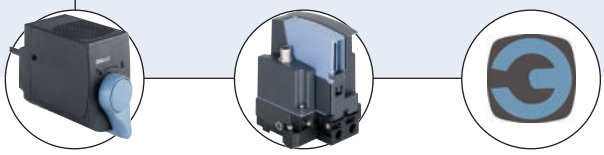
Online Analysis System

- 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 fielbus connectivity, remote operation and maintenance

Type 8905 can be combined with...



Type MSxx
Analysis sensor cube

Type ME2x
System Connect modules

Communicator

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
- further parameters available from mid 2015

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 accessible (available in 2015)
- functions from a library or user defined algorithms
- interaction with actors and actuators in the treatment process via analog or binary (semiconductor switches and relay) 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.

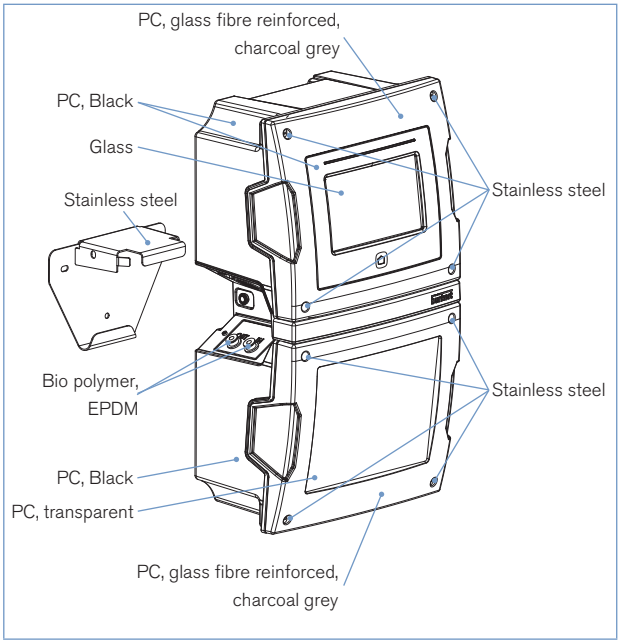
General data	
Mounting	Wall mount unit, clicksystem with wall-mounting holder
Materials	
Casings	PC (black, UV stabilized, UL94 V0)
Cover	
of the electronic module casing	PC (glass fibre reinforced, UV stabilized, UL94 V0, charcoal grey); PC (black, UV stabilized, UL94 V0); Glass
of the sensor cube casing	PC (glass fibre reinforced, UV stabilized, UL94 V0, charcoal grey); PC (transparent)
Studs	Stainless steel
Cable entry plate	Elastomer
Wall-mounting plate	Stainless steel
Display	780 x 460 pixels resolution Capacitive 7" Touchscreen; backlit
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	Drinking water, industrial water
pH value*	pH 4 to 9
Conductivity**	> 50 µS/cm
Sample water temperature	0 to 40°C *(32 to 104°F)*, not freezing
Sample water pressure	PN 6
Sample water flow range	> 10 L/h; depending on number of sensor-cubes

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

Electrical data	
Operating voltage (“SUPPLY”)	100 - 240 V AC or 18 - 30 V DC
Power consumption	Max. 96 VA Max. 4 A at 24 V DC

Environment conditions and standards	
Ambient temperature Operation Storage	 0 to +40°C *(-4 to 104°F)* - -20 to +70°C *(-4 to 140°F)*
Relative humidity	< 95%, without condensation
Height above sea level	max. 2000 m
Protection class	IP65 (electronic casing) IP20 (sensor cube casing)
Standard and directives CE EMC **Approvals** UL-Recognized for US and Canada cULus	 EN 61000-6-2, EN 61000-6-3 UL pending

Materials view



Construction

Electronic module casing

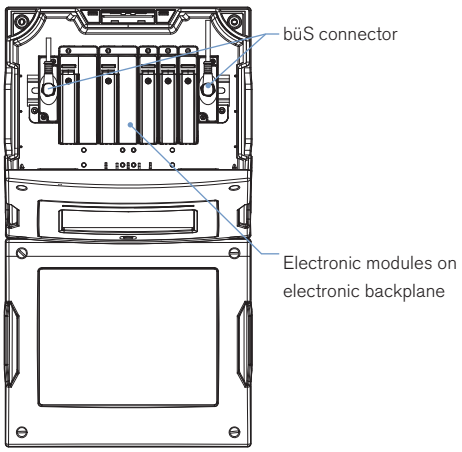
The main parts of the electronic module casing are described below.
The device is always equipped with the following electronic modules:

- HMIU incl. USB slot and Ethernet
- 7” Touchscreen incl. USB Slot
- Option: PSU Mains supply 100 – 240 VAC
- 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

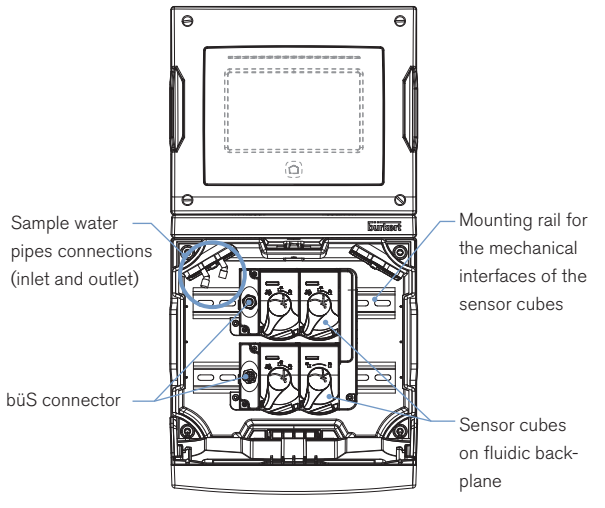
Depending on the configuration of the device and for a complete description and for the technical data related to the electronic modules, refer to the data sheets of each electronic modules.



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 More info.
- Chlorine Sensor Cube Type MS02 More info.
- Conductivity Sensor Cube Type MS03 More info.
- ORP Sensor Cube Type MS04 More info.
- Turbidity Sensor Cube Type MS05 More info.



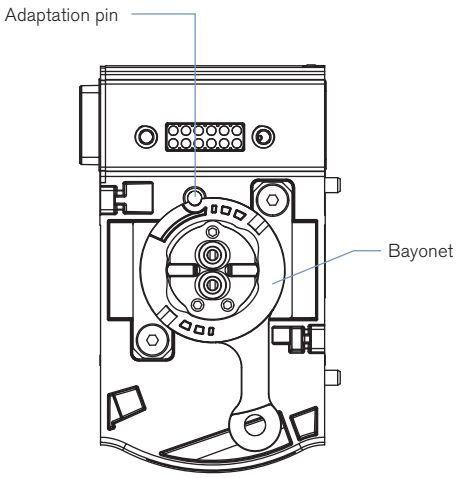
Additional modules

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 büS connection.

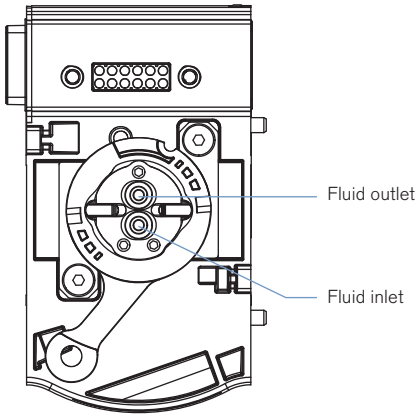
Position of the lever

if no sensor cube is plugged in



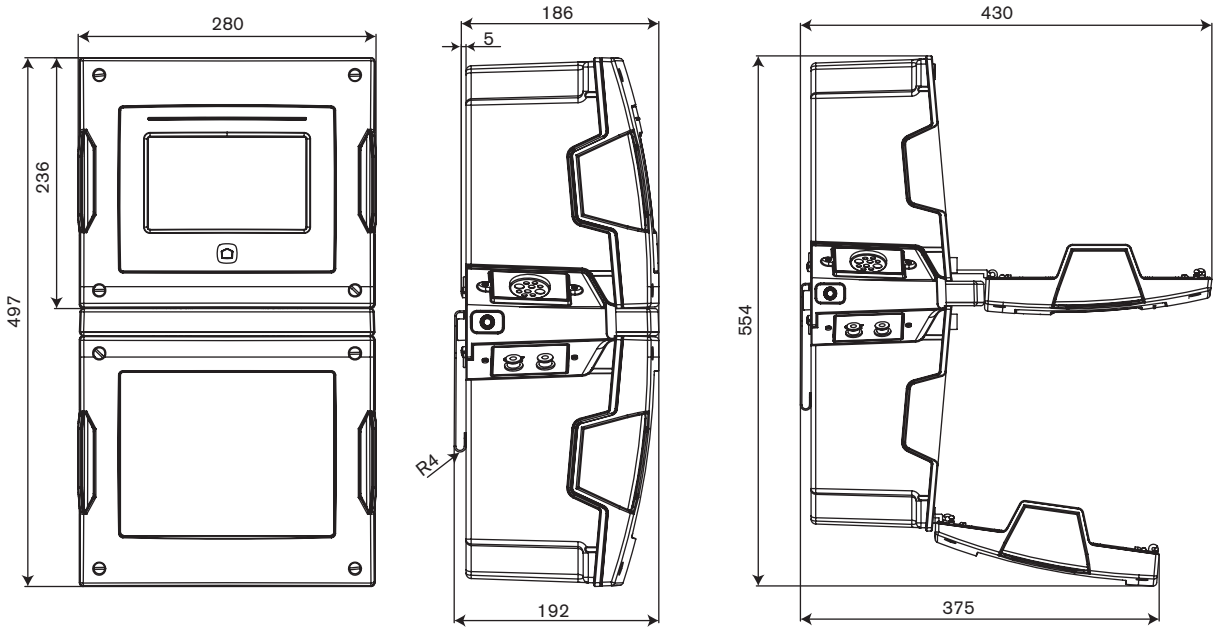
Fluid inlet and fluid outlet are closed and tight
(bayonet lever to the right)

if a sensor cube is plugged in



Fluid inlet and fluid outlet are open
(bayonet lever to the left)

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	-	566 082
	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 arrangement; pressure 6 to 10 bar	566 081
Sample water pump; for pre pressure below 1,5 bar	566 082
Sample water pipe 3 m	566 083

powered by EDIP