

### **Technical Specifications**

MECONTROL UBC SC is an online analyzer for carbon in fly ash at coal and biomass fueled power stations. The patented hundredfold field proven system uses microwave technology for non-extractive measurement of a key combustion parameter.

MECONTROL UBC SC requires only minimum maintenance, is highly available and has only one moving part. The fast bulk sample collection guarantees representative results and a short response time. For the standard measuring range MECONTROL UBC SC is the system of choice. For very low ranges or increased accuracy requirements the MECONTROL UBC<sup>XT</sup> SC system based on hyphenated-techniques is available.

### **Typical applications**

- Online sorting of fly ash according to EN-450, ASTM-C618 or similar standards
- Measurement of a key combustion parameter
- Combustion optimization (O<sub>2</sub>, burners, pulverizer, classifier)
- Tool for combustion and grinding optimization when using different coal types
- Indicator for mill condition

### Characteristics

- High accuracy
- In-situ measurement, no ash extraction
- Highly representative due to measurement of bulk fly ash (not at flue gas duct)
- Sensor extremely robust, low maintenance demand
- System state can be determined remotely



### Technical data

	Microwave
MECONTROL UBC SC	
Measurement principle	Microwave & Radiometric
MECONTROL	
UBC. SC	
	1
Typical accuracy 10	
	$\sim 0.3\%$ (0 10% LIBC)
	method
Measurement range	0 - 20 % carbon in fly ash
	0 - 55  °C
Control Box	
	0 – 55 °C
Sensor Box	
Ash temperature	0 – 150 °C (option: 0 –
	short-term up to 300 °C)
Dimensions Control Box	800 x 1200 x 300 mm
	(W x H x D)
	Type of mounting: wall-mounted
Dimensions Sensor Box	600 x 600 x 350 mm
	(W x H x D)
	I ype of mounting: wall-mounted
Weight Control Box	110 kg
Weight Sensor Box	40 kg
Cable length distances	Control Box –
	Sensor Box – Sensor: < 10 m
Degree of protection	IP 00, NEMA 4
Control Box and	
Sensor Box	Steel newder costed DAL 7025
Sensor Boy	Sieei, powder coaled RAL 7035



**TERMOCHEM** 

https://pomiary.termochem.com.pl/ e-mail: tch@termochem.com.pl +48426405605, +48426405696

Technical Specifications Version v5.01

All rights reserved

autoryzowany serwis w Pols **PROMECON®** we focus on your process



### Continuation technical data

Automatic sampling	
Life time sensor	up to 8 years, depending on measurement intervals and ash
Life time auger	
Dimensions Sensor	Screw insertion depth: approx. 285 mm - 385 mm Outside length of shaft and motor: approx. 585 mm Flange width: approx. 150 mm (XT: approx. 630 mm) Sensor width: approx. 200
Air supply pressure	
Fly ash temperature	short-term up to 300 °C)

I/O's	
Signal outputs	Outputs: 1x galvanically isolated current output 0/4 – 20 mA, 1x status output: SPDT relay contact
Signal input	
(optionally)	Modbus TCP/IP, Profibus V1
Communication	Modem or VPN connection
Provision compliances	Machinery directive: 2006/42/EG (2006/05/17) Electromagnetic compatibility directive: 2014/35/EU (2014/02/26) Low voltage directive: 2014/30/EU (2014/02/26) RoHS directive:
Standard compliances	DIN EN ISO 12100 DIN EN 60204-1 DIN EN 61326-1

### Usage of UBC reading at the power station

The online UBC reading is used as additional information about the quality of the combustion in addition to the online  $O_2$ , CO and NOx measurement. By having the Online UBC reading available the pulverizer / classifier can be optimized during operation together with optimum settings for the excess air.

The second purpose is the automatic online sorting of the fly ash to the good or bad ash silo according to QS requirements. By utilizing MECONTROL UBC SC labor cost for continuous and rapid fly ash analysis can be reduced and fly ash can be sorted with sharper interfaces for the good/ bad ash which leads to more fly ash sales versus cost for disposal of bad ash.



autoryzowany serwis w Polsce

PROMECON

we focus on your process

Technical Specifications Version v5.01

All rights reserved

https://pomiary.termochem.com.pl/ e-mail: tch@termochem.com.pl +48426405605, +48426405696



### Function

The MECONTROL UBC SC Control Box controls the sensor.

The sensor is collecting the fly ash out of the process in a dense phase e.g. of precipitator hopper, intermediate ash bunkers or similar by an ash auger. The ash sample will be collected and compressed into the measuring chamber with a constant force so that density effects will be mostly eliminated. The carbon content in the big volume ash sample is measured via a patented microwave principle. The ash auger will be reversed to push the ash back into the process. After air purging of the measurement chamber an empty chamber test is conducted to make sure that each time a fresh sample will be measured.

The whole sensor has only one moving part which makes the system so reliable and reduces necessary maintenance. Compared to other systems there are no heated sampling pipes, valves, separators and so on. The Ash sample keeps warm and does not leave the process. The MECONTROL UBC<sup>XT</sup> SC utilizes a combined method where radiometry is used in addition to the microwave principle to further enhance the accuracy for customers with very low carbon ashes.

The local sensor box has local controls for automatic and manual operation and for taking manual samples for laboratory comparison purpose.

The Control Box is equipped with a touch screen user interface in order to configure the system and to access measurement and other logged data. The Control Box governs the local sensor operation.



### General system arrangement



+48426405605, +48426405696

Technical Specifications Version v5.01 All rights reserved

autoryzowany serwis w Polsce **PROMECON**® we focus on your process





**Dimensions Control Box** 



**Technical Specifications** Version v5.01

All rights reserved

we focus on your process



autoryzowany serwis w Polsce https://pomiary.termochem.com.pl/ e-mail: tch@termochem.com.pl +48426405605, +48426405696





#### Installation point of sensor

The location of the sensor in the bulk ash hoppers will vary from plant to plant depending on the type of ash removal system is utilized. On continuously operating hopper discharge or systems where the hoppers are generally empty, the sensor should be installed very low in the hopper or in the hopper exit pipe so that ash is falling over the sensor at all times. On systems where the emptying of the hoppers is intermittent or sequential, the sensor should be installed higher on the hopper so that the sensor does not become buried for extended periods of time where it would be re-sampling the same ash over and over. The filling sequence of the sensor can also be synchronized with the hopper valve.

Depending on the process and the philosophy of ash disposal it may be required to locate the sensor in other places of the process like in intermediate bunkers.

### Sensor Types

Different MECONTROL UBC sensor types are available for the different mounting situations.

#### Sensor with internal measurement chamber

Type: SE-UBC-A300-Ixx....

Sensors with internal measurement chambers are used where sufficient space is available inside the process. Typically for the installation in the precipitator hopper sensors with internal measurement chambers are used. The sensor can be supplied with individually angled flange (angle expressed by "xx" in the product type) to suit the hopper wall angle.



Technical Specifications Version v5.01 All rights reserved

IERMOCHEM https://pomiary.termochem.com.pl/ e-mail: tch@termochem.com.pl +48426405605, +48426405696

autoryzowany serwis w Polsce

PROMECON





Drawing UBC Sensor – Internal Measurement Chamber



Drawing mounting flange / blind flange for sensor with internal measurement chamber (article code 2090100001)



+48426405605, +48426405696

**Technical Specifications** Version v5.01

All rights reserved

autoryzowany serwis w Polsce **PROMECON**<sup>®</sup> https://pomiary.termochem.com.pl/ e-mail: tch@termochem.com.pl we focus on your process



#### Sensor with external measurement chamber

#### SE-UBC-Ax00-A00....

Is a sensor with external measurement chamber with limited installation space inside the process e.g. for 300mm discharge pipes below the hopper.

The sensor with external chamber is made for installations with less availability of space:







Drawing mounting flange / blind flange for sensor with internal measurement chamber (article code 2090100002)

**Technical Specifications** Version v5.01

All rights reserved



**IERMOCHEM** autoryzowany serwis w Polsce PROMECON® https://pomiary.termochem.com.pl/ e-mail: tch@termochem.com.pl +48426405605, +48426405696



# **Control Box**

Measurement principle	MECONTROL UBC SC: microwave
Measurement range	
Measurement accuracy 1σ	MECONTOL UBC: <= 0.6 % (0 - 10 % carbon in fly ash)
Accuracy check	
Number of measurement points	1 measurement point
Signal output	UBC: 1 x galvanically isolated 4 - 20 mA output Measurement channel fault: 1 x SPDT relay contact Control Box fault: 1 x SPDT relay contact
Signal input	Release signal measurement point: 24 VDC signal
Connectivity	Analog modem
Power supply	1 ~ 230 VAC, 50/60 Hz (phase, neutral, earth / ground)
Power consumption	< 900 VA
Enclosure type	Rittal AE 1280.500
Protection class	IP 66, NEMA 4
Dimensions	Approx. 800 mm (W) x 300 mm (D) x 1200 mm (H)
Mounting	Wall mounting, mounting brackets included
Material; surface finish	Steel; powder coated, RAL 7035
Material thickness	Side walls, rear wall, roof: approx. 1.5 mm Door: approx. 2.0 mm
Gross weight	Approx. 110 kg
Ambient temperature	0 – 55 °C



**TERMOCHEM** autoryzowany serwis w Polsce https://pomiary.termochem.com.pl/ e-mail: tch@termochem.com.pl +48426405605, +48426405696

we focus on your process

All rights reserved



## **Sensor Box SC**

Quantity	1 pc.
Power supply	
Box wiring: power supply cable	Power supply cable between Control Box and Sensor Box. Standard power cable up to 500 VAC, three solid wires wire diameter 1.9 mm; wire cross section 2.5 mm <sup>2</sup> / AWG 12
Box wiring: signal cable	e.g.: NYY-J 3x2,5 Signal cable between Control Box and Sensor Box. Signal cable with 3 flexible wires wire diameter 0.9 mm / wire cross section 0.5 mm <sup>2</sup> / AWG 20 e.g.: Ölflex Classic 110 3X0 5
Enclosure type	Rittal AE 1360.500
Protection class	IP 66, NEMA 4
Dimensions	Approx. 600 mm (W) x 350 mm (D) x 600 mm (H)
Mounting	Wall mounting, mounting brackets included
Cable length distance	Control Box - Sensor: < 40 m
Material; surface finish	Steel; powder coated, RAL 7035
Material thickness	Side wall, rear wall, roof: 1.5 mm; door: 1.75 mm
Gross weight	Approx. 40 kg
Ambient temperature	0 – 55 °C



autoryzowany serwis w Polsce **PROMECON**<sup>®</sup> https://pomiary.termochem.com.pl/ e-mail: tch@termochem.com.pl e-mail: tch@termochem.com.pl +48426405605, +48426405696



## Sensor

Quantity	MECONTROL UBC SC: 1 per Control Box
Sampling method	Non-extractive - without requirement of pneumatic transportation of ash / heating elements / exposing sample to ambient conditions / cyclonic separation
Sample size	
Compaction for ultimate density repeatability of fly ash sample	Yes, controlled ash compaction
Measuring cycle	If sensors installed in location with cyclically rested ash: 1 sensor installed: > 10 min 2 sensors installed: > 12 min / sensor 3 sensors installed: > 15 min / sensor 4 sensors installed: > 18 min / sensor
Automatic sampling	Optionally available, extraction of 50 ml samples at each xth measuring cycle in a bottle
Power supply	From Sensor Box / Sensor Box SC
Drive specification	250 W, 3 phases, 230 / 400 VAC Approx. screw rotation speed (unloaded): emptying: 1.8 / s; filling: 1.38 / s
Degree of protection	IP 55, NEMA 12
Life time sensor	up to 8 years, depending on measurement intervals and ash
Life time auger	approx. 1 year, depending on measurement intervals and ash
Dimensions	Screw insertion depth: approx. 285 mm - 385 mm (with automatic sampling: approx. 180 mm - 280 mm)
	Outside length of shaft and motor: approx. 585 mm (with automatic sampling: approx. 695 mm)
	Flange width: approx. 150 mm Sensor width: approx. 200 mm
Flange	
Mounting / application location	Hopper; position and inclination angle to be defined
Cable Length Distance	Sensor Box - Sensor: < 10 m
Material	Steel probe with hardened ash auger
Air supply pressure	minimum 3000 hPa at 60 l/min



All rights reserved

autoryzowany serwis w Polsce https://pomiary.termochem.com.pl/ e-mail: tch@termochem.com.pl +48426405605, +48426405696



Air pressure ash environment	
Ash column above the sensor for filling measurement chamber	more than 100 mm
Ash column above the sensor for emptying measurement chamber	less than 500 mm
Ash column outside the specification	optional funnel or special measurement process adaptor
Auger length	300 mm
Gross weight	UBC Sensor: approx. 22 kg
Fly ash temperature	0 - 150 °C (option: 0 - 225 °C, short-term up to 300 °C)



autoryzowany serwis w Polsce **PROMECON**<sup>®</sup> https://pomiary.termochem.com.pl/ e-mail: tch@termochem.com.pl e-mail: tch@termochem.com.pl +48426405605, +48426405696

All rights reserved

Datasheet

Version 201



### Required environment for sensor installation

- Pressure inside ash environment must be in the range between -30 mbar and 0 mbar
- Availability of compressed air min. 4 bar
- Distance between measurement cabinet and Sensor box, Standard 70 m. Between Sensor Box and Sensor max. 10 m.
- Availability of current 1 phase 230VAC 50/60Hz or 3 phase 400VAC 50/60Hz
- External signal from the plant is needed, either
  - A) to synchronize the measurement or
  - B) to start/stop the measurement 0
- Modem connection for monitoring / error checks / calibration is needed
- Typical environment of ash filter systems in plants:

direction)	Function	Parts typically used by the plant
		Collection Vessel of several precipitators
Vessel	process	Precipitator
		without valves
Connecting tube	Leads ash from incoming	with pressure valve below
	system	above
		Pneumatic transport tube
Ash Removal	Ash Removal System	Pressure sending vessel
System		Ash pump housing

- If the mounting is in or under a precipitator the installation is in the first filter row (where 80-90% of the ash is filtered)
- In case of cyclical exchange of the ash in the ash environment ensure, that the cycle duration is not too short (> 15 min), else no synchronization is possible. The duration must be shorter than 2 h in order to receive always actual data.

Ensure that the ash level over the auger is low (max. 5-10 cm over the auger) while the sensor is emptying.



**Technical Specifications** Version v5.01

All rights reserved

autoryzowany serwis w Polsce https://pomiary.termochem.com.pl/ PROMECON we focus on your process

e-mail: tch@termochem.com.pl +48426405605, +48426405696



### **Evaluation of installation positions**





Technical Specifications Version v5.01

All rights reserved

autoryzowany serwis w Polsce **PROMECON**<sup>®</sup> we focus on your process



### Typical mounting positions of the sensor

The location of the sensors in the bulk ash hoppers will vary from plant to plant depending on the type of ash removal system is utilized. On continuous or systems where the hoppers are generally empty, the sensor should be installed very low in the hopper or in the hopper exit pipe so that ash is falling over the sensor at all times.



UBC Sensor measurement chamber outside, mounting on hopper exit pipe





On systems where the emptying of the hoppers is intermittent or sequential, the sensors should be installed higher on the hopper so that the sensor doesn't become buried for extended periods of time where it would be re-sampling the same ash over and over.

After determining the installation location, the lagging and insulation should be removed from an area large enough to allow for easy access for mounting plate installation.

The mounting plate must be seal welded around the full contact area with the hopper wall to prevent leakage. Allow at least 10 cm clearance around the sensor and mounting adapter when re-installing hopper insulation and lagging.



IERMOCHEM https://pomiary.termochem.com.pl/ e-mail: tch@termochem.com.pl +48426405605, +48426405696

Technical Specifications Version v5.01

All rights reserved

autoryzowany serwis w Polsce **PROMECON®** we focus on your process



### **Touchpanel operation**

The system can be controlled locally via touch panel. Beside the configuration, setup and operation historic measurement and event data can be accessed.

Data monitor N	let-Auto	Automatic!	Print	ICC-Auto!	0:00:00/00	.00.0000 0130
Status IC-Card:	Туре ОК	Used files:	0 /	0 max.:	0/ 0	
		Automa	atio	c!		
	He:	asure∎ent of	Unbur	nt Carbon		
	UBC (%):			0.0	00 %	
	Temperatu	re:			1.0°C	
Parameters						
Stal	tus					
lac	a1 _		-			
Sample List Err	0Г			Version	Login	Stop Auto
active 🚺 Step	1					

Main touch panel screen

### **Electrical Wiring / Connection of Control Box**

The Control Box frame must be grounded to the plant ground grid either through direct connection, or through connection to building steel with a cross section adapted to local requirements (minimum size 2,5 mm<sup>2</sup> / AWG 12).

The Control Box requires as standard supply voltage a 1-ph power source with neutral, using a minimum recommended conductor size of 6 mm<sup>2</sup> / AWG 10 to be connected to terminals L1 and N on the power termination block X1. A separate power ground must be supplied from the 1-ph power source to the PE terminal on the X1 power termination block.

Supply voltage:	1 phase 230 VAC with neutral, +/- 10 %, 50/60 Hz (other power supplies are available upon request)
Power Consumption:	max. 900 VA
Terminal:	X1
Terminal cross section:	6 mm² / AWG 10
Internal circuit breaker:	10 A
Recommended external fuse:	16 A
Ambient temperature range:	0 55 °C

All rights reserved



we focus on your process



**IERMOCHEM** 

e-mail: tch@termochem.com.pl +48426405605, +48426405696



### Analogue Output

Terminal:	X22			
Terminal cross section:	2,5 mm² / AWG 12	2,5 mm² / AWG 12		
Terminal description:	1 (+), 11 (-)			
Scaling:	typ. 4 – 20 mA or 4 – 20 mA	0 – 10 % Unburned Carbon Content 0 – 20 % Unburned Carbon Content		
Output specification:	potential free, no p	ower supply required		
Allowable output load resistance:	350 $\Omega$ or less			

### **Release Signal**

A release signal is required for starting and stopping the measurement cycle:

Event controlled mode:	closed side gate	-> 24V Signal
Time controlled mode:	start measurement cycle	-> 24V Signal
Terminal:	X23	
Terminal cross section:	2,5 mm² / AWG 12	
Terminal description:	1 (+), 11 (-)	



https://pomiary.termochem.com.pl/ e-mail: tch@termochem.com.pl +48426405605, +48426405696

Technical Specifications Version v5.01

All rights reserved

autoryzowany serwis w Polsce **PROMECON**<sup>®</sup> we focus on your process



### **Fault Signals**

Terminal:	X21				
Terminal cross section:	2,5 mm² / AWG	2,5 mm² / AWG 12			
Terminal description:	No Fault:	closed contact 12, 14 (11, 12 open)			
	Fault:	closed contact 11, 12 (12, 14 open)			
Output specification:	max. 250 VAC/	max. 250 VAC/DC / max. 6 A			

A common fault message signal is available on terminal X21:

### A channel fault message is provided on terminal X24:

Terminal:	X24	X24				
Terminal cross section:	2,5 mm² / AWG	2,5 mm² / AWG 12				
Terminal description:	11, 12, 14	11, 12, 14				
Scaling:	No Fault:	closed contact 12, 14 (11, 12 open)				
	Fault:	closed contact 11, 12 (12, 14 open)				
Output specification:	potential free, n	potential free, no power supply required				
Output Load:	max. 250 VAC/I	max. 250 VAC/DC / max. 6 A				



**IERMOCHEM** autoryzowany serwis w Polsce https://pomiary.termochem.com.pl/ e-mail: tch@termochem.com.pl +48426405605, +48426405696

**Technical Specifications** Version v5.01

All rights reserved



Туре	Version	Level	System	Enclosure	Option	Description
MS-UBC-SC						UBC Control Box
	BS-					Standard
	XT-					XT Version
		208-				208 VAC / 50/60 Hz
		230-				230 VAC / 50/60 Hz
		400-				400 VAC / 50/60 Hz
		XXX-				xxx VAC / 50/60 Hz
			1PN-			Single Phase System with Neutral
			3PN-			Three Phase System with Neutral
			3P-			Three Phase System w/o Neutral
				ST		Steel Enclosure, powder coated, RAL 7035
				VA		Stainless Steel Enclosure, 1.4301
					-S	Option: special Version

### Model code MECONTROL UBC Control Box

Example: MS-UBC-SC-BS-230-1PN-ST = Control Box MECONTROL UBC SC, standard version (microwave), supply voltage 230 VAC, 1 phase / neutral, powder coated steel cabinet.

### Model code MECONTROL UBC SC Sensor Box

Туре	VFD	Sampling	system	Enclosure	Option	Description
SB-UBC-SC						UBC Sensor Box
	TOS-					Toshiba Variable Frequency Drive
		NN-				Standard Sampling
		AP-				Automatic Sampling
			1PN-			Single Phase System with Neutral
			3P-			Three Phase System w/o Neutral
				ST		Steel Enclosure, powder coated, RAL 7035
				VA		Stainless Steel Enclosure, 1.4301
					-S	Option: special Version

Example: SB-UBC-SC-TOS-NN-ST = Sensor Box for MECONTROL UBC sensor, Toshiba VFD, automatic sampling, single phase power supply, powder coated steel enclosure.



autoryzowany serwis w Polsce https://pomiary.termochem.com.pl/ e-mail: tch@termochem.com.pl +48426405605, +48426405696

**PROMECON**<sup>®</sup>

we focus on your process

**Technical Specifications** Version v5.01

All rights reserved



### Model code MECONTROL UBC Sensor

Туре	Auger	style	Sampling	Version	Option	Description
SE-UBC-						UBC Sensor
	A300-					Auger 300 mm, hardened
	A400-					Auger 400 mm, hardened
	C300-					Auger 300 mm, coated
	C400-					Auger 400 mm, coated
		A00-				Outside Measurement Chamber
		lxx-				Inside Measurement Chamber, Flange Angle: xx°
			NN-			Standard Sampling
			AP-			Automatic Sampling
				BS		Standard microwave
						XT Version combined microwave/ radiometric
				XT		sensor
					-S	Option: special Version

Example: SE-UBC-A400-I25-NN-BS = Sensor for MECONTROL UBC SC System, hardened 400 mm ash auger, internal measurement chamber, mounting flange angle 25°, manual sampling, standard microwave sensor.



TERMOCHEM autoryzowany serwis w Polsce https://pomiary.termochem.com.pl/ e-mail: tch@termochem.com.pl +48426405605, +48426405696

**Technical Specifications** Version v5.01

All rights reserved



### **Article Codes**

Article No.	Туре	Description
Measuremen	t Cabinet	
2020100001	MS-UBC-SC-BS-230-1PN-ST	UBC SC Control Box
2020100002	MS-UBC-SC-BS-230-1PN-VA	UBC SC Control Box, Stainless Steel
2020100003	MS-UBC-SC-XT-230-1PN-ST	UBC SC Control Box, XT-Version
2020100004	MS-UBC-SC-XT-230-1PN-VA	UBC SC Control Box, XT-Version, Stainless Steel
Sensor Box		
2020200001	SB-UBC-SC-TOS-NN-1PN-ST	UBC SC Sensor Box
2020200002	SB-UBC-SC-TOS-NN-1PN-VA	UBC SC Sensor Box, Stainless Steel
2020200003	SB-UBC-SC-TOS-AP-1PN-ST	UBC SC Sensor Box, Automatic Sampling
2020200004	SB-UBC-SC-TOS-AP-1PN-VA	
000000000		Steel
2020200005	SB-UBC-SC-TOS-NN-1PN-ST	UBC SC Sensor Box, XT-Version
2020200006	SB-UBC-SC-TOS-NN-1PN-VA	UBC SC Sensor Box, XI-Version, Stainless Steel
2020200007	SB-UBC-SC-TOS-AP-1PN-ST	UBC SC Sensor Box, Automatic Sampling, XT-Version
2020200008	SB-UBC-SC-TOS-AP-1PN-VA	Stainless Steel
MECONTRO	L UBC Sensor	
2010300001	SE-UBC-A300-Ixx-NN-BS	Sensor, 300 mm Auger, Hardened, Inside Chamber
2010300002	SE-UBC-A400-Ixx-NN-BS	Sensor, 400 mm Auger, Hardened, Inside Chamber
2010300003	SE-UBC-C300-lxx-NN-BS	Sensor, 300 mm Auger, Coated, Inside Chamber
2010300004	SE-UBC-C400-lxx-NN-BS	Sensor, 400 mm Auger, Coated, Inside Chamber
2010300005	SE-UBC-A300-Ixx-AP-BS	Automatic Sampling
2010300006	SE-UBC-A400-Ixx-AP-BS	Automatic Sampling
2010300007	SE-UBC-C300-Ixx-AP-BS	Automatic Sampling
2010300008	SE-UBC-C400-Ixx-AP-BS	
		Automatic Sampling
2010300009	SE-UBC-A300-A00-NN-XT	Version
2010300010	SE-UBC-A400-A00-NN-XT	Version
2010300011	SE-UBC-C300-A00-NN-XT	Versien
2010300012	SE-UBC-C400-A00-NN-XT	
		Version
2010300013	SE-UBC-A300-A00-AP-XT	Version, Automatic Šampling
2010300014	SE-UBC-A400-A00-AP-XT	Version Automatic Sampling
2010300015	SE-UBC-C300-A00-AP-XT	
		Version, Automatic Šampling
2010300016	SE-UBC-C400-A00-AP-XT	Version, Automatic Šampling
2010300017	SE-UBC-A400-Ixx-NN-BS-S	Funnel
2010300018	SE-UBC-C400-lxx-NN-BS-S	
		Funnel

**Technical Specifications** Version v5.01

All rights reserved



autoryzowany serwis w Polsce https://pomiary.termochem.com.pl/ e-mail: tch@termochem.com.pl e-mail: tch@termochem.com.pl +48426405605, +48426405696



MECONTROL UBC Sensor (continuation)					
2010300019	SE-UBC-A300-A00-NN-BS	Sensor, 300 mm Auger, Hardened, Outside Chamber			
2010300020	SE-UBC-A400-A00-NN-BS	Sensor, 400 mm Auger, Hardened, Outside Chamber			
2010300021	SE-UBC-C300-A00-NN-BS	Sensor, 300 mm Auger, Coated, Outside Chamber			
2010300022	SE-UBC-C400-A00-NN-BS	Sensor, 400 mm Auger, Coated, Outside Chamber			
2010300023	SE-UBC-A300-A00-AP-BS				
		Automatic Sampling			
2010300024	SE-UBC-A400-A00-AP-BS				
004000005		Automatic Sampling			
2010300025	SE-0BC-C300-A00-AP-BS	Automatic Sampling			
2010200026		Automatic Sampling			
2010300020	SE-0BC-C400-A00-AF-BS	Automatic Sampling			
Pneumatic U	hit				
2010400001	PU-1MV	Standard Pneumatic Unit			
2010400002	PU-3MV	Pneumatic Unit with Venting Option			
2010400003	PU-5MV	Pneumatic Unit for Automatic Sampling Sensor			
XT Mounting Package					
2010500001	XTPC-UBC				
		Software, Scintillator			
2010500002	XTPRS-UBC	UBC XT Radiometric Source			
Mounting Adaptors / Sealing / Funnel					
2090100001	MA-UBC-IN	Mounting Adaptor Inside Measurement Chamber			
2090100002	MA-UBC-OUT	Mounting Adaptor Outside Measurement Chamber			
2090100003	FU-UBC-300SCREW	Optional Funnel, 300 mm Screw			
2090100004	FU-UBC-400SCREW	Optional Funnel, 400 mm Screw			
2090100005	SEAL-UBC-IN	Flange Sealing Inside Measurement Chamber			
2090100006	SEAL-UBC-OUT	Flange Sealing Outside Measurement Chamber			

autoryzowany serwis w Polsce



we focus on your process



Przedsiębiorstwo Handlowo-Usługowo-Produkcyjne "TERMOCHEM"

mgr inż. Jerzy Roshol 95-015 Głowno, ul. Łowicka 12 REG. 004345658 NIP: 733-000-12-59 tel./fax: (+48 42) 640-56-05, 640-56-96 http://www.termochem.com.pl tch@termochem.com.pl



Technical Specifications Version v5.01

All rights reserved

autoryzowany serwis w Polsce **PROMECON®** we focus on your process

https://pomiary.termochem.com.pl/ e-mail: tch@termochem.com.pl +48426405605, +48426405696