

## C6010

## pH - mV - Conductivity - Resistivity - Salinity - TDS - Temperature

pH:	-2...+16 pH
mV:	±2000 mV
Conductivity:	0...2000 mS/cm
Resistivity:	0...200 MΩ.cm
Salinity:	0.0...70.0
TDS:	0...100 g/l
Temperature:	-5...+105 °C

*One channel for all ranges  
One temperature channel*



- 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 (E<sub>0</sub>) between ±999 mV.
- mV**  
 Features mV calibration for accurate ORP measurements.  
 Selectable resolution from 0.1 mV to 1 mV.
- Conductivity**  
 Multi-point (1...3) calibration for more linearity.  
 An electrode with a typical cell constant of 1 cm<sup>-1</sup> (standard) 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<sup>-1</sup> 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<sup>-1</sup> 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!).
- Temperature**  
 Reads temperatures with 0.1 °C resolution.  
 Manual or automatic temperature compensation.  
 Calibrates temperature probe for quality measurements.
- 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.

CODE	DESCRIPTION
C6010	Meter only (without electrodes) + USB cable + 4 NiMH batteries + mains adaptor
C6010X	Meter kit without electrodes: C6010 + 2x50 ml buffers (pH 4 and 7) + 50 ml electrolyte (3M KCl) + 50 ml conductivity standard (0.01 M KCl) + carrying case
C6010P	Meter kit for pH: C6010 + pH/ATC electrode SP10T + 2x50 ml buffers (pH 4 and 7) + 50 ml electrolyte (3M KCl) + carrying case
C6010K	Meter kit for conductivity: C6010 + conductivity/ATC electrode SK10T + 50 ml conductivity standard (0.01 M KCl) + carrying case
C6010T	Meter kit complete: C6010 + pH/ATC electrode SP10T + conductivity/ATC electrode SK10T + 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)
→ Add a \$-sign for US plug versions, e.g.: C6010\$	
→ Add a U-sign for UK plug versions, e.g.:C6010U	

● **Inputs**

One common input for all ranges + corresponding reference input.  
One input for a Pt1000 automatic temperature probe.  
Low voltage DC input for e.g. a mains adaptor.

● **Outputs**

Galvanically isolated USB communication port for connection to a computer.

● **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.

Freely downloadable data acquisition software enables 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		C6010	
pH	Range	-2...+16 pH	
	Resolution	0.001 pH	
	Accuracy	0.1% ± 1 digit	
	Calibration	1...5 points	
	Buffers	9 pre-programmed 5 user specified	
	Temperature compensation	-5...+105 °C	
	ISO-pH	6...8 pH	
	Slope	80...120%	
mV	Zero point (Eo)	±999 mV	
	Range	±2000 mV	
	Resolution	0.1 mV	
	Accuracy	0.1% ± 1 digit	
	Calibration	1 point	
	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)	0.1/1/10 cm <sup>-1</sup> ±30%		
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		
TEMPERATURE			
Range	-5...+105 °C		
Resolution	0.1 °C		
Accuracy	0.1 °C		
Calibration	1 point		
INPUTS			
Measurement	BNC, 10 <sup>12</sup> 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		
Modes	all (6)		
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		

**Electrodes supplied with kit versions**



**SP10T**

- pH + ATC
- Epoxy body, 1 m cable
- 0...14 pH, 0...80 °C
- Single junction, sealed

**SK10T**

- Conductivity + ATC
- Epoxy body, 1 m cable
- 1 cm<sup>-1</sup>, 0...80 °C
- Dual graphite plates