

<b>Measurement Channels</b>	<b>2</b>
<b>Temperature Channels</b>	<b>2</b>
<b>pH</b>	-2.000...+16.000 pH
<b>mV</b>	±2000.0 mV
<b>Ion (C343x only)</b>	0.01 ng/l...100 g/l
<b>Conductivity</b>	0...2000 mS/cm
<b>Resistivity</b>	0...200 MΩ.cm
<b>Salinity</b>	0.0...70.0
<b>TDS</b>	0...100.0 g/l
<b>Dissolved oxygen</b>	0...60.00 mg/l 0...600%
<b>Air pressure</b>	600...1300 hPa
<b>Temperature</b>	-5.0...+105.0°C
<b>Warranty</b>	36 months



**Two independent channels for all measurements!  
Accepts 4-pole and 2-pole EC probes!**

## ● Description

C3410 and C3430 are variations on C3010 and C3030 with 2 extra DIN connections for 4-pole EC measurements. EC can be measured with a 4-pole cell for a very high accuracy and linearity or with a 2-pole EC probe at the gold plated BNC connections. C3411 and C3431 variations have an Ethernet connection instead of USB. Same as for C30xx there is no interference between channels. The built-in help system guides the user through the use of the instrument and it's various functions.

Besides the pre-programmed pH buffers and EC standards, you can also add your own buffer and standard tables. Not just a certain value at a certain temperature but the complete temperature related table of your specific buffer. Add up to 5 pH buffers and 3 EC standards of your own choice and use them as if they are built-in. Two temperature inputs are independent from measurement channels. ATC for each channel can be selected from any of the temperature inputs.

The device can be connected to a PC and completely controlled via either USB/RS232 or Ethernet/RS232. Both software and communication protocol can be downloaded from our website.

## ● Highlights

**Multichannel** up to 2 measurements can be performed at the same time and simultaneously or individually shown on the display. Each channel can measure 2 times per second.

**No interference** between pH/ORP/Ion and conductivity electrodes in the same solution

**Custom calibration tables** allows the user to add complete buffer/standard-temperature relation tables. With this feature the built-in tables can be extended with your own tables. Tables can be entered via a device menu or uploaded from a PC.

**Wide Display** shows 2 channels at the same time including temperature and date/time.

**Stability indicator** ensures visualisation when the measurement has stabilised.

**Stability algorithm** ensures stable readings with ability to detect fast changes.

**Hold function** allows to freeze the display

**Selectable resolution** for more stable readings of mV, pH and DO.

**Range lock** for conductivity measurements.

**Capacitive compensation** eliminates the capacitive component of electrode and cable when measuring low conductivities.

**4-pole EC and 2-pole EC** electrodes can be used via either DIN (4 pole) or BNC (2 pole) connector.

**Galvanic isolated USB interface** eliminates ground loop effects when connected to a PC (C3410,C3430 only).

**Ethernet connection** allows remote access to the device via LAN or Internet (C3411,C3431 only).

**GLP report** can be shown on the display or sent to the digital port.

### **Pre-programmed standards**

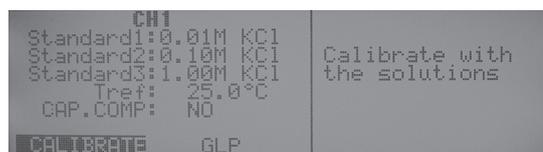
pH: 1.68, 2.00, 4.00, 4.01, 6.87, 6.99, 9.18, 9.21, 10.01, 12.00, 12.45 (at 25°C)  
Conductivity: 1413 µS/cm, 12.88 mS/cm, 111.8 mS/cm (at 25°C)

**Free software and firmware updates** downloadable from [www.consort.be](http://www.consort.be)

## Specifications

<b>pH</b>	Range	-2.000...+16.000 pH
	Resolution	0.001 pH
	Accuracy	0.1% ± 1 digit
	Calibration	1...5 points
	Buffers	11 pre-programmed 5 user specified
	Temperature compensation	-5.0...+105.0°C
	ISO-pH	6.000...8.000 pH
	Slope	80.0...120.0%
	Zero point (Eo)	±999.0 mV
	Selectable Resolution	✓
<b>mV</b>	Range	±2000.0 mV
	Resolution	0.1 mV
	Accuracy	0.1% ± 1 digit
	Calibration	1 point
	Selectable Resolution	✓
<b>CONDUCTIVITY</b>	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 or off
	Reference temperature	20°, 25°C
	Temperature coefficient	natural waters (EN27888)
	Range lock	✓
	Capacitive compensation	✓
	4-pole measurements	✓
	<b>RESISTIVITY</b>	Range
Resolution		1 Ω.cm
<b>SALINITY</b>	Range	0.0...70.0
	Reference temperature	15°C
<b>TDS</b>	Range	0...100.0 g/l
	Resolution	0.01 mg/l
<b>DISSOLVED OXYGEN</b>	Range	0...60.00mg/l
	Resolution	0.01 mg/l
	Accuracy	1% ± 1 digit
	Calibration	1 point
	Temperature compensation	0...50°C
	Salinity compensation	0...40
	Air pressure compensation	600...1300 hPa
Selectable Resolution	✓	

<b>TEMPERATURE</b>	Range	-5.0...+105.0°C	
	Resolution	0.1°C	
	Accuracy	0.1°C	
<b>ION (C303x only)</b>	Calibration	1 point	
	Range	0.01 ng/l...100 g/l	
	Resolution	3 digits	
	Accuracy	0.5% ± 1 digit	
<b>AIR PRESSURE</b>	Calibration	2...5 points + blank	
	Range	600...1300 hPa	
	Calibration	1 point	
<b>CHANNELS</b>	Measurement	2	
	Temperature	2	
<b>INPUTS</b>	Measurement	2 BNC, 10 <sup>12</sup> Ω 2 DIN	
	Temperature	2x2 banana, for Pt1000	
<b>CALIBRATION</b>	Reminder	0...999 h	
	GLP	✓	
<b>DISPLAY</b>	LCD	240x64 pixels	
	White backlight	✓	
	Hold function	✓	
	Selectable resolution	✓	
	Real time clock	✓	
	Built-in help	✓	
	Languages	English Dutch French German	
	<b>COMMUNICATION</b>	Interface with computer	USB/RS232 or Ethernet/RS232
		Baud rate	1200...115200 b/s
		Printer	✓
<b>DATA-LOGGING</b>	Data sets	12000 + °C/date/time	
	Modes	all	
	Manual or timed	✓	
	Interval	1...9999 s	
<b>SECURITY</b>	Password protection	✓	
<b>AMBIENT CONDITIONS</b>	Temperature	0...40°C	
	Humidity	0...95%, non condensing	
<b>POWER SUPPLY</b>	Mains	100...240 VAC, 50/60 Hz	
	Low voltage	9...15 VDC	
<b>DIMENSIONS</b>	WxDxH	26x18x9 cm	
<b>WEIGHT</b>	Meter	1.1 kg	



## Ordering codes

Code	Description
C3410	pH/conductivity/DO meter (USB version)
C3411	pH/conductivity/DO meter (Ethernet version)
C3430	pH/ion/conductivity/DO meter (USB version)
C3431	pH/ion/conductivity/DO meter (Ethernet version)
AP414	Serial printer
SH300	Flexible electrode holder (optional)
ADAPT-CAR	Car adaptor, 12 V (optional)

→ Supplied with a mains adaptor (100...240 VAC, EU/US) and USB or UTP cable. Add -UK for UK plug versions, -CH for Swiss plug versions.