

Online Analysis System

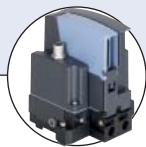


Type 8905 can be combined with...



Type MSxx

Analysis sensor cube



Type ME2x

System Connect modules



Type MZ20

Cleaning System



Communicator

- For analysis applications for drinking water and fresh water in industrial processes
- Modular sensor and electronic system:
 - up to 6 measurements in one housing
 - up to 30 analysis Sensor cubes in one büS system
- Prepared for fieldbus connectivity, remote operation and maintenance

Type 8905 Online Analysis System is a modular system for monitoring all important water parameters on one platform. The Type 8905 is a multichannel multifunction unit for the Bürkert sensor cubes and electronic modules from the EDIP platform. The efficient device integration platform (EDIP) allows the high flexibility by using modularity in the hardware as well as in the software of the system.

Type 8905 is the device for continuous measurement of high priority water parameters such as:

- pH-value
- chlorine, for disinfection purposes
- conductivity, indicator for dissolved content/minerals
- ORP-value, parameter for oxidation or reduction characteristics of the water
- turbidity, indicator for undissolved content
- temperature

Modularity in hardware and software offers the high flexibility for easy installation, use and operation. It allows adding or removing electronic modules or sensor cubes without tools during uninterrupted operation (Hot Swap). The touchscreen allows on site configuration of new installed modules. When a Bürkert Communicator is connected by büS, LAN or USB there are additional functions:



- functions from a library or user defined algorithms
- interaction with actors and actuators in the treatment process via analog or binary inputs and outputs
- control functions like open and/or closed loop control

The Type 8905 is available as a compact system in one housing. For customized systems please contact your closest Bürkert sales center for configuration of the specific functionality.

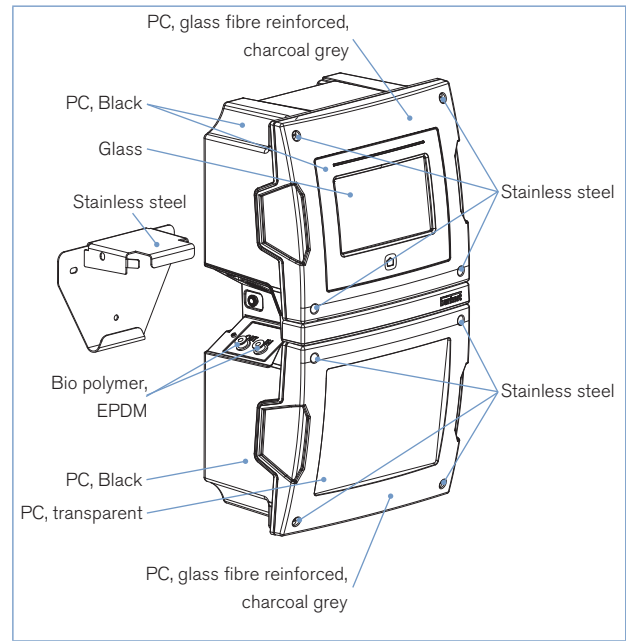
General data	
Mounting	Wall mount unit, clicksystem with wall-mounting bracket
Materials	
Casings	PC (black, UV stabilized, UL94 V0)
Cover of the electronic module casing	PC (glass fibre reinforced, UV stabilized, UL94 V0, charcoal grey); PC (black, UV stabilized, UL94 V0); Glass
of the sensor cube casing	PC (glass fibre reinforced, UV stabilized, UL94 V0, charcoal grey); PC (transparent)
Studs / Cable entry plate	Stainless steel / Elastomer
Fluid connection	Biopolymer (EPDM seals)
Wall-mounting bracket	Stainless steel 304L
Self-adhesive bumpers	Polyurethane
Display	780 x 460 pixels resolution Capacitive 7" Touchscreen; backlight
Data logger	Integrated Micro SD, 2 GB; adjustable logging interval; external reading via USB or LAN port
Sensor cubes	Max. 6 internal sensor cubes; max. connection of 30 external sensor-cubes via büS max. büS length 100 m (without T connections)
Type of medium pH value* / Conductivity**	Water without particles: drinking water, industrial water pH 4 to 9 / > 50 µS/cm
Sample water temperature	3...40°C (37...104°F)
Sample water pressure	Refer to the data sheet of all the used sensor-cubes and apply the most restrictive value given
Sample water flow range	> sum of the min. flow quantity of each installed cube (e.g.: 1 chlorine sensor cube, 1 pH sensor cube, 1 ORP sensor cube, flow rate > 6 + 6 + 6 = 18 l/h)
Weight	approx. 8 kg (if equipped with 1 x 100...240 V AC power supply module + 1 x HMIU module + 5 sensor cubes), up to 12 kg (if totally equipped)

* when a chlorine sensor cube is present within the system: pH value is restricted to pH 5 to 9

** only when a chlorine sensor cube is present within the system

Electrical data	
Operating voltage ("SUPPLY")	100...240 V AC 50/60Hz or 20...30 V DC limited energy source (in accordance to UL 61010-1, paragraph 9.4) or Class 2 source (in accordance to standards 1310/1585 and 60950-1)
Power consumption	Max. 96 VA
Environment conditions and standards	
Ambient temperature	
Operation	0...+40°C (-4...104°F) -
Storage	-20...+70°C (-4...140°F) (without sensor cube)
Relative humidity	< 95%, without condensation
Height above sea level	max. 2000 m
Protection class	IP65 with closed and tight casings
Standard and directives 	
EMC	EN 61000-6-4
Approvals	
UL-Recognized for US and Canada 	UL pending

Materials view



Construction

Electronic module casing

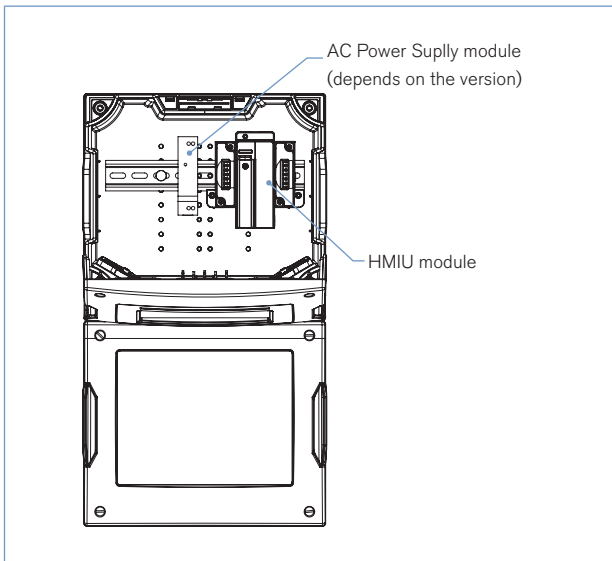
The main parts of the electronic module casing are described below. The device is always equipped with the following electronic modules:

- HMIU (Human Machine Interface Unit) incl. USB slot and Ethernet
- 7" Touchscreen incl. USB Slot
- Option: PSU Mains supply 100...240 V AC
- 2 x bÜS Connector

There are 7 slots (5 Slots with Option PSU) integrated for future modules:

- WiFi/UMTS Communication Module
- Input / Output Modules
- Fieldbus Connection Modules

Depending on the configuration of the device and for a complete description and for the technical data related to the electronic modules, refer to the data sheets of each electronic modules.



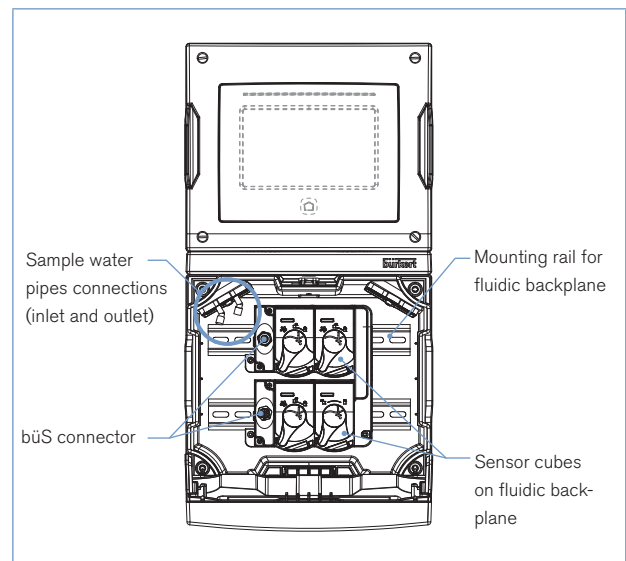
Sensor cube casing

The main parts of the sensor cube casing are described below.

The device can contain one to six sensor cubes.

Depending on the configuration of the device and for a complete description and for the technical data related to the sensor cubes, refer to the data sheets of each sensor cube.

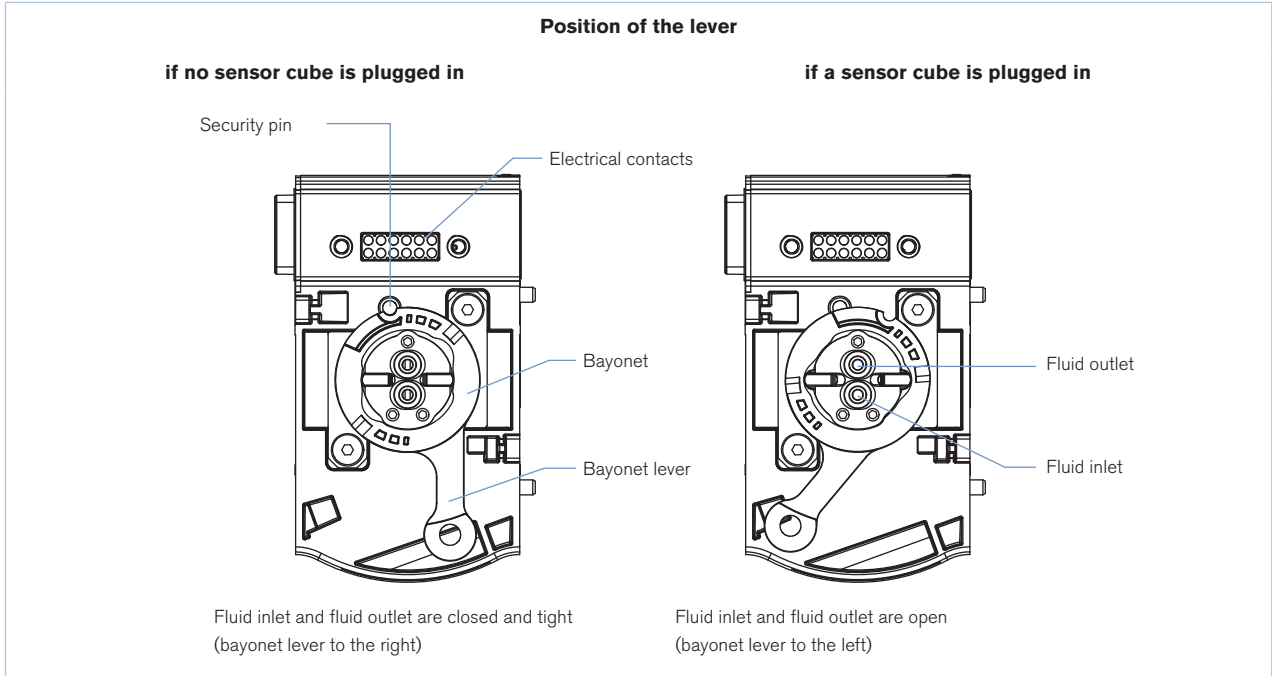
- pH Sensor Cube Type MS01
- Chlorine Sensor Cube Type MS02
- Conductivity Sensor Cube Type MS03
- ORP Sensor Cube Type MS04
- Turbidity Sensor Cube Type MS05



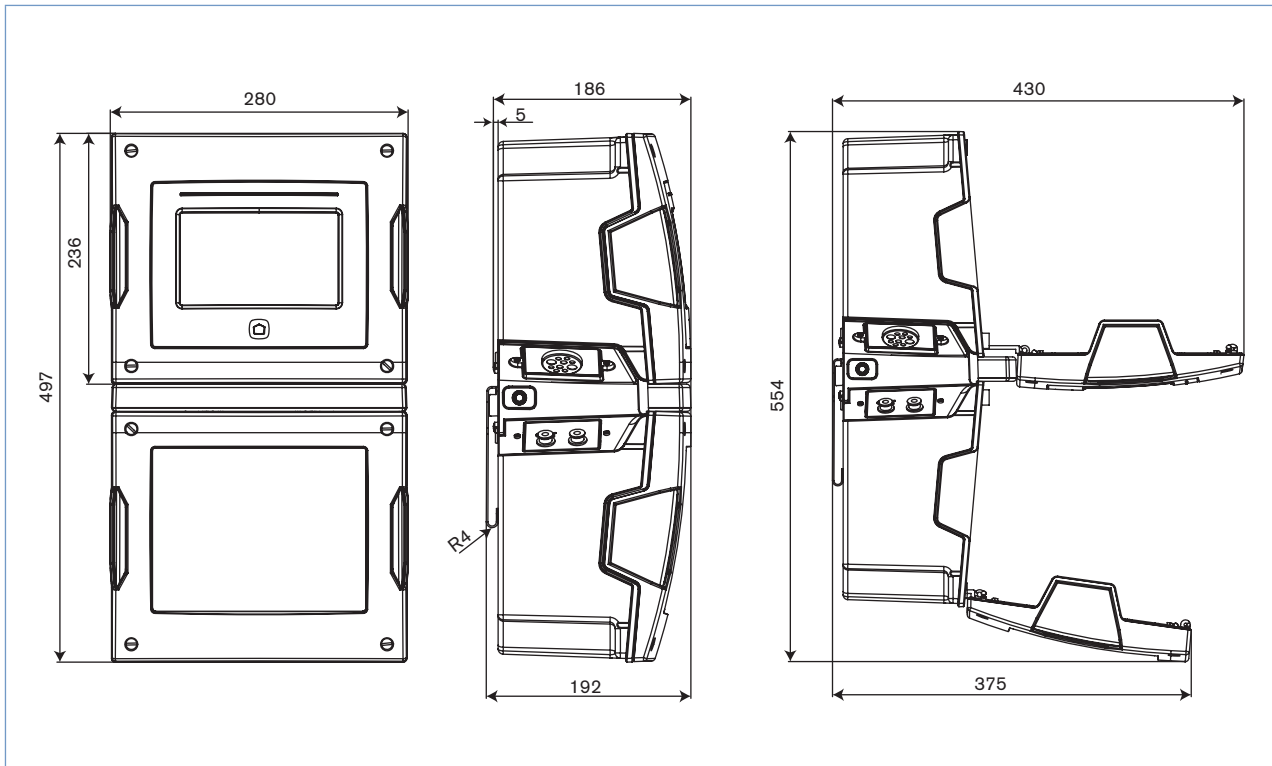
Additional modules

Mechanical interfaces of the sensor cubes

All the fluidic backplanes for the sensor cubes have the same design. Thus any sensor cube can be plugged on any mechanical interface. The backplanes are connected to each other and feed the sensor cubes parallel with the power supply and the sample water and provide the serial bus connection.



Dimensions [mm]



Ordering chart for Online Analysis System Type 8905

Description	Operating voltage	Equipment						Item no.
		MS01 sensor cube, pH	MS02 sensor cube, Chlorine	MS03 sensor cube, Conductivity	MS04 sensor cube, ORP	MS05 sensor cube, Turbidity	PSU: incl. 100...240 V AC Mains Power Supply	
Online Analysis System - pH, Conductivity, Turbidity	24 V DC	1	-	1	-	1	-	566 090
	100...240 V AC	1	-	1	-	1	1	566 091
Online Analysis System - pH, Chlorine, Turbidity	24 V DC	1	1	-	-	1	-	566 092
	100...240 V AC	1	1	-	-	1	1	566 093
Online Analysis System - pH, ORP, Conductivity, Turbidity	24 V DC	1	-	1	1	1	-	566 094
	100...240 V AC	1	-	1	1	1	1	566 095
Online Analysis System - pH, Chlorine, ORP, Turbidity	24 V DC	1	1	-	1	1	-	566 096
	100...240 V AC	1	1	-	1	1	1	566 097
Online Analysis System - pH, Chlorine, Conductivity, ORP, Turbidity	24 V DC	1	1	1	1	1	-	566 098
	100...240 V AC	1	1	1	1	1	1	566 099

Ordering chart for accessories for Type 8905

Description	Item no.
Sample water pipe 4/6 mm, 5 m	567 793
Sample water pipe 4/6 mm, 10 m	567 701
Sample water pipe 4/6 mm, 25 m	567 794
Strainer 100 µm	772 703
Pressure reducer	772 437
Cleaning system, 2 solutions	567 124
Set including the wall-mounting bracket with four self-adhesive bumpers	566 363
Set with a pressure reducer (including a 100 µm strainer, a sampling point and two G1/4" connections), a wall-mounting bracket with nut (for the pressure reducer), a pressure gauge (for the pressure reducer) and two quick-connect couplings	566 319



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In case of special application conditions, please consult for advice.

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