

# Multiparameter probes

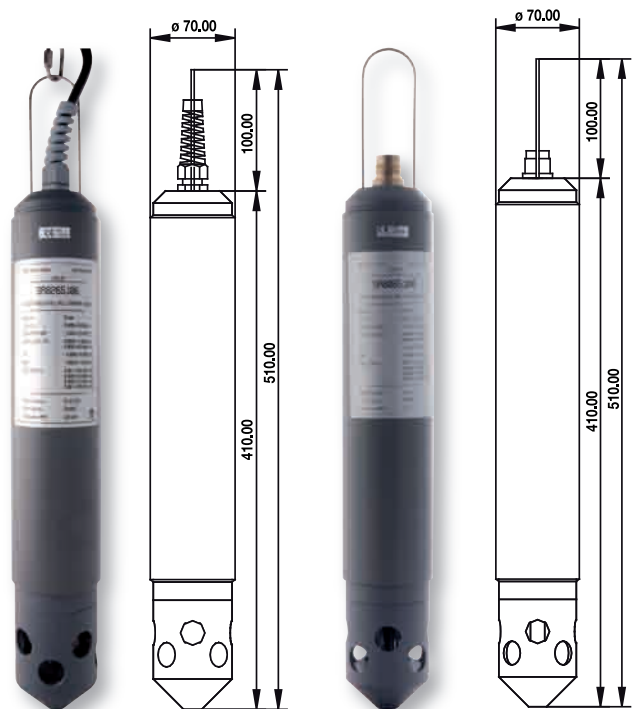
- Up to 7 parameters**
- Max. depth 350 meters**
- Easy to replace sensors**
- Internal or external power supply**
- Managing software**
- Wide range of models**

Designed for multiparameter analysis of liquids, our probes are the result of 40 years of expertise in the field of electrochemical measurement.

The various available models allow to measure the following:

- Depth**
- Temperature**
- E. Conductivity**
- pH**
- O.R.P.**
- Dissolved Oxygen** (optical or polarographic)
- Turbidity** (option)
- ISE** (option)

The probes provide the measures in digital format with standard protocols. Data transmission has been made as flexible as possible, allowing Customers to use B&C Electronics connecting software, or their own software, or any standard data analysis software.



- **Environmental monitoring**
- **Underground water**
- **Rivers, lakes and sea monitoring**
- **Waste water treatments**
- **Fish farming supervision**
- **Depth profile analysis**
- **Boreholes and wells**



# Multiparameter probes

## SA 8060.101

Model with 6 sensors: Depth, Temperature, E. Conductivity, pH, ORP, D. Oxygen.  
Max depth 20 m, data logger and internal battery.

## SA 8060.104

Model with 6 sensors: Depth, Temperature, E. Conductivity, pH, ORP, D. Oxygen.  
Max depth 350 m, data logger and internal battery.

## SA 8065.101

Model with 6 sensors: Depth, Temperature, E. Conductivity, pH, ORP, D. Oxygen.  
Max depth 20 m, without data logger, external power supply.

## SA 8065.104

Model with 6 sensors: Depth, Temperature, E. Conductivity, pH, ORP, D. Oxygen.  
Max depth 350 m, without data logger, external power supply.

## SA 8265.106

Model with 6 sensors: Depth, Temperature, E. Conductivity, pH, ORP, D. Oxygen.  
With differential pressure sensor for atmospheric pressure compensation  
Sealed cable  
Without data logger, external power supply.  
Max depth: 20 m

## Opzioni

### 091.181

Option Turbidity.  
Scale 0/4000.0 NTU

### 091.161

Option Optical Dissolved Oxygen.

### ISE Option

NH<sub>4</sub><sup>+</sup>, Cl<sup>-</sup>, others on request

### Protocol Option

MODBUS

### Non standard models

B&C offers the possibility to have custom models, with only certain parameters and cables up to 100 meters. Please contact our Sales Department for details.

## Technical Specifications

**Date:** DD-MM-YY (only SA8060.10x)

**Hour:** hh-mm-ss (only SA8060.10x)

**Level:** 0/20.000 m (SA806x.101 and SA8265.106)  
0/350.00 m max. (SA806x.104)

**Temperature:** 5.00/+55.00 °C

**Conductivity:** 0/6.000 mS autorange  
0/60.000 mS

**Temperature Coefficient:** 0/3.50 %/°C

**Reference Temperature:** 10/30 °C

**pH:** 0/14.000 pH

**Redox:** ± 1100.0 mV

**Dissolved Oxygen:** 0/200.00 mmHg  
0/200.00 %air  
0/20.000 ppm  
0/20.000 mg/l

### Secondary parameters:

**Pressure:** 500/800 mmHg

**Salinity:** 0/60.000 ppm

**Relative Humidity:** 0/100 %

**Programmable acquisition:** Time interval or Level interval

### Power supply:

**Models with built-in data logger:**

Ni/Cd rechargeable 1800 mAh

**Models without data logger:**

External 9/14Vdc - 60mA

**Interface:** serial RS485 - ASCII Protocol

**Operating Pressure:** 35 bar max.

**Material:** PVC

**Length:** 510 mm

**Diameter:** 70 mm max.

**Weight:** 2 Kg max.

**Connector:** IP 68 oceanographic

**Cable:** 30 m (SA8265.106)

The technical specifications may be changed without notice

# Multiparameter probes

## Accessories

### SA 8000 Connecting software

To be installed on the P.C. for the following functions:

- connection to sites and probes in network
- continuous data and messages display
- storage and printing of data
- sensor calibration
- operation mode programming of the probe (time or depth based data logging)
- data transfer from the data logger of the probe
- transfer of the sensors calibration parameter stored in the probe
- graphics and data analysis.

### SA 9491 Interconnecting cable

Made by 5 m cable and connectors for probe, PC, and battery charger.

It adapts the RS 485 output from the probe to the RS 232 input of the PC.

### SA 9431 Interconnecting cable

Made by 30 m cable and connectors for probe, PC, and battery charger.

Kevlar/poliurethane material

Diameter 7.5 mm

### BC 8582 Automatic battery charger

Suitable for 3 NiCd batteries, included into SA 8060.10x models

Power 220 Vac  $\pm$  10%

Current 0.8 A

### BC 8611 RS485/RS232 converter

To be used with SA 9431 cable or longer, and for connections to RS 232 acquisition systems.

### BC 8701 RS485/USB converter

With power supply 12Vdc for SA8065.10x.

### SZ 929 Extension cable

Kevlar/poliurethane material

Diameter 7.5 mm

### SA 9409 Blind plug

Suitable for stand alone and vertical profile operating mode

## Spares

**SA 9100** Reference electrode

**SA 9110** pH electrode

**SA 9115** pH + ORP electrode

**SA 9120** ORP electrode

**SA 9130** Conductivity sensor

**SA 9150** Temperature sensor

**SA 9160** D. Oxygen sensor

**SA 9180** Turbidity sensor

## Service

B&C Electronics provides periodical revision and calibration to Multiparameter probes under Customers request.



# Multiparameter probes

## Measures and Data Managing

The new SA8000 software release has been developed to work with Windows and Internet Explorer. When the probe is connected to a PC, the user-friendly and intuitive software allows for calibration of all installed sensors, to download data and print graphs. Furthermore, the graphic interface has an Help menu that links the user to specific chapter of Instruction Manual.



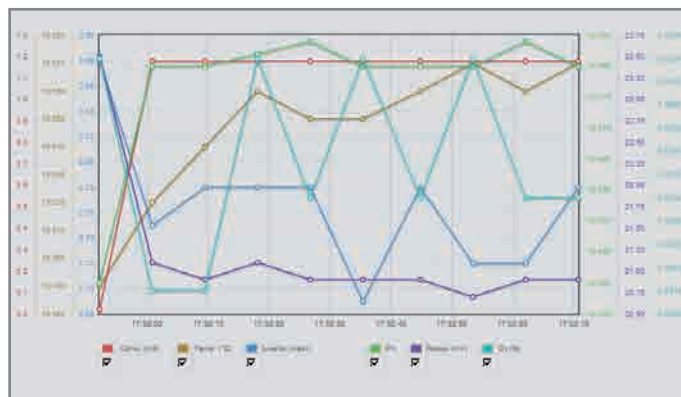
## WQM System

For more complex installations and monitoring applications, with more than one measuring points, the TMF data logger allows to connect up to 10 probes on an RS385 line.

The system can be programmed to acquire data from each probe and to send them via FTP to various Acquisition and Monitoring Centers.

It is also possible to send alarms or relay activations via SMS to a list of mobile phones.

Please contact our Sales Department for more details on this system.



## Applications

