

Ozone Instruments

List of Products

Valid from 01 July 2020

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)

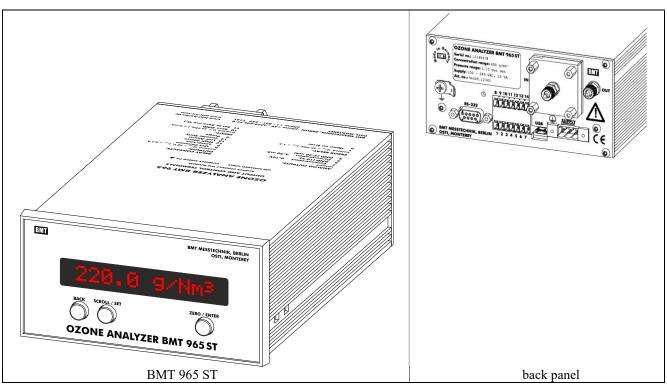
Ozone Measurement	2
High Concentration OZONE ANALYZERs	2
OFF-GAS System	5
OZONE-IN-WATER SENSORs	6
Ambient OZONE MONITOR	
Ozone Sources	11
Ozone Generators	
Ozone Accessories	15
Fittings, Reducers, Tubing	
Sample Gas Filters, Ozone Destructs	
Flow Meters	
Valves	
Sample Gas Dryers, Pumps	
Ozone Generator Accessories	
Order Sheet	

Ozone Instruments Valid from 01 July 2020



Ozone Measurement

High Concentration OZONE ANALYZERs



order number	description	
BMT 965 ST	standard ozone analyzer, 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 of analyzer)	

please order only one concentration range:

	standard	50, 100, 2	00, 300, 400, 500 or 600 g/Nm ³	
LR	low		20 or 10 g/Nm ³	
LLR	lowest	instrument is double in height !	5 or 2 g/Nm ³	

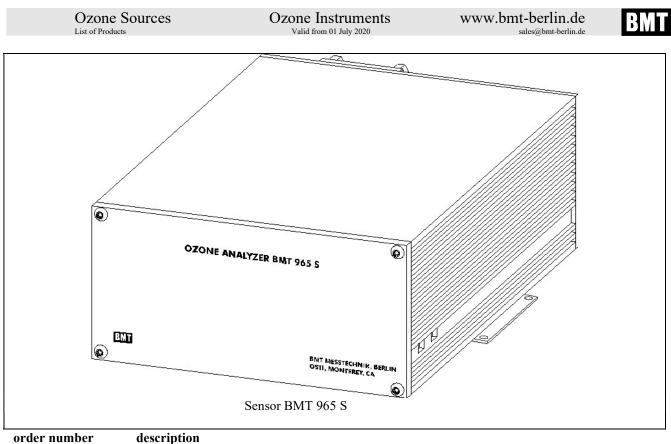
please order only one **pressure** range:

		prease order only one pressure range.
	standard	1.15 barabs
HP	high	1.5, 2.0, 2.5, 3.0, 3.5, or 4.0 barabs

options

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**!

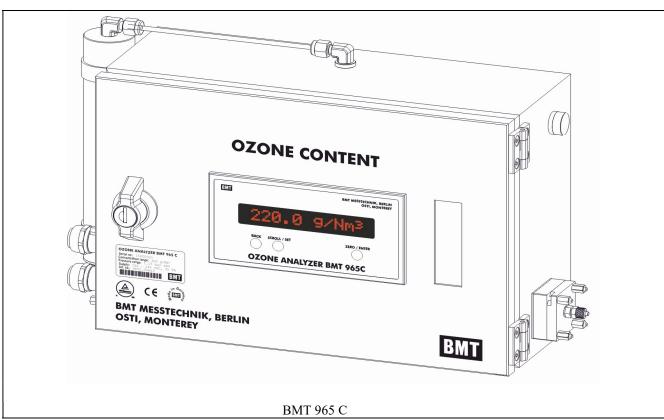


	A
BMT 965 S	sensor = ozone analyzer BMT 965 without a display

	Image: Sector
BMT 965 BT	bench top version of BMT 965 ST, portable, throttle valve, flow meter, sample gas filter, catalysing cartridge, for 24VDC, wall mount power supply for 100- 240VAC included, max. inlet pressure 2.5 bar g, max. outlet pressure 1.15 barabs, other specs see BMT 965 ST
BMT 965 TRANS	Transfer Standard for field verification, carefully calibrated to the highest diligence and accurateness, range 300 g/Nm3, incl. 2 re-calibrations at BMT

options

internal PU	built-in purge unit (solenoid valve & air pump)	
	for fully automatic purging and zeroing on push button command	
bag	with soft carrying bag (camera bag)	



order number	description	
BMT 965 C	cabinet version of ozone analyzer (wall-mount metal cabinet, splash-proof)	
	with internal purge unit, flow meter, squeeze valve (throttle valve), sample gas filter,	
	catalyzing cartridge CAT-35, max. inlet pressure 2.5 bar g, max. outlet pressure 1.15	
	barabs	
MODBUS-RTU	option: MODBUS-RTU	
MODBUS-TCP	option: MODBUS-TCP	
RS-232	option: RS-232, bidirectional, isolated, 2400-38400 Baud	
option: Swagelok	BMT 965 C with LET-LOK (Swagelok interchangeable), inlet only, see order sheet	

spare parts:

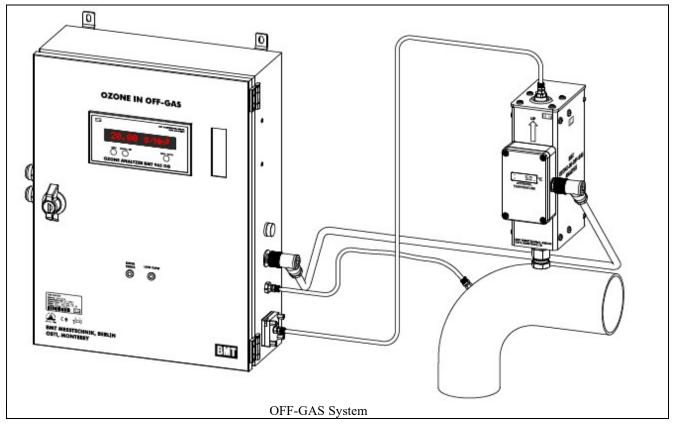
spure pures.	
CAT-35	Catalysing Cartridge for BMT 965 C
REFILL-35	Carulite 200 material to refill CAT-35
FILTER 25G	box with 5 filter inserts of porous PTFE ("GOLD" filters), 25mm
CONN-232	connector for serial interface, 4-pole, solder terminals

		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
		-

Adapter 965C-964C 965C-964C Signal & Mains Adapter

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, 200 g/Nm ³ , 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)	
FILTER 50G	box with 5 filter inserts of porous PTFE ("GOLD" filters), 50mm	
MODBUS-RTU	option: MODBUS-RTU	
MODBUS-TCP	option: MODBUS-TCP	

options:

opiions.				
DH6	sample gas dehumidifier DH6 (to be mounted at the point of sampling)			
	cable length 3m (others on request, max. 10m)			
SOBV	shut-off ball valve, mounting option for DH6			
SGP5-SPARE	spare parts for SGP5 (membranes, valves, O-rings)			
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)			

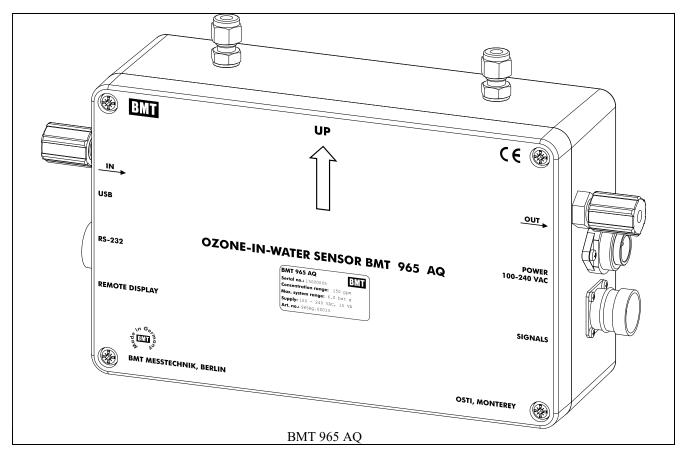
		please order only one concentration range:
	standard	50 or 100 g/Nm ³
LR	low	20 or 10 g/Nm ³
LLR	lowest	5 g/Nm ³

		please order only one pressure range:
	standard	1.15 barabs
HP	high	1.5 or 2.0 barabs
Adapter 965OG- 964OG	965OG-964OG Signal & Mains Adapter	

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

BMT

OZONE-IN-WATER SENSORs



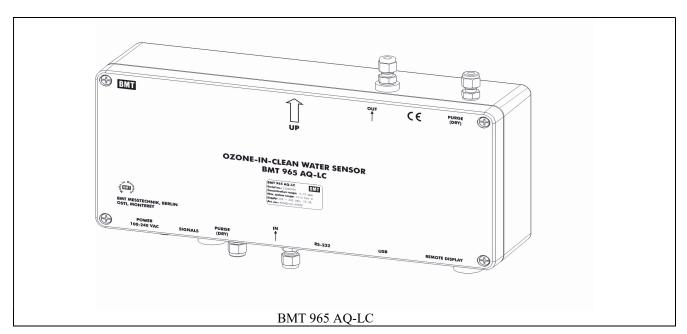
order number	description				
BMT 965 AQ	SENSOR BMT 965 AQ, USB (On-The-Go, Device/Host mode, Full Speed),				
	range: 10, 50, 100 or 150 ppm _w (g/m ³), please specify				
BMT 965 AQ/HF	SENSOR BMT 965 AQ (HF version) for up to 20% hydrofluoric acid (HF)				
	range: 10, 20, 50, 100 or 150 ppm _w (g/m ³), please specify				
RS-232	option: RS-232, bidirectional, isolated, 2400-38400 Baud				
MODBUS-TCP	option: MODBUS-TCP				
option: /RD	optional connector for Remote Display BMT 965 RD (display see next page)				
option: RD cable	special cable length > 10m up to 30m (up to 100m please contact factory)				
AQ Signal Cable	16-pole signal cable, only one connector, standard length 2m (please specify length)				
AQ Power Cable	power cable, only one connector, standard length 2m (please specify length)				
	power cable with connectors on both sides,				
	NEMA 5-15P (2m) or Schuko (1.5m), please specify				

spare parts:

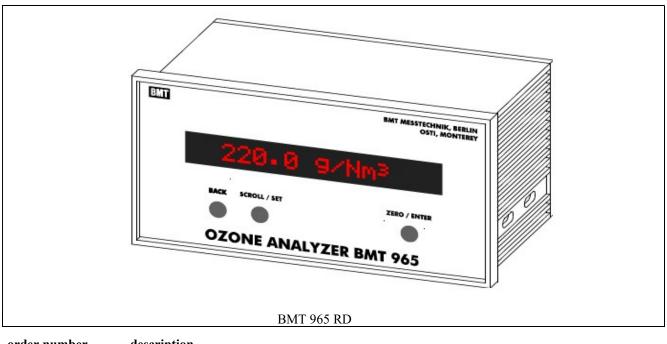
CONN-MAINS	connector for mains input, 4-pole, screw terminals
CONN-SIG 16	connector for signals, 16-pole, solder terminals
CONN-232	connector for serial interface, 4-pole, solder terminals
CONN-TOOL	mounting Tool for Signal Connector

please order only one concentration range:
10, 50, 100, or 150 ppm _w (g/m ³)





order numberdescriptionBMT 965 AQ-LCSENSOR BMT 965 AQ-LC, USB (On-The-Go, Device/Host mode, Full Speed),
range: 0.5, 0.75, 2, 5, 10, or 15 ppmw (g/m³),
please specify
fluid ports PVDF for 4x6 mm tubing, or 1/4" SS Swagelok, please specifyRS-232option: RS-232, bidirectional, isolated, 2400-38400 Baud
option: /RDoptional connector for Remote Display BMT 965 RD



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

Ozone Source	es			struments 01 July 2020	v	www.bmt-b	erlin.de @bmt-berlin.de	BMT
			Order	Sheet				
 please check option/version standard & recommended version included, no choice option not available or not applicable 		BMT 965 ST	BMT 965 BT	BMT 965 C	BMT 965 0G	BMT 965 AQ	BMT 965 AQ/HF	BMT 965 AQ/LC
Basic model $ ightarrow$								
Concentration range ¹⁾								
0.5 g/Nm ³ (or 0.04 %wt/wt)		_	_	_	_	_	_	0.5 ppm _w
0.75g/Nm3 (or 0.06 %wt/wt)		_	_	_	_	_	—	0.75 ppm _w
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/Nm ³ (or 0.7 %wt/wt)						10 ppm _w	10 ppm _w	10 ppm _w
15 g/Nm ³ (or 1.1 %wt/wt)		_	_	-	—	_	_	15 ppm _w
20 g/Nm ³ (or 1.5 %wt/wt)						-	20 ppm _w	_
50 g/Nm ³ (or 3.5 %wt/wt)						50 ppm _w	50 ppm _w	—
100 g/Nm ³ (or 7 %wt/wt)						100 ppm _w	100 ppm _w	-
150 g/Nm ³		—	-	-	—	150 ppm _w	150 ppm _w	—
200 g/Nm ³ (or 14 %wt/wt)					_	_	_	-
300 g/Nm ³ (or 20 %wt/wt)					—	—	—	—
400 g/Nm ³ (or 26 %wt/wt)					_	_	_	-
500 g/Nm ³ (or 31 %wt/wt)					—	_	—	_
600 g/Nm ³ (or 37 %wt/wt)					_	_	_	-
Pressure range								
standard, 1.15 bara		•			•	_	_	
high, 1.50 bara		•	-	_	•			
high, 2.00 bara				_			_	_
high, 2.50 bara high, 3.00 bara				_			_	_
			_	_	_	_	_	_
high, 3.50 bara			_	_	_	_	_	_
high, 4.00 bara	U		_	_	_	_	_	
Fittings								
for 3x5 mm FEP		•	•	•	•	_	_	_
for 4x6 mm FEP						_	_	_
1/8" Swagelok 4)						_	_	_
1/4" Swagelok 4)		_	—			—	—	
6 mm Swagelok 4)		_	_			_	_	_
PVDF, for 4x6 mm FEP		—	_	-	_	_	—	•
Other built-in options								
option Internal Purge Unit 3)		1.15 bara	1.15 bara			_	-	-
Sensor Version (no display)			-	-	—			
Interface Options ⁵⁾								
RS-232								
Modbus-RTU		_	_					
Modbus-TCP		_	_					
RD		_	_	_	_			
			1				1	<u> </u>



Choosing a model and its ranges (concentration and pressure) is mandatory!

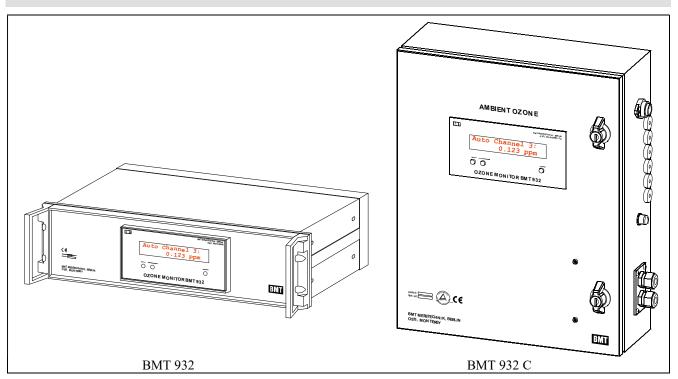
- **Note 1):** The ranges in %wt/wt are not equal to the ranges in g/Nm³ the unit may be switched by the user at any time.
- Note 2): For ranges 2 and 5g/Nm³, the instrument is double in height (front 144 x 144mm).
- Note 3): An internal purge unit is only available for a pressure range of 1.15 bara, in general.
- Note 4): LET-LOK fitting, Swagelok interchangeable
- Note 5) Interface options are an either/or choice

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

Ozone Instruments Valid from 01 July 2020

BMT

Ambient OZONE MONITOR



order number	description		
BMT 932-1	19" monitor, 1-channel, please specify range: 1, 2, 5, 10, 20, 50, 100, or 250ppm _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 included: • one filter holder and mounting fitting per channel • 200 filter inserts		
option: 932-24VDC	main power input 18 – 36 VDC (instead of 100 – 240 VAC)		
option: 932-RELAY	relay box, 50 pin D-Sub connector, fully compatible with BMT 930 relay box		
option: 932-MPA	second display for ozone partial pressure (mPa)		
	according to DIN ISO 1431-1 and ASNI D 1149-07		

spare parts:

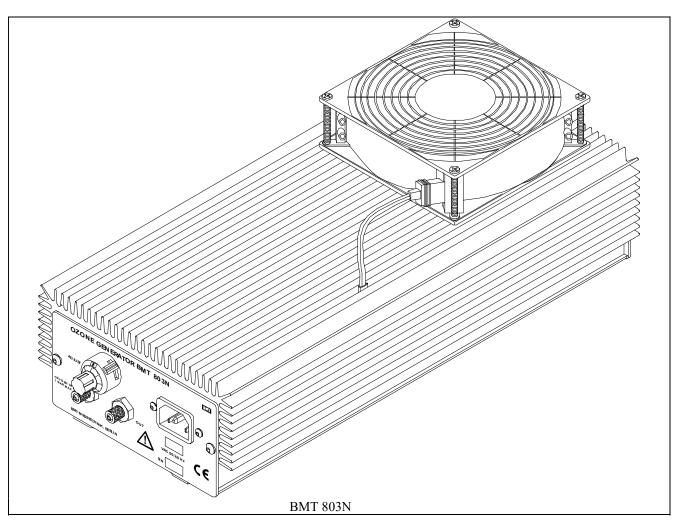
spare parts kit (UV lamp, scrubber, additional set of filter holders)	
UV lamp (please specify serial number)	
scrubber (gold)	
permanent scrubber (black)	
sample gas pump (please specify serial number)	
filter holder	
box with filter inserts (200 pcs.)	
mounting fitting (male) for filter holder, mounting hole 13mm	
set of fittings (male & female) for both sides of filter holder	
fitting for 1/4" or 4x6 mm tubing, mounting thread G 1/8"	
for evaluation of condensation risk	
tubing, 1/4 x 5/32", transparent FEP	
	14
· · · · ·	see p. 14
Adapter 1/4" Swagelok to 932-MALEFIT, 19cm long with FEP lining, Filter Holder	
provides "zero air" for ambient monitors of measurement range 1 ppmv	
	UV lamp (please specify serial number) scrubber (gold) permanent scrubber (black) sample gas pump (please specify serial number) filter holder box with filter inserts (200 pcs.) mounting fitting (male) for filter holder, mounting hole 13mm set of fittings (male & female) for both sides of filter holder fitting for 1/4" or 4x6 mm tubing, mounting thread G 1/8" for evaluation of condensation risk tubing, 1/4 x 5/32", transparent FEP Ambient Ozone Simulator, for comparison of two ozone monitors sample gas dryer, peltier-electric, 24 VDC, incl. power supply 100-240VAC/100W Adapter ¹ /4" Swagelok to 932-MALEFIT, 19cm long with FEP lining, Filter Holder

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

Ozone Instruments Valid from 01 July 2020

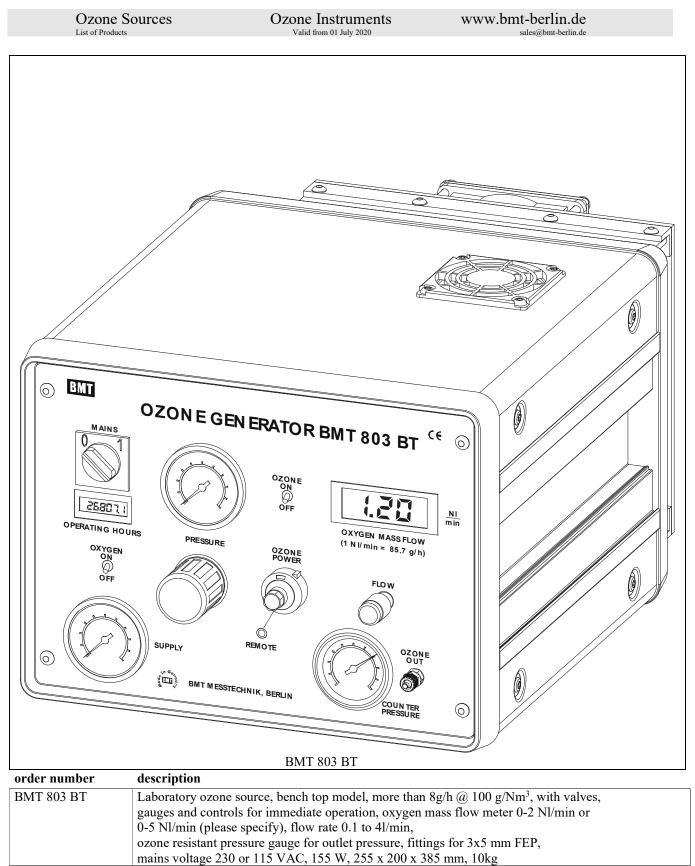
Ozone Sources

Ozone Generators



order number	description			
BMT 802N	zone generator, about 4g/h @ 100 g/Nm ³ (length 311 mm)			
BMT 803N	ozone generator, about 8g/h @ 100 g/Nm ³ (length 391 mm)			
BMT 803N HP	ozone generator, about 8g/h @ 100 g/Nm ³ , high pressure version 2 to 3 bar abs			
option: RC	remote control with 0-5VDC or remote potentiometer (instead of built-in			
	potentiometer)			
option: CHECK	check valve at the outlet (mounted externally)			
option: VCR	generator with ¹ / ₄ " VCR (inlet and outlet, male body)			
option: SWAGE	generator with 1/4" or 1/8" LET-LOK (Swagelok interchangeable), inlet & outlet			

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





order number	description
BMT 803 BT-A	BMT 803 BT combined with special ozone concentration analyser, range 300g/Nm3,
	pressure range 2.0 bara, fittings for 3x5 mm FEP
option: SWAGE	generator with 1/8" LET-LOK (Swagelok interchangeable), outlet only

Ozone S List of Product		Ozone Instruments Valid from 01 July 2020	www.bmt-berlin.de
		AOS 2	
order number	description		

order number	description
AOS 2	Ambient Ozone Simulator with flow independent concentration, up to 3 1/min,
	for comparison of 2 ozone monitors, 24 VDC/450 mA (wall mount power supply incl.)

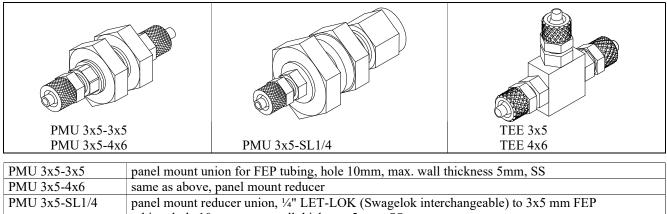


Ozone Accessories

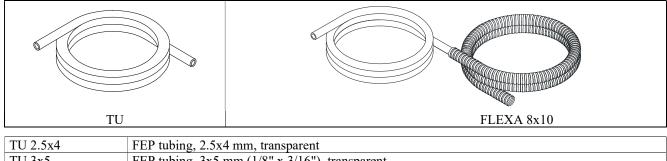
Our standard fitting size is for 3x5 mm flexible tubing (FEP, PTFE, etc.). Other fitting types and sizes on request.

Fittings, Reducers, Tubing

6	6	6	6		
F 3x5-M5	F 4x6-M5	F 3x5-M5-OR	F 4x6-1/8-SS	F 3x5-1/8	F 4x6-1/8
order number	description				
F 3x5-M5	fitting for (standa	rd) 3x5 mm (or 1/8"	x 3/16" resp.) FEP tu	bing, M5 thread, SS	
F 4x6-M5	fitting for 4x6 m	n FEP tubing, M5 th	read, SS		
F 3x5-M5-OR	same as F3x5-M.	5, with KALREZ® O	-ring on mounting sid	le	
F 4x6-1/8-SS	fitting for 4x6 m	n FEP tubing, G1/8	thread, SS		
F 3x5-1/8	fitting for (standa	rd) 3x5 mm (or 1/8"	x 3/16" resp.) FEP tu	ibing, G1/8" thread,	
	aluminum, black	anodised			
F 4x6-1/8	fitting for 4x6 m	n FEP tubing, G1/8"	thread, aluminum, bl	ack anodised	
nut 3x5	additional nuts fo	additional nuts for the above fittings may be ordered separately			
nut 4x6	additional nuts fo	additional nuts for the above fittings may be ordered separately			



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



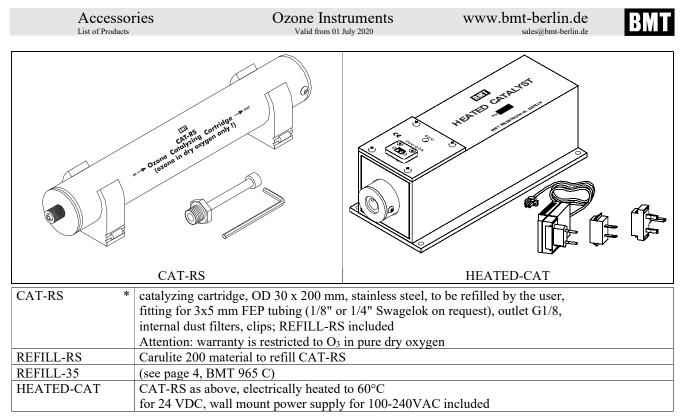
TU 2.5x4	FEP tubing, 2.5x4 mm, transparent
TU 3x5	FEP tubing, 3x5 mm (1/8" x 3/16"), transparent
TU 4x6	FEP tubing, 4x6 mm, transparent
TU 1/4x5/32	FEP tubing, 1/4 x 5/32", transpare
FLEXA 8x10	flexible SS tubing ID 7.5mm, for protecting FEP tubing



Sample Gas Filters, Ozone Destructs

25m1 Schott DT 25	DT 5		100ml schott
order number descripti	on		
DT 25 DIRT TR	AP 25ml, fittings 3x5 mm, gla	ss / PTFE	
	AP 50ml, fittings 6mm or 1/4"		elok interchangeable),
	TFE, acrylic protection on two s		
DT 100 DIRT TR	AP 100ml, fittings 3x5 mm, gl	ass / PTFE	
	S1	~	SGF 50
	vstem, gas filter + flow resistan	ce, fittings for 3x5	mm
	ert (two pieces), PTFE as filter, diameter 50 mm, fittin	gs for (standard) 3	x5 mm or 4x6 mm PTFE
mounting fibre)	holes M 4, anodised aluminun	n, comes with 20 fi	lter inserts (pure glass
	bove, golden anodized, for filte	er inserts of porous	PTFE ("GOLD" filters),
	lter inserts		
	bove, with window for easy in		
SGF 50G filter holder replacement (removable part, black or			
	5C / OG with 50mm glass fibre		
	20 filter inserts, 50mm, for SG		
	5 filter inserts of porous PTFE		
FILTER 25 box with	20 filter inserts of pure glass fi	bre, 25mm (as used	a in older BMT 964)

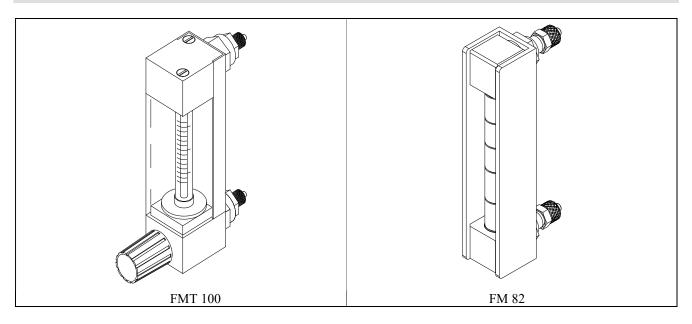
* These filter holders are not suitable as spare parts in BMT instruments! Please ask.



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

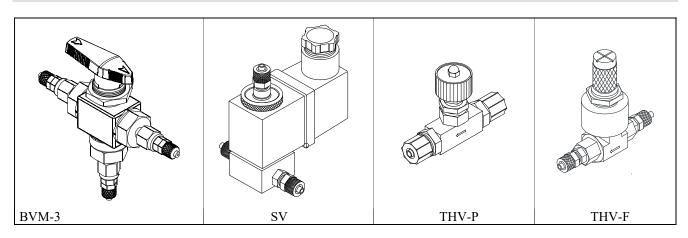


Flow Meters



order number	description
FMT 100-12	flow meter (SS) 0.1 to 1.2 l/min, with throttle valve, fittings 3x5 mm Al
FMT 100-6	same as above, range 0.05 to 0.6 l/min
FM 82-3	flow meter 0.03 to 0.3 l/min, glass, SS, PTFE, fittings for 3x5 mm or 4x6 mm tubing
FM 82-5	flow meter 0.04 to 0.5 l/min, glass, SS, PTFE, fittings for 3x5 mm or 4x6 mm tubing
FM 82-10	flow meter 0.1 to 1.0 l/min, glass, SS, PTFE, fittings for 3x5 mm or 4x6 mm tubing

Valves

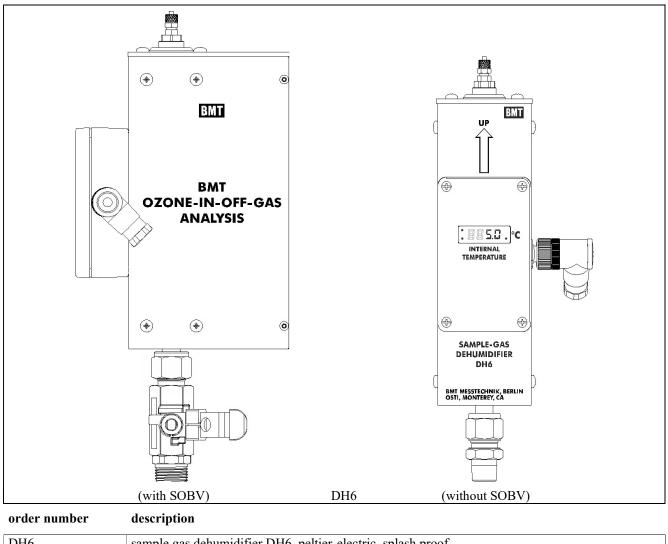


BVM-3		3-way ball valve, manually operated, SS, for 3x5 mm tubing
SVDC 5	*	3-way solenoid valve, fittings for 3x5 mm FEP, SS, 5V DC / 2.8W, with plug
SVDC 12	*	3-way solenoid valve, fittings for 3x5 mm FEP, SS, 12V DC / 6W, with plug
SVDC 24	*	3-way solenoid valve, fittings for 3x5 mm FEP, SS, 24V DC / 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

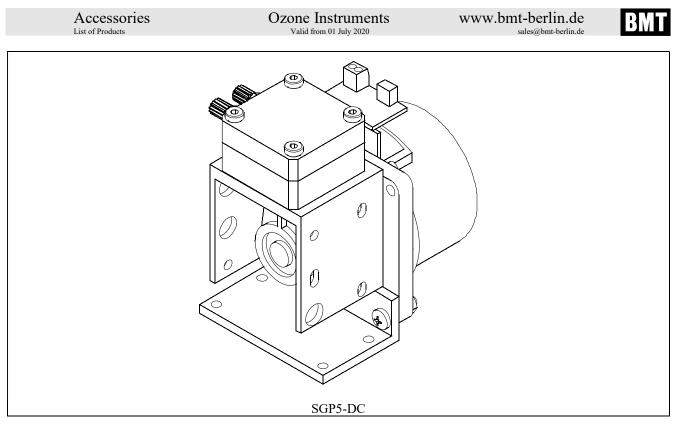
* The above solenoid valves are not suitable as spare parts in BMT instruments! Please ask.

BMT

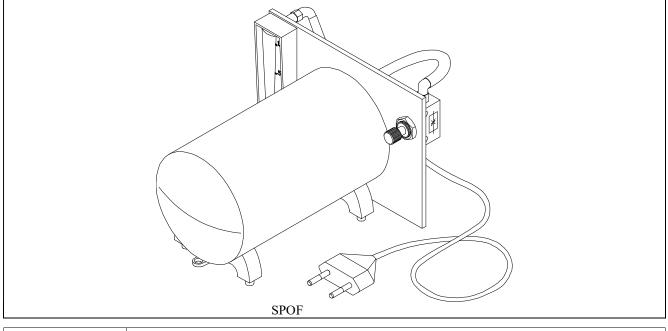
Sample Gas Dryers, Pumps



DH6	sample gas dehumidifier DH6, peltier-electric, splash proof
	including power supply, 100240 VAC to 24 V DC, 100 W
DH6-LC	version to be used at very low (ambient) ozone concentration, internal PTFE lining
SOBV	shut-off ball valve, mounting option for DH6 and DH6-LC



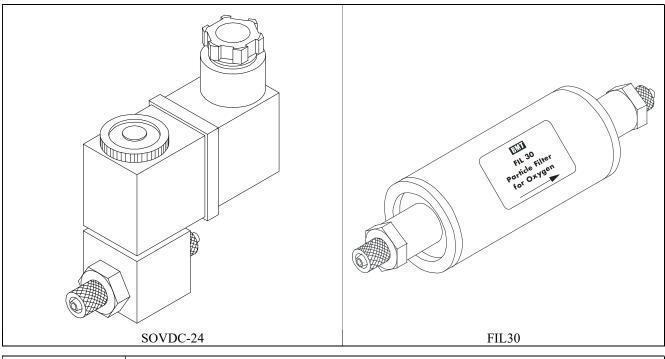
order number	description
SGP5-DC	sample gas pump, ozone resistant, fittings for 3x5 mm, 24 VDC, 1A
	performance: 0.5 l/min at $\Delta P = 0$ and 0.35 l/min at $\Delta P = 100$ mbar
SGP5-SPARE	spare parts kit for SGP5 (membrane, valves, O-rings)
SGP5-DC-POWER	24VDC wall mount power supply for 100240VAC



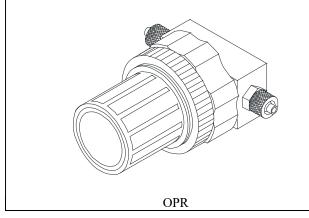
SPOF

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

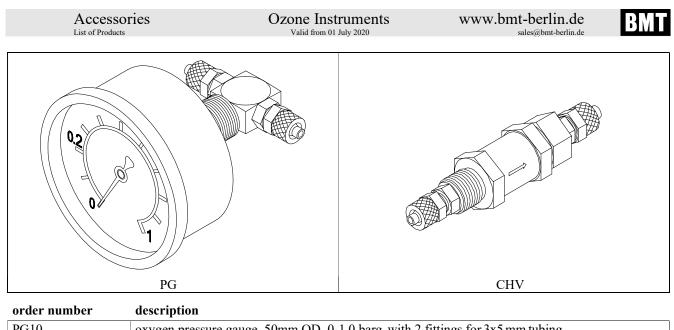
Ozone Generator Accessories



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 barg
OPR25	oxygen pressure regulator 0-2.5 barg



PGI0	oxygen pressure gauge, 50mm OD, 0-1.0 barg, with 2 fittings for 3x5 mm tubing,
	clamp
PG25	oxygen pressure gauge, 50mm OD, 0-2.5 barg, 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.

BMT MESSTECHNIK GMBH Hamburger Straße 19, D-14532 Stahnsdorf, Germany Tel. +49-3329-69677- 0

Fax +49-3329-69677-29

www.bmt-berlin.de

sales@bmt-berlin.de

-

.