# C6010 • C6030

# Multi-parameter analysers



| | |
|---|---:|
| **pH:** | -2…+16 pH |
| **mV:** | ±2000 mV |
| **Ion:** | 0.01 ng/l…100 g/l |
| **Conductivity:** | 0…2000 mS/cm |
| **Resistivity:** | 0…200 MΩ.cm |
| **Salinity:** | 0…70.0 |
| **TDS:** | 0…100 g/l |
| **Dissolved oxygen:** | 0…60 mg/l |
| | 0…600% |
| **Air pressure:** | 600…1300 hPa |
| **Temperature:** | -5…+105°C |

*Ion: C6030 only*

## One channel for all measurements!

### pH

Multi-point (1…5) calibration for more linearity.

Selectable resolution from 0.001 pH to 0.1 pH.

Automatic calibration with any of eleven pre-programmed and five user specified pH buffers. *Create your own buffer/temperature tables!*

Accepts pH electrodes with any zero point (Eo) between ±999 mV.

### mV

Features mV calibration for accurate ORP measurements.

Selectable resolution from 0.1 mV to 1 mV.

### Ion (C6030 only)

Direct concentration measurement.

Multi-point (2…5) calibration and an additional blank correction for measuring low concentrations.

Stores calibration curves for up to 9 different electrodes.

### Conductivity

Multi-point (1…3) calibration for more linearity.

An electrode with a typical cell constant of 1 cm$^{-1}$ permits to measure from 0.01 µS/cm to 200 mS/cm in five ranges.

An electrode with a typical cell constant of 0.1 cm$^{-1}$ permits to measure from 0.001 µS/cm to 20 mS/cm in five ranges.

An electrode with a typical cell constant of 10 cm$^{-1}$ permits to measure from 0.1 µS/cm to 2000 mS/cm in five ranges.

Automatically selects correct range and frequency.

Selectable reference temperature: 20° or 25°C.

Automatic calibration with any of three preprogrammed and three user specified standard solutions. *Create your own standard/ temperature tables!*

Allows to lock the initial conductivity range to avoid non-linear titration curves.

Accurate low conductivity measurements by eliminating the capacitive component of the electrode and its cable (avoid the use of long cables!).

### Dissolved oxygen

Operates with a galvanic dissolved oxygen electrode requiring no polarisation time and no zero calibration.

Selectable resolution from 0.01 mg/l (0.1%) to 0.1 mg/l (1%).

Manual salinity compensation 0-40.

Automatic air pressure compensation 600-1300 hPa.

### Temperature

Reads temperatures with 0.1°C resolution.

Manual or automatic temperature compensation.

Calibrates temperature probe for quality measurements.

| CODE | DESCRIPTION |
|---|---|
| **C6010** | pH/conductivity/DO meter + USB cable |
| **C6030** | pH/Ion/conductivity/DO meter + USB cable |
| **C60x0P** | Meter kit for pH: meter + pH/ATC electrode SP10T + 2x50 ml buffers (pH 4 and 7) + 50 ml electrolyte (3M KCl) + carrying case |
| **C60x0K** | Meter kit for conductivity: meter + conductivity/ATC electrode SK10T + 50 ml conductivity standard (0.01 M KCl) + carrying case |
| **C60x0Z** | Meter kit for oxygen: meter + dissolved oxygen electrode SZ10T + carrying case |
| **C60x0T** | Meter kit complete: meter + pH/ATC electrode SP10T + conductivity/ATC electrode SK10T + dissolved oxygen electrode SZ10T + 2x50 ml buffers (pH 4 and 7) + 50 ml electrolyte (3M KCl) + 50 ml conductivity standard (0.01 M KCl) + carrying case |
| **C60x0X** | Meter kit without electrodes: meter + 2x50 ml buffers (pH 4 and 7) + 50 ml electrolyte (3M KCl) + 50 ml conductivity standard (0.01 M KCl) + carrying case |
| **SH300** | Flexible electrode holder (optional) |
| **A4049** | Car adaptor, 12 V (optional) |

➔ **Supplied with a mains adaptor (100…240 VAC, EU/US) + 4 NiMH batteries** *(add a UK-sign for UK plug versions, e.g.:C6030-UK)*

## Inputs
One common input for all ranges + corresponding reference input.

One input for a Pt1000 automatic temperature probe.

## Outputs
Galvanically isolated USB communication port for connection to a computer.

## Display
Large bright LCD screen for better readability.

A white backlight automatically illuminates when operated on the mains.

Stability indicator prompts the user when readings should be taken.

Hold function allows to freeze the display for convenient reading or recording.

The interactive LCD screen provides step by step instructions in the language of your choice (English, Dutch, French, German).

Real-time clock displays time and date.

Shows a GLP report on the LCD screen.

## Data-logging
Up to 12000 data sets can be stored manually or at a programmable interval.

Allows to mix data from all ranges in the same table.

Download **free data acquisition software** from *www.consort.be* to view, store and edit the measurements in your computer.

## Cabinet
Robust dust and splash-proof cabinet.

## Special features
Three year warranty.

Calibration reminder 0...999 h.

Programmable recorder output.

Programmable identification number for use with a printer or computer.

Password protection prevents any unauthorised modification of the instrument's settings.

Two-way communication with a printer or computer using USB.

Mains and rechargeable battery operation with programmable automatic switch-off.

Shows percentage of remaining battery capacity.

Optional 12 V car adaptor.

## GLP
All procedures for a "Good Laboratory Practice" are on board.

## Pre-programmed standards
pH buffers: 1.68, 2.00, 4.00, 4.01, 6.87, 7.00, 9.18, 9.21, 10.01, 12.00, 12.45 (at 25°C).

Conductivity: 1413 µS/cm, 12.88 mS/cm, 111.8 mS/cm (at 25°C).



| SPECIFICATIONS | | C60x0 |
|---|---|---|
| pH | Range | -2...+16 pH |
| | Resolution | 0.001 pH |
| | Accuracy | 0.1% ± 1 digit |
| | Calibration | 1...5 points |
| | Buffers | 11 pre-programmed 5 user specified |
| | Temperature compensation | -5...+105°C |
| | ISO-pH | 6...8 pH |
| | Slope | 80...120% |
| | Zero point (Eo) | ±999 mV |
| mV | Range | ±2000 mV |
| | Resolution | 0.1 mV |
| | Accuracy | 0.1% ± 1 digit |
| | Calibration | 1 point |
| ION *(C6030 only)* | Range | 0.01 ng/l...100 g/l |
| | Resolution | 3 digits |
| | Accuracy | 0.5% ± 1 digit |
| | Calibration | 2...5 points + blank 9 individual curves |
| CONDUCTIVITY | Range (cc dependent) | 0...2000 mS/cm |
| | Resolution (cc dependent) | 0.001 µS/cm |
| | Accuracy | 0.5% f.s. of range |
| | Calibration | 1...3 points |
| | Standards | 3 pre-programmed 3 user specified |
| | Cell constant (cc) | 0.07...13 cm$^{-1}$ |
| | Temperature compensation | -5...+105°C |
| | Reference temperature | 20° or 25°C |
| | Temperature coefficient | natural waters (EN27888) |
| | Range lock | ✓ |
| | Capacitive compensation | ✓ |
| RESISTIVITY | Range | 0...200 MΩ.cm |
| | Resolution | 1 Ω.cm |
| SALINITY | Range | 0.0...70.0 |
| | Reference temperature | 15°C |
| TDS | Range | 0...100 g/l |
| | Resolution | 0.01 mg/l |
| DISSOLVED OXYGEN | Range | 0...60 mg/l (0...600%) |
| | Resolution | 0.01 mg/l (0.1%) |
| | Accuracy | 1% ± 1 digit |
| | Calibration | 1 point |
| | Temperature compensation | 0...50°C |
| | Salinity compensation | 0...40 |
| | Air pressure compensation | 600...1300 hPa |
| TEMPERATURE | Range | -5...+105°C |
| | Resolution | 0.1°C |
| | Accuracy | 0.1°C |
| | Calibration | 1 point |
| AIR PRESSURE | Range | 600...1300 hPa |
| | Calibration | 1 point |
| INPUTS | Measurement | BNC, 10$^{12}$ Ω |
| | Temperature | 2 banana, for Pt1000 |
| CALIBRATION | Reminder | 0...999 h |
| | GLP | ✓ |
| DISPLAY | LCD | 128x64 pixels |
| | White backlight | ✓ |
| | Hold function | ✓ |
| | Selectable resolution | ✓ |
| | Real time clock | ✓ |
| COMMUNICATION | Interface with computer | USB, insulated |
| DATA-LOGGING | Data sets | 12000 + °C/date/time |
| | Modes | all (9) |
| | Manual or timed | ✓ |
| | Interval | 1...9999 s |
| SECURITY | Identification number | ✓ |
| | Password protection | ✓ |
| AMBIENT CONDITIONS | Temperature | 0...40°C |
| | Humidity | 0...95%, non condensing |
| POWER SUPPLY | Mains | 100...240 VAC, 50/60 Hz |
| | Low voltage | 9...15 VDC |
| | Batteries | 4x1.2 V, AA, NiMH |
| DIMENSIONS | WxDxH | 12x25x5 cm |
| WEIGHT | Meter | 600 g |