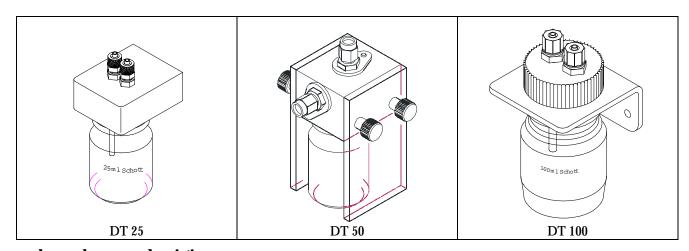


order number	description
viuei numbei	acsciivadii

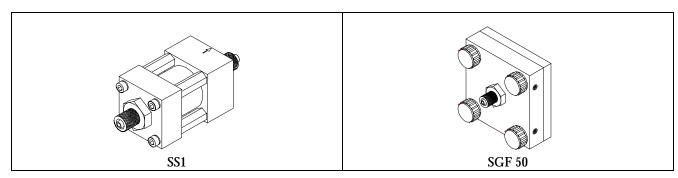
TU 2.5x4	FEP tubing, 2.5x4 mm, transparent	per m
TU 3x5	FEP tubing, 3x5 mm (1/8" x 3/16"), transparent	per m
TU 4x6	FEP tubing, 4x6 mm, transparent	per m
TU 1/4x5/32	FEP tubing, 1/4 x 5/32", transparent	per m
FLEXA 8x10	flexible SS tubing ID 7.5 mm, for protecting FEP tubing	per m



Sample Gas Filters, Ozone Destructs

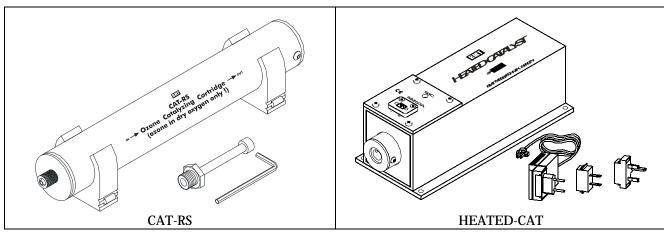


order number	description
DT 25	DIRT TRAP 25 ml, fittings 3x5 mm, glass / PTFE
DT 50	DIRT TRAP 50 ml, fittings 6 mm or 1/4" LET-LOK (Swagelok interchangeable),
	glass / PTFE, acrylic protection on two sides
DT 100	DIRT TRAP 100 ml, fittings 3x5 mm, glass / PTFE



order number	description
SS1	sample system, gas filter + flow resistance, fittings for 3x5 mm
FILTER-SS1	filter insert (two pieces), PTFE
SGF 50 *	sample gas filter, diameter 50 mm, fittings for (standard) 3x5 mm or 4x6 mm PTFE,
	mounting holes M4, anodised aluminum, comes with 20 filter inserts (pure glass fibre)
SGF 50G *	same as above, golden anodized, for filter inserts of porous PTFE ("GOLD" filters),
	5 spare filter inserts
SGF 50G/W *	same as above, with window for easy inspection
SGF 50G	filter holder replacement (removable part, black or grey) for upgrade of
UPGRADE KIT	BMT 965C / OG with 50 mm glass fibre filter insert to porous PTFE
FILTER 50	box with 20 filter inserts, 50 mm, for SGF 50 (as used in older BMT 964C & OG)
FILTER 50G	box with 5 filter inserts of porous PTFE ("GOLD" filters), 50 mm, for SGF 50G
FILTER 25	box with 20 filter inserts of pure glass fibre, 25 mm (as used in older BMT 964)
FILTER 25G	box with 5 filter inserts of porous PTFE ("GOLD" filters), 25mm

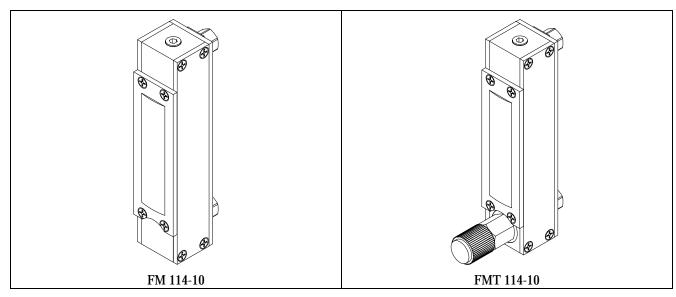
^{*}These filter holders are not suitable as spare parts in BMT instruments! Please ask.



order number		description
CAT-RS	*	catalyzing cartridge, OD 30 x 200 mm, stainless steel, to be refilled by the user,
		fitting for 3x5 mm FEP tubing (1/8" or 1/4" Swagelok on request), outlet G1/8,
		internal dust filters, clips; REFILL-RS included
		Attention: warranty is restricted to O ₃ in pure dry oxygen
REFILL-RS		Carulite 200 material to refill CAT-RS
REFILL-35		(see page 4, BMT 965 C)
HEATED-CAT		CAT-RS as above, electrically heated to 60°C
		for 24 VDC, wall mount power supply for 100-240 VAC included

^{*}The above CAT-RS is not suitable as spare part in BMT instruments! Please ask.

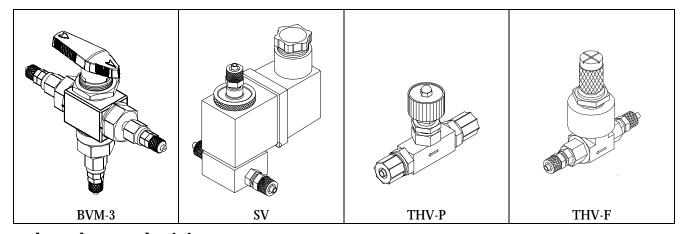
Flow Meters



order number description

014101 11411111111111111111111111111111	
FM 114-10	flow meter 0.1 to 1.0 l/min, glass, SS, FFKM, fittings for 3x5 mm or 4x6 mm tubing
FMT 114-10	flow meter 0.1 to 1.0 l/min, with throttle valve, fittings for 3x5 mm or 4x6 mm tubing

Valves



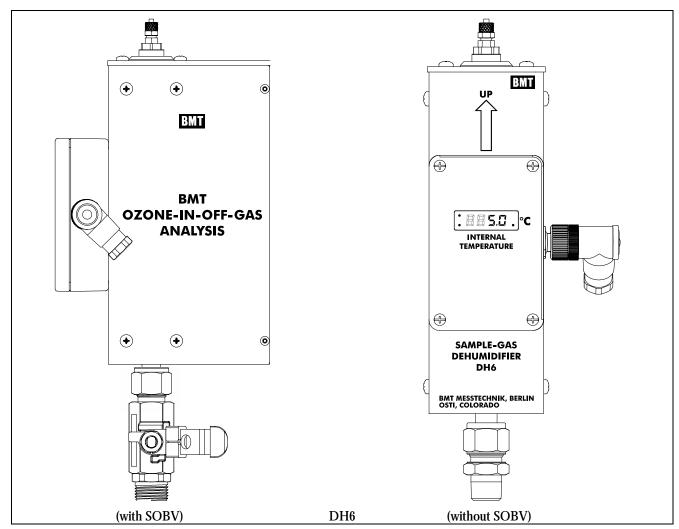
order number description

BVM-3	3-way ball valve, manually operated, SS, for 3x5 mm tubing
SVDC 24 *	3-way solenoid valve, fittings for 3x5 mm FEP, SS, 24V DC / 6W, with plug
SVDC Plug	electric connector
SVAC-PWR	24 VDC power supply, to operate SVDC 24 at 100240 VAC, 15 W, screw terminals
THV-P	throttle valve, for PRESS (bypass) configuration, for 3x5 mm tubing
THV-F	throttle valve, fine tuning, for 3x5 mm tubing

^{*}The above solenoid valve is not suitable as spare part in BMT instruments! Please ask.

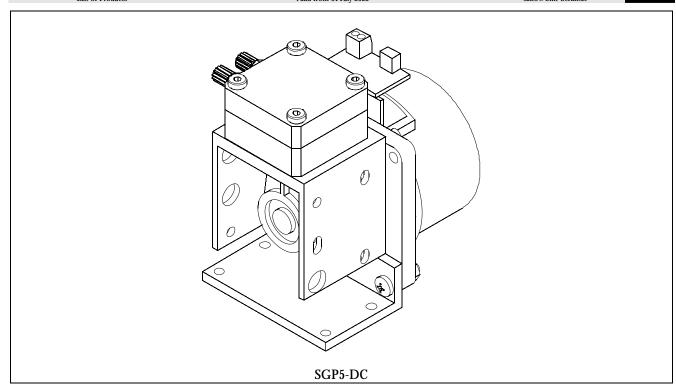


Sample Gas Dryers, Pumps

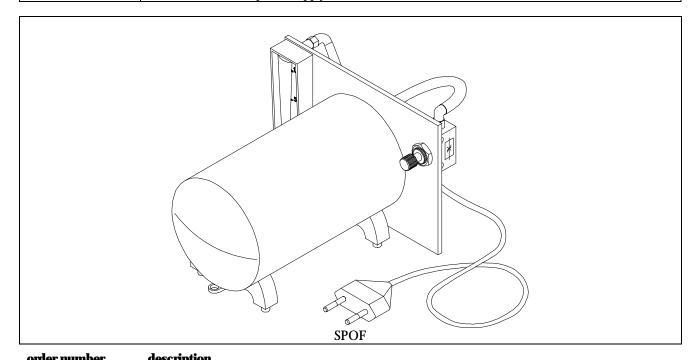


order number	description
DH6	sample gas dehumidifier DH6, peltier-electric, splash proof
	including power supply, 100240 VAC to 24 V DC, 40 W
DH6-LC	version to be used at very low (ambient) ozone concentration, internal PTFE lining

options	
SOBV	shut-off ball valve, mounting option for DH6 and DH6-LC



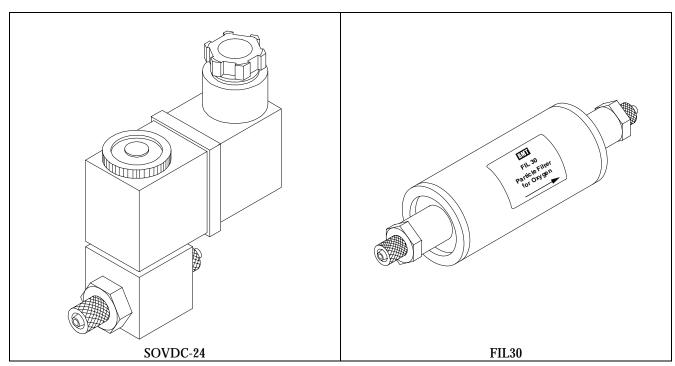
order number	description
SGP5-DC	sample gas pump, ozone resistant, fittings for 3x5 mm, 24 VDC, 1A
	performance: 0.5 l/min at $\Delta P = 0$ and 0.35 l/min at $\Delta P = 100$ mbar
SGP5-SPARE	spare parts kit for SGP5 (membrane, valves, O-rings)
SGP5-DC-POWER	24 VDC wall mount power supply for 100240 VAC



oruer number	aescription
SPOF	sample pump (suction pump) for ozone-free sample gas, 0-1 l/min, 100 - 240 VAC

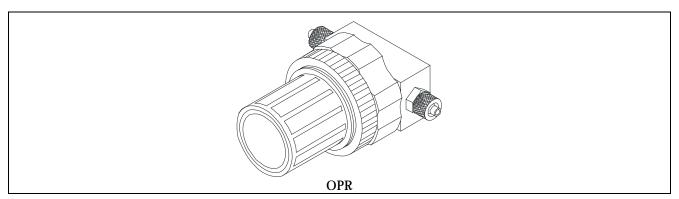


Ozone Generator Accessories



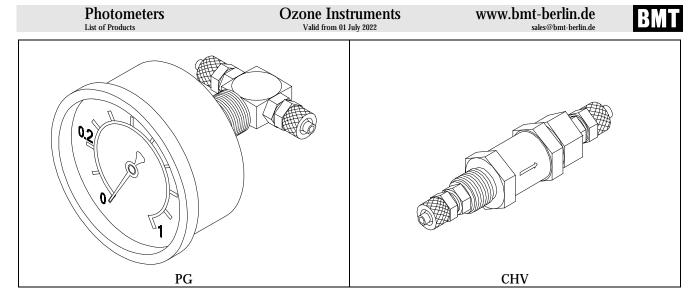
order number description

SOVDC-24	oxygen safety off valve NC (for 3x5 mm tubing), coil 24 VDC/5W, others on request
FIL30	oxygen filter (specify tubing)



order number description

OPR10	oxygen pressure regulator 0-1.0 bar g
OPR25	oxygen pressure regulator 0-2.5 bar g



order number	description
PG10	oxygen pressure gauge, 50 mm OD, 0-1.0 bar g, with 2 fittings for 3x5 mm tubing, clamp
PG25	oxygen pressure gauge, 50 mm OD, 0-2.5 bar g, with 2 fittings for 3x5 mm tubing, clamp
CHV	check valve, approx. 25 mbar, ozone resistant

If you have any further question, do not hesitate to contact us.

We will find a solution to your problem.

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